November 9, 2004

Mrs. Mary G. Korsnick
Vice President, R.E. Ginna Nuclear Power Plant
R.E. Ginna Nuclear Power Plant, LLC
1503 Lake Road
Ontario, New York 14519

SUBJECT: R. E. GINNA NUCLEAR POWER PLANT- NRC INTEGRATED INSPECTION REPORT 05000244/200404

Dear Mrs. Korsnick:

On September 30, 2004, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your R. E. Ginna facility. The enclosed integrated inspection report documents the inspection findings, which were discussed on October 27, 2004 with Mr. Tom Marlow and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

This report documents four NRC-identified findings of very low safety significance (Green). Two of these findings were determined to involve violations of NRC requirements. However, because of their very low safety significance, and because they have been entered into your corrective action program, the NRC is treating these issues as non-cited violations in accordance with Section VI.A.1 of the NRC's Enforcement Policy. Additionally, a licensee-identified violation which was determined to be of very low safety significance is listed in this report. If you contest the non-cited violations noted in this report, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at the Ginna facility.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the

NRC Public Document Room or from the Publicly Available Records (PARS) component of the 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/

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

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

Enclosure: Inspection Report 05000244/2004004
w/ Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.	50-244
License No.	DPR-18
Report No.	05000244/2004004
Licensee:	Constellation Energy, R.E. Ginna Nuclear Power Plant, LLC
Facility:	R. E. Ginna Nuclear Power Plant
Location:	1503 Lake Road Ontario, New York 14519
Dates:	July 1, 2004 - September 30, 2004
Inspectors:	K. Kolaczyk, Senior Resident Inspector M. Marshfield, Resident Inspector C. Cahill, Senior Reactor Inspector J. Furia, Senior Health Physicist E. H. Gray, Senior Reactor Inspector A. Della Greca, Senior Reactor Inspector J. McFadden, Health Physicist D. Silk, Senior Emergency Preparedness Inspector
Approved by:	James M. Trapp, Chief Projects Branch 1 Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000244/2004-004; 07/01/2004 - 09/30/2004; R. E. Ginna Nuclear Power Plant; Post Maintenance Testing, Identification and Resolution of Problems, Event Followup, Other Activities.

The report covered a 3-month period of inspection by resident inspectors and announced inspections by regional specialists. This inspection identified two Green non-cited violations (NCVs) and two Green findings. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3 dated July 2000.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Initiating Events

Green. The inspectors identified a finding that the Ginna Station does not have an installed control room alarm for the containment airborne radioactive particulate detector (R11) as described in the Updated Final Safety Analysis Report (UFSAR). A purpose of the alarm is to notify plant operators of reactor coolant system (RCS) leakage in the containment building. The radiation detector has indication in the control room and there are several other indicators and alarms in the control room that indicate the presence of reactor coolant system leakage.

The finding is greater than minor, because it is associated with the design control attribute of the Initiating Events Cornerstone, and adversely affects the cornerstone objective of limiting the likelihood of those events that upset plant stability. The finding is also greater than minor because a radiation detector alarm could provide operators with an early indication of a loss of primary coolant event. In accordance with Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," the inspectors conducted SDP Phase 1 screening and determined that the finding was of very low safety significance (Green). The SDP process screens to Green since the absence of the alarm would not result in exceeding the RCS leakage Technical Specification limit for identified RCS leakage. (Section 1R19)

Cornerstone: Mitigating Systems

Green. The inspector identified a Green non-cited violation of 10 CFR 50.48, "Fire Protection," because the Ginna cable tunnel contained an escape hatch that was not adequately designed to minimize the effects of fire and explosion. As a result, safety-related equipment located in the cable tunnel could have been damaged under certain postulated scenarios. The licensee has completed a modification to the escape hatch to correct this condition.

The finding was greater than minor because it was associated with the Mitigating Systems cornerstone attribute of protection against external factors and affected the objective of ensuring the capability of systems to respond in the event of a fire. Using the Fire Protection significance determination process, IMC 0609, Appendix F, the finding required a Phase 2 analysis because of the effect on the fixed fire suppression system and of the reduced effectiveness of the fire brigade in combating the postulated fire scenario. The finding was determined to need a detailed Phase 3 fire risk evaluation because the Phase 2 SDP, using conservative assumptions, determined that the issue could have been greater than very low safety significance. The Phase 3 evaluation was needed to ensure a thorough review of factors such as ignition frequency, suppression capability, and shutdown methods. Based on a comprehensive Phase 3 evaluation of the initiation event frequency, surviving mitigating systems, and operator actions to mitigate the impact of the fire event, the finding was considered to have a very low safety significance (Green). (Section 4OA5)

Cornerstone: Barriers

Green. The inspectors identified a non-cited violation of 10 CFR 50 Appendix B, Criterion lll, "Design Control" on July 22, 2004, when several breaches in the control room boundary (wall) were identified. The cumulative area of the breaches would allow air in-leakage into the control room at levels that exceeded control room design criteria assumptions. The licensee implemented immediate action to repair this condition.

This finding was greater than minor because if left uncorrected the finding could become a more significant safety concern. If the breaches were not repaired, untreated outside air could leak into the control room and have an adverse effect on the control room environment during certain postulated accidents. In addition, this finding was greater than minor because it affected the design control attribute and the Barrier Cornerstone objective of providing reasonable assurance that physical barriers will provide protection during events and accidents. The inspectors determined this finding was a cross-cutting issue in the Problem Identification and Resolution area since Ginna personnel did not initially conduct a thorough extent of condition review when the degraded control room conditions were identified. In accordance with Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," the inspectors conducted an SDP Phase 1 screening. This screening determined that a Phase 3 evaluation was required because the degradation of the control room barrier function against a toxic atmosphere was affected. The Phase 3 SDP analysis concluded that this issue was of very low safety significance (Green), because of the low initiating event frequency of an inadvertent offsite release of toxic gas that would affect the Ginna control room operators. (Section 4OA3)

Cornerstone: Emergency Preparedness

Green. The inspectors identified a finding that Ginna did not adequately evaluate Technical Support Center (TSC) ventilation surveillance test failures or maintain the TSC ventilation system in a manner to ensure it would be capable of performing its intended emergency preparedness function in a reliable manner.

The finding is greater than minor because it is associated with the facilities and equipment attribute of the EP Cornerstone, and impacts the objective to ensure that Ginna staff is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The inspectors determined this finding was a cross-cutting issue in the Problem Identification and Resolution area since Ginna personnel did not adequately assess the significance of the degraded conditions of the TSC ventilation system as required by the Ginna corrective action program. The EP Significance Determination Process (SDP) was used to assess the safety significance of this finding. Based on IMC 0609, Appendix B, "Emergency Preparedness SDP," Sheet 1 for the failure to comply with an NRC requirement and the examples provided in Section 4.8, this finding was determined to be of very low safety significance (Green). This significance determination was supported by the subsequent Ginna analysis that concluded the TSC ventilation system remained operable with the failed damper and ductwork perforations. (Section 2OA2)

B. Licensee-Identified Violations

A violation of very low safety significance which was identified by Ginna personnel was reviewed by the inspectors. Corrective actions taken or planned by Ginna appeared reasonable. The violation is summarized in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

With the exception of minor power reductions to facilitate surveillance testing activities, Ginna operated at 100 percent power for the entire report period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01 - 1 Sample)

a. Inspection Scope

On September 8 and 9, the Rochester area experienced significant rainfall, which caused flooding in several low-lying areas. As a result of the runoff created by the rainfall, the water levels in several streams close to the Ginna site rapidly increased including Deer Creek, which flows through the Ginna owner-controlled area. In response to high water conditions, the inspectors toured areas of the plant that are below ground level to ensure excessive water in-leakage had not occurred. Locations toured included the Screenhouse, Intermediate Building, and Residual Heat Removal sub-basement areas. The inspectors also verified that Ginna personnel had taken adequate actions to contain rainwater that was leaking into several plant areas because of defective roofs and ceiling drains. Areas of particular focus included the Relay Room, where water had entered through gaps in the ceiling that resulted from ongoing maintenance activities related to installation of a new control room ventilation system, and the Auxiliary Building operating floor, where roof leaks had allowed water to collect adjacent to safety-related electrical busses.

b. Findings

No findings of significance were identified.

1R02 Evaluation of Changes, Tests, or Experiments (71111.02 - 19 Samples)

a. Inspection Scope

The inspectors reviewed the three safety evaluations (SE) completed by Ginna personnel during the past two years. The inspectors' review verified that changes to the facility or procedures as described in the Updated Final Safety Analysis Report (UFSAR) and changes to tests not described in the UFSAR, were reviewed and documented in accordance with 10 CFR 50.59, and that the safety issues pertinent to the changes were properly resolved or adequately addressed. The review also confirmed that Ginna personnel had appropriately concluded that the changes and tests could be accomplished without obtaining license amendments. The following three safety evaluations were reviewed:

2002-0002 Cycle 30 Reload, Rev 0
2003-0001 Reload for Cycle 31, Rev 0
2003-0002 DA-ME-2001-0001 for Local Throttling of AOV-624, AOV-625, Rev 0

The inspectors also reviewed 16 screen-out evaluations for changes, tests, and experiments for which Ginna personnel determined that a safety evaluation was not required. This review was performed to verify that Ginna's threshold for performing safety evaluations was consistent with 10 CFR 50.59. The listing of the screened-out evaluations reviewed is provided in the Attachment.

In addition, the inspectors reviewed the administrative procedures that were used to control the screening, preparation, and issuance of the safety evaluations to ensure that the procedure adequately covered the requirements of 10 CFR 50.59. In conjunction with this review, the inspectors also reviewed selected applicability review forms related to plant changes (primarily procedure changes) for which the requirements of 10 CFR 50.59 did not apply.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

Partial System Walkdowns. (71111.04Q - 5 Samples)

The inspectors used plant Technical Specifications, Ginna operating procedures, plant piping and instrument drawings (P&ID), and the UFSAR as guidance for conducting partial system walkdowns of the following systems:

- The inspectors completed a walkdown of the 4160-volt off-site electrical power system while the "B" diesel generator (DG) was out of service for testing activities. The inspection consisted of a walkdown of the electrical panel in the control room as well as a walkdown of the on-site transformer yard area. The offsite power system was examined when the "B" diesel was being tested because of its high risk significance.

- The safety injection (SI) "B" and "C" trains were walked down while the "A" SI pump was out-of-service on September 7, 2004, for planned maintenance. These trains were examined because of their high risk significance. The inspection reviewed the alignment of the train valves and electrical breakers to ensure proper in-service and standby configurations were in place during maintenance as described in plant procedures and drawings. The material condition and general housekeeping of the trains and adjacent areas were examined as part of the inspection. The inspectors verified that operations personnel were following the applicable plant TS.

- The inspectors completed a walkdown of the "B" DG while the "A" DG was out of service for planned maintenance. The system valve lineup and breaker lineups were checked as well as the current status of support systems and components such as lube oil and service water temperatures and differential pressures. The air start system lineup was verified and the operating panel was verified to be in proper alignment. The inspectors verified that the operators were following the applicable plant TS.

- The "A" component cooling water (CCW) train was walked down while the "B" CCW heat exchanger was out of service for a service water valve replacement in late September 2004. The train was examined because of its risk significance during the opposite heat exchanger's unavailability. The inspection reviewed the alignment of the train valves and electrical breakers to ensure proper in-service and standby configurations were in place during maintenance as described in plant procedures and drawings. The material condition and general housekeeping of the trains and adjacent areas were examined as part of the inspection. The inspectors verified that operations personnel were following the applicable plant TS.

- The inspectors completed a walkdown of the ventilation system for the Technical Support Center (TSC). The position of dampers and breakers were checked and the material condition and general housekeeping of the system and adjacent areas were examined as part of the inspection. Action reports (AR)s that had been written for system deficiencies were also reviewed.

Complete System Walkdown. (71111.04S - 1 Sample)

The inspectors conducted a detailed walkdown of the "A" diesel generator (DG) and associated support systems necessary for proper operation of the DG. The "A" DG system was selected for inspection because of its importance following a loss of offsite power event. The inspection verified proper system alignment as required by plant TS, the UFSAR, and Ginna procedures and drawings. A review was also conducted of documented maintenance and action reports to check for trends and/or significant system deficiencies.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05Q - 12 Samples and 71111.05A - 1 Sample)

a. Inspection Scope

Using the Ginna Fire Protection Program documents as guidance, the inspectors performed walkdowns of the following fire areas to determine if there was adequate control of transient combustibles and ignition sources. The material condition of fire

protection systems, equipment and features, and the material condition of fire barriers was also inspected against industry standards. In addition, the passive fire protection features were inspected, including the ventilation system fire dampers, structural steel fire proofing, and electrical penetration seals. The following plant areas were inspected:

- Screenhouse
- Service Building Basement
- Charging Pump Room
- "A" Diesel Generator Room
- "B" Diesel Generator Room
- "A" Battery Room
- "B" Battery Room
- Relay Room
- Control Room Air Handling Room
- Auxiliary Building Basement
- Auxiliary Building Middle Level
- Auxiliary Building Operating Level

b. Findings

No findings of significance were identified.

2. Fire Brigade Drill

a. Inspection Scope

The inspectors observed a test of the Ginna station fire brigade conducted at 6:00 p.m. on September 1, 2004. The test involved a simulated fire in the Screenhouse Building. The inspectors verified the fire brigade personnel responded quickly to the fire, and used appropriate personal protective equipment. While combating the fire, the inspectors verified the brigade used proper firefighting techniques, and performed satisfactorily as a team. Following the drill, the inspectors verified the post-drill critique was thorough.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07A - 3 Samples)

a. Inspection Scope

The inspector verified that Ginna's maintenance, testing, inspection, and evaluation of results were adequate to ensure proper water flow or heat transfer for the following heat exchangers and related components including the intake structure and traveling screens:

- Component cooling water (CCW) heat exchangers (service water side)
- Emergency diesel generator (EDG) jacket water and lube oil heat exchangers
- "A" standby auxiliary feedwater (SAFW) system cooler heat exchanger

The inspector reviewed service water (SW) heat exchanger test methodology, frequency of testing, test conditions, acceptance criteria, and the evaluation of test results. The tracking of designated operational parameters including service water flows, heat exchanger differential pressures and temperatures was observed. Control Room indications and alarms for SWS operation including SW to CCW and to EDGs were examined. The extent and control of chlorination to minimize growth of potential service water system fouling growths were reviewed and the condition of the system monitoring bio-boxes was observed. The inspection, cleaning, and maintenance methods used to evaluate the intake structure, and intake tunnel into the screen house and video records of observations from these underwater areas were reviewed. The controls and equipment (electric heaters) in-place to prevent fragile ice buildup on the intake structure were reviewed. The service water system condition and heat exchanger performance were reviewed with the SW system engineer. This was to verify that the methods used for inspection and cleaning were consistent with expected degradation and that the current condition of the heat exchangers is acceptable. The photographs of the as-found condition of the "A" SAFW system cooler heat exchanger from March 2000 were examined. The frequency of service water system parameter observation by plant auxiliary operators, the computer logging of data, and provisions for disposition of values outside acceptable limits were observed and/or evaluated. The line flush conducted during the inspection for the Auxiliary Feedwater (AFW) Pump “A,” 4" line, per procedure PT-16F-A was observed. Selected test calculations of component performance data were reviewed to verify the test results reflected heat exchanger condition and that operation was consistent with design. Also, a sample of action reports (ARs) related to service water system problems including a few minor leaks, were reviewed to verify the licensee entered the problems into the corrective action program and provided appropriate corrective action.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11 - 1 Sample)

a. Inspection Scope

On August 30, 2004, the inspectors observed a licensed operator simulator scenario. The test observed was scenario ES1213-02, “Large Break LOCA.” The inspectors reviewed the critical tasks associated with the scenario, observed the operators’ performance, and observed the post-evaluation critique. The inspectors also reviewed and verified compliance with Ginna procedure OTG-2.2, “Simulator Examination Instructions.”

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12 - 2 Samples)

a. Inspection Scope

The inspectors evaluated work practices and follow-up corrective actions for selected system, structure, or component (SSC) issues at Ginna to assess the effectiveness of maintenance activities. The inspectors reviewed the performance history of those SSCs and assessed Ginna's extent of condition determinations for those issues with potential common cause or generic implications to evaluate the adequacy of Ginna's corrective actions. The inspectors reviewed Ginna's problem identification and resolution actions for these issues to evaluate whether Ginna personnel had appropriately monitored, evaluated, and dispositioned the issues in accordance with Ginna procedures and the requirements of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance." In addition, the inspectors reviewed selected SSC classification, performance criteria and goals, and corrective actions implemented by Ginna personnel to verify whether the actions were reasonable and appropriate. The following issues were reviewed:

- During the months of July and August 2004, the operations department declared the containment particulate radiation monitor R-11 inoperable on several occasions, because the monitor's sampling system was not functioning properly. Initial troubleshooting efforts conducted by personnel in the Instrument and Controls (I&C) department were not successful in resolving the cause of the failures, which were eventually traced to a faulty sample paper spooling system. While reviewing this issue, the inspector discovered that the alarm setpoint for R-11 may not be adequate. Details regarding this observation are discussed in Section 1R19 of this report.

- Since December 2003, the "A" and "C" charging pumps have experienced excessive packing leakage. Subsequent troubleshooting by Ginna personnel, attributed the leakage to galvanic corrosion caused by material incompatability between the pump pistons and packing.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 - 4 Samples)

a. Inspection Scope

The inspectors evaluated the effectiveness of Ginna's maintenance risk assessments required by paragraph a(4) of 10 CFR 50.65. This inspection included discussions with

control room operators and scheduling department personnel regarding the use of Ginna's online risk monitoring software. The inspectors reviewed equipment tracking documentation and daily work schedules, and performed plant tours to gain reasonable assurance that actual plant configuration matched the assessed configuration. Additionally, the inspectors verified that Ginna's risk management actions, for both planned and/or emergent work, were consistent with those described in procedure IP-PSH-2, "Integrated Work Schedule Risk Management." Risk assessments for the following out-of-service systems, structures, and/or components were reviewed:

- Planned maintenance on relay 18 in the intermediate range nuclear instrument involving blocking of the overpower trip signal which had failed in RPS Train "B" (July 1, 2004).
- Planned monthly maintenance on the "B" EDG which attempted use of a different method of system isolation to reduce the unavailability time (August 3, 2004).
- Planned maintenance to replace a blown fuse on the main turbine output voltage regulator (July 8, 2004).
- Planned maintenance on the "A" EDG which was complicated by repairs to the off-site 767 transformer and breakers (September 23, 2004).

b. Findings

No findings of significance were identified.

1R14 Operator Performance During Non-routine Plant Evolutions (71111.14 - 2 Samples)

a. Inspection Scope

On July 16 and September 9, 2004, the inspectors observed control room operators respond to two false fire alarms. The first false alarm was on the top floor of the Intermediate Building; the second was in the east stairwell of the Auxiliary Building. The Intermediate Building fire alarm was caused by a defective detector. The alarm in the Auxiliary Building was caused by inadequate venting of the sprinkler header following a maintenance evolution. The inspectors responded to the Control Room when the events occurred, and verified operators utilized the appropriate fire response procedures to diagnose and correct the condition. Further, the inspectors verified that the fire brigade's response to the alarms was timely.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15 - 6 Samples)

a. Inspection Scope

The inspectors reviewed operability determinations to verify that the operability of systems important to safety was properly established, that the affected components or systems remained capable of performing their intended safety functions, and that no unrecognized increase in plant or public risk occurred. In addition, the inspectors reviewed the following operability evaluations to determine if system operability was properly justified in accordance with IP-CAP-1.1, "Technical Evaluation for Current Operability and Past Operability Determination Worksheet":

- Action Report (AR) 2004-2346, "EDG Equipment Door Leak During Rainstorm"
- AR 2004-2333, "Rain Water Leaking Into Relay Room at Annex Wall"
- AR 2004-1859, "Insufficient Thread Engagement on Flange to Valve 4620 - SW Outlet from CCW HX 'B'"
- AR 2004-1864, "Low Thickness Reading Located on Elbow Downstream of V-4620 - Below Minimum Wall Thickness"
- AR 2004-1794, "CRDM Shroud Fan Suction Temperature Reading Approximately 180 Degrees"
- AR 2004-1826, "Containment Sump 'A' Level Zero Drift"

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17)

a. Inspection Scope

Biennial Inspection - (71111.17B - 11 Samples)

The inspectors reviewed eleven risk-significant plant modification packages selected from among the design changes that were completed within the past two years. The review was to verify that: (1) the design bases, licensing bases, and performance capability of risk-significant structures, systems, or components had not been degraded through modifications; and (2) modifications performed during increased risk configurations did not place the plant in an unsafe condition. The selected plant modifications were distributed among initiating event, mitigating system, and barrier integrity cornerstones.

For the selected modifications, the inspectors confirmed the adequacy of the design by reviewing design inputs, assumptions, and associated design calculations. The inspectors also reviewed field change notices that were issued during the installation to confirm that the problems associated with the installation were adequately resolved. In addition, the inspectors reviewed the post-modification testing, functional testing, and instrument and relay calibration records to determine readiness for operations. Finally,

the inspectors reviewed the affected procedures, drawings, design basis documents, and UFSAR sections to verify that the affected documents were appropriately updated. For accessible components, the inspectors also performed field observation of installed equipment to detect possible abnormal installation conditions.

Following are the modifications reviewed:

PCR 2001-0043	Throttling of MOV 3996, Rev 0
PCR 2003-0004	Installation of Low Flow Meter in SI Test Line, Rev 0
PCR 2003-0026	Rod Control Voltage Regulator, Rev. 0
PCR 2003-0032	Containment Sump B Gap Issues, Rev 0
PCR 2003-0006	RHR Pump Diff Press at 1725 gpm, Rev. 0
TE 2001-0048	NUS Instrument Model SPS500 Single Loop Power Supply which Replaces Foxboro Model 610 and 610A Supplies, Rev 1
TE 2003-0005	Equivalency of Capacitors for Safety Related Inverters
TE 2003-0023	Replacement Gaskets for Containment Penetration #2
TE 2002-0050	Equivalency Evaluation For Valves 870A and 870B (Velan/Anchor Darling)
UC 18/012	Revise DG Start Criteria during Adverse Weather and Other Conditions, dated October 7, 2003
UC 18/035	Revise RCP Flywheel Frequency

Annual Inspection (71111.17A - 1 Sample)

The inspectors reviewed Technical Services Request 2004-0071 which installed additional temperature monitors on the four 115kv underground pipe cables in the owner-controlled area. The additional monitors were installed because Ginna personnel were concerned the temperature of the underground cables may become excessive when they are carrying additional current following a planned 2006 power uprate. The review was to verify that: (1) the design bases, licensing bases, and performance capability of risk-significant structures, systems, or components had not been degraded by the modification; (2) the modification did not place the plant in an unsafe condition, and (3) the modification could be installed using commercial grade controls.

For accessible components, the inspectors also performed field observation of installed equipment to detect possible abnormal installation conditions.

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing (71111.19 - 6 Samples)

a. Inspection Scope

The inspectors observed portions of post-maintenance testing activities in the field to determine whether the tests were performed in accordance with approved procedures.

The inspectors assessed the test's adequacy by comparing the test methodology to the scope of maintenance work performed. In addition, the inspectors evaluated the test acceptance criteria to verify that the test demonstrated tested components satisfied the applicable design and licensing bases and TS requirements. The inspectors reviewed the recorded test data to determine whether the acceptance criteria were satisfied. The post maintenance testing activities reviewed included:

- WO 20403105, TSC Emergency Diesel Thermostat Replacement
- WO 20402680, Boron on Packing Gland
- WO 20403299, Low Suction Pressure Icing on the Evaporator
- WO 20400028, Inspect and Clean Strainer NSF 14 for Fire System S35
- WO 20403564, Charging Pump "B" O-Ring Extrusion Repairs
- WO 20403223, R11 Paper Tear

b. Findings

Introduction. The inspectors identified a finding that the Ginna Station does not have an installed control room alarm for the containment airborne radioactive particulate detector (R11) as described in the Updated Final Safety Analysis Report (UFSAR). A purpose of the alarm is to notify plant operators of reactor coolant system (RCS) leakage in the containment building. The radiation detector has indication in the control room and there are several other indicators and alarms in the control room that indicate the presence of reactor coolant system leakage. However, this detector is the most sensitive instrument and would provide operators the earliest detection of RCS leaks.

Description. The containment vent or containment atmosphere particulate monitor, R-11, measures short-lived particulate daughters of noble gas. The UFSAR states that the monitor can detect a .013 gallon per minute leak from the reactor coolant system within 20 minutes of initiation, assuming the presence of corrosion product activity. The Ginna UFSAR, Section 5.2.5.1, states that R-11 is the most sensitive system for detecting low RCS leak rates. Table 5.2-5 of the UFSAR indicates that the R-11 monitor has "control room indication for alarms and indicators," that would warn operators of a reactor coolant pressure boundary leak in the containment. Although R-11 has an indication of count rate in the Control Room, it does not have an alarm function which will indicate increased primary leakage in containment at the leak rate sensitivity stated in Table 5.2-5 of the UFSAR.

Analysis. The inspectors determined that the performance deficiency associated with this finding is the failure to provide an alarm function for the R-11 radiation detector as indicated in the UFSAR. The finding is greater than minor, because it is associated with the design control attribute of the Initiating Events Cornerstone, and adversely affects the cornerstone objective of limiting the likelihood of those events that upset plant stability. The finding is also greater than minor because a radiation detector alarm could provide operators with an early indication during a loss of primary coolant event. In accordance with Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," the inspectors conducted SDP Phase 1 screening and determined that the finding is of very low safety significance

(Green). The SDP process screened to Green since the absence of the alarm would not result in exceeding the RCS leakage TS limit and does contribute to a reactor trip with a loss of mitigating system availability. This finding is entered in Ginna's corrective action program as Action Report 2004-2111. FIN 05000244/2004004-01, No Alarm on R-11 to Provide Early Detection of RCS Leakage.

Enforcement. No violation of regulatory requirements occurred. The inspectors determined that the finding did not represent a non compliance because description of systems in the USFAR are not regulatory requirements.

1R22 Surveillance Testing (71111.22 - 9 Samples)

a. Inspection Scope

The inspectors witnessed the performance and/or reviewed test data for the following surveillance tests that are associated with selected systems, structures, and components (SSCs) to verify that TS were followed, and that acceptance criteria were properly specified. The inspectors also verified that proper test conditions were established as specified in the procedures that no equipment preconditioning activities occurred, and that acceptance criteria had been met.

- PT-12.1, "Emergency Diesel Generator 'A' Monthly" (July 29, 2004).
- PT-16Q-A, "Auxiliary Feedwater Pump 'A' Quarterly" (July 16, 2004).
- PT-12.5, "Technical Support Center Emergency Diesel Test" (August 2, 2004).
- PT-37.9, "Technical Support Center Pressurization and Filter Bank Flow Mass Air Flow" (July 28, 2004).
- PT-22.2, "Personnel Hatch Door Seal Leak Test" (August 9, 2004).
- WO 20401495, "Inspect Containment Vessel Tendon Grease Cans" (August 19, 2004).
- WO 20302431, "Two Week Walkdown of HVAC Equipment" (August 6, 2004).
- WO 20402366, "Recirculate Oil in 115kv Transmission Line" (September 14, 2004).
- PT-2.8Q, "CCW Pumps 'A' & 'B'" (September 29, 2004).

b. Findings

No findings of significance were identified

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06 - 1 Sample)

a. Inspection Scope

On August 30, 2004, the inspectors observed a licensed operator simulator scenario that included a limited test of the Ginna emergency response plan. Scenario ES1213-02, "Large Break LOCA," was observed. During the exercise, the inspectors verified the

crew properly classified the event per Emergency Plan Implementing Procedure (EPIP) 1-0, “Ginna Station Event Evaluation and Classification.”

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS1 Access Control to Radiologically Significant Areas (71121.01 - 7 Samples)

a. Inspection Scope

The inspector reviewed radiological work activities, practices, and procedural implementation during observations and tours of the facilities, and inspected procedures, records, and other program documents to evaluate the effectiveness of Ginna’s access controls to radiologically significant areas. This inspection activity represents the completion of seven (7) samples relative to this inspection area (i.e., inspection procedure sections 02.02.a thru f and 02.05.c) in partial fulfillment of the annual inspection requirements.

Plant Walkdowns and RWP Reviews (02.02.a thru f)

During a week of inspection, the inspector identified exposure-significant work areas within radiation areas, high radiation areas, or airborne radioactivity areas and reviewed associated licensee controls and surveys of these areas to determine if controls in use were acceptable. The inspectors walked down these areas or their perimeters with a survey meter to make the determination whether the radiation work permits (RWPs), work control instructions, barriers required by Technical Specfications, procedures, engineering controls, surveys, postings, and use of air sampling were adequate. The inspector also examined the procedure for setting the alarm set points for the electronic personal dosimeters, the conformity of these set points with radiation survey results, and what actions were required upon an alarm on an electronic personal dosimeter.

At the time of this inspection, there were no airborne radioactivity areas. The inspector reviewed selected RWPs which covered work activities with the potential to produce airborne activity and verified that the RWPs contained provisions for surveying for airborne activity. The inspector reviewed contamination survey data for several RWPs involving system breeches and noted that the beta/gamma to alpha activity level ratios were high indicating a minimal relative presence of transuranic radionuclides. During a previous inspection during the week of February 23, 2004, the inspector reviewed records of radiological incidents that involved personnel-contamination-monitor alarms due to personnel internal exposures. The reviewed documents did not identify any recordable internal exposures.

During this inspection, the inspector also examined Ginna's physical and programmatic controls for highly-activated or contaminated materials (non-fuel) stored within spent fuel and other storage pools. The inspector noted that Ginna had incorporated guidance in this area in numerous procedures including radiation protection procedures for labeling, radiation work permits, job coverage, and for use of underwater filters and vacuums.

High Risk-Significant, High Dose Rate HRA and VHRA Controls (02.05.c)

During this week of inspection, the inspector met with the acting foreman of radiological operations and reviewed the current listing of locked high radiation areas. Emphasis was placed on identifying any accessible high-dose-rate high radiation areas (HRAs) and very high radiation areas (VHRAs). During tours of the radiologically-controlled area, the inspector examined the postings and barriers at selected accessible locations on this listing. The inspector verified adequate posting and locking of the entrances to the selected locations which were examined.

Related Activities

On August 24 through 27, the inspector observed the morning turnover meetings for the Radiation Protection staff and technicians. On August 25, the inspector observed a pre-job briefing for the disassembly, repair, and reassembly of the bravo charging pump. On August 25 and 26, the inspector observed the radiological controls implemented by the radiation protection technician covering the work activity on the charging pump and the radiological protection practices used by the radiation workers.

The inspector performed a selective examination of documents (as listed in the List of Documents Reviewed section) to evaluate the adequacy of radiological controls. The review in this area was against criteria contained in 10 CFR 19.12, 10 CFR 20 (Subparts D, F, G, H, I, and J), Technical Specifications, and procedures.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls (71121.02 - 3 Samples)

b. Inspection Scope

The inspector reviewed the effectiveness of Ginna's program to maintain occupational radiation exposure as low as reasonably achievable (ALARA). This inspection activity represents the completion of three (3) samples relative to this inspection area (i.e., inspection procedure sections 02.01.a and d and 02.07) in partial fulfillment of the biennial inspection requirements.

Inspection Planning (02.01.a and d)

The inspector reviewed the plant collective exposure history for the last three full years, the current exposure trends in 2004, and ongoing or planned activities to reduce individual, work group, and site collective exposure. The inspector examined the plant's current three-year rolling average collective exposure in comparison with industry experience. The inspector also evaluated the adequacy of the site-specific procedures associated with maintaining occupational exposures ALARA which included the procedures for radiation work permits, ALARA job reviews, and ALARA job review preparation. The inspector also reviewed the processes currently used to estimate and track work-activity-specific exposures.

Declared Pregnant Workers (02.07)

The inspector determined that there had been no declared pregnant workers during the current assessment period. The inspector verified that adequate procedures and monitoring controls were in place to implement the requirements of 10 CFR 20.1208, dose equivalent to an embryo/fetus.

Related Activities

The inspector discussed the ALARA advantages of the shutdown chemistry sequence used for the last refueling outage and any changes for the next outage with the principal chemist. The inspector reviewed the minutes of the most recent meeting of the Station ALARA committee which took place on May 10, 2004. The topic of this meeting was the methodology for classifying, tracking, and goal-setting for the contaminated areas in the plant.

The inspector performed a selective examination of documents (as listed in the List of Documents Reviewed section) for regulatory compliance and for adequacy of control of radiation exposure. The review was against criteria contained in 10 CFR 20.1101 (radiation protection programs), 10 CFR 20.1701 (use of process or other engineering controls), and procedures.

c. Findings

No findings of significance were identified.

2OS3 Radiation Monitoring Instrumentation (71121.03 - 2 Samples)

c. Inspection Scope

The inspector reviewed the program for health physics instrumentation to determine the accuracy and operability of the instrumentation. This inspection activity represents the completion of two (2) samples relative to this inspection area (i.e., inspection procedure sections 02.01 and 02.02) in partial fulfillment of the biennial inspection requirements.

Inspection Planning (02.01)

The inspector reviewed the plant UFSAR to identify applicable radiation monitors associated with transient high and very high radiation areas including those used in remote emergency assessment. UFSAR Section 11.5.2.2 described the installed process radiation monitoring system. UFSAR Section 12.3.4 described the installed area radiation and airborne radioactivity monitoring instrumentation.

Identify Additional Radiation Monitoring Instrumentation (02.02)

On August 24, the inspector discussed portable radiation detection instrumentation with radiation-protection-instrumentation personnel. The inspector also reviewed the types of instrumentation in the radiation-protection-procedure listing for instrument operation and calibration. Based on these activities, the inspector identified the types of portable radiation detection instrumentation used for job coverage of high radiation area work, other temporary area radiation monitors currently used in the plant, and continuous air monitors associated with jobs with the potential for workers to receive fifty millirems of committed effective dose equivalent (CEDE).

Related Activities

The inspector performed a selective examination of documents (as listed in the List of Documents Reviewed section) for regulatory compliance and adequacy in this area. The review was against criteria contained in 10 CFR 20.1501, 10 CFR 20 Subpart H, Technical Specifications, and procedures.

d. Findings

No findings of significance were identified.

Cornerstone: Public Radiation Safety

2PS3 Radiological Environmental Monitoring Program (REMP) (71122.03 - 9 Samples)

d. Inspection Scope

The inspector reviewed: the most current Annual Environmental Monitoring Report (2003 Annual Radiological Environmental Operating Report) and Ginna assessment results to verify that the REMP was implemented as required by TS and the Offsite Dose Collection Manual (ODCM) and for changes to the ODCM with respect to environmental monitoring, commitments in terms of sampling locations, monitoring and measurement frequencies, land use census, interlaboratory comparison program, and analysis of data; the ODCM (revision 19, dated 01/21/04) to identify environmental monitoring stations; Ginna self-assessments, audits, licensee event reports, and interlaboratory comparison program results; the UFSAR for information regarding the environmental monitoring program and meteorological monitoring instrumentation; and,

the scope of the licensee's audit program to verify that it meets the requirements of 10 CFR 20.1101(c).

The inspector walked down 12 (of 12) air sampling stations; one (of 3) milk collection stations; four (of 5) surface water sampling stations; and 14 (of 39) thermoluminescence dosimeter (TLD) monitoring stations and determined that they were located as described in the ODCM and determined the equipment material condition to be acceptable.

The inspector observed the collection and preparation of a variety of environmental samples (listed above) and verified that environmental sampling was representative of the release pathways as specified in the ODCM and that sampling techniques were in accordance with procedures.

Based on direct observation and review of records, the inspector verified that the meteorological instruments were operable, calibrated, and maintained in accordance with guidance contained in the UFSAR, NRC Safety Guide 23, and Ginna procedures. The inspector verified that the meteorological data readout and recording instruments in the control room and at the tower were operable.

The inspector reviewed each event documented in the Annual Environmental Monitoring Report which involved a missed sample, inoperable sampler, lost TLD, or anomalous measurement for the cause and corrective actions. The inspector conducted a review of Ginna's assessment of any positive sample results.

The inspector reviewed any significant changes made by Ginna to the ODCM as the result of changes to the land census or sampler station modifications since the last inspection. The inspector also reviewed technical justifications for any changed sampling locations and verified that Ginna performed the reviews required to ensure that the changes did not affect its ability to monitor the impacts of radioactive effluent releases on the environment.

The inspector reviewed the calibration and maintenance records for 12 air samplers and composite water samplers. The inspector reviewed: the results of Ginna's contractor interlaboratory comparison program to verify the adequacy of environmental sample analyses performed by Ginna' s contractor; Ginna's quality control evaluation of the interlaboratory comparison program and the corrective actions for any deficiencies; Ginna's determination of any bias to the data and the overall effect on the REMP; and QA audit results of the program to determine whether Ginna met the TS/ODCM requirements. The inspector verified that the appropriate detection sensitivities with respect to TS/ODCM are utilized for counting samples and reviewed the results of the vendor's quality control program including the interlaboratory comparison program to verify the adequacy of the vendor's program.

The inspector observed several locations where Ginna monitors potentially contaminated material leaving the RCA, and inspected the methods used for control, survey, and release from these areas, including observing the performance of personnel

surveying and releasing material for unrestricted use, verifying that the work is performed in accordance with plant procedures.

The inspector verified that the radiation monitoring instrumentation was appropriate for the radiation types present and was calibrated with appropriate radiation sources. The inspector reviewed Ginna's criteria for the survey and release of potentially contaminated material; verified that there was guidance on how to respond to an alarm which indicates the presence of licensed radioactive material; and reviewed Ginna's equipment to ensure the radiation detection sensitivities are consistent with the NRC guidance contained in IE Circular 81-07 and IE Information Notice 85-92 for surface contamination and HPPOS-221 for volumetrically contaminated material. The inspector also reviewed Ginna's procedures and records to verify that the radiation detection instrumentation was used at its typical sensitivity level based on appropriate counting parameters and verified that the licensee has not established a "release limit" by altering the instrument's typical sensitivity through such methods as raising the energy discriminator level or locating the instrument in a high radiation background area.

e. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

1. Occupation Exposure Control Effectiveness (OECE)(02.01) (71151 - 1 Sample)

a. Inspection Scope

The inspector selectively examined records used by Ginna to identify occurrences involving high radiation areas, very high radiation areas, and unplanned personnel exposures for the time period from December 2003 through late August of 2004. The reviewed records included selected corrective action program records and Ginna's monthly PI data records for this PI. This review was conducted against the applicable criteria specified in Nuclear Energy Institute's (NEI) Regulatory Assessment Performance Indicator Guideline No. 99-02 (Revision 2, with an effective date of November 19, 2001).

This review and examination did not identify any problems with the PI accuracy or completeness and thus verified this performance indicator. This inspection activity represents the completion of one (1) sample relative to this inspection area (i.e., inspection procedure section 02.01) for one performance indicator (i.e., OECE).

Radiological Effluent Technical Specification/Offsite Dose Calculation Manual Radiological Effluent Occurrences (RETS/ODCM REOs)(02.01) (71151 - 1 Sample)

The inspector selectively examined records used by Ginna to identify any occurrences involving gaseous or liquid effluent releases. The reviewed record types included selected corrective action program records and Ginna's monthly PI data records for this PI. The inspector reviewed records covering the time period from December 2003 through late August of 2004. This review was conducted against the applicable criteria specified in Nuclear Energy Institute (NEI) 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 2 (effective date of November 19, 2001).

This review and examination did not identify any problems with the PI accuracy or completeness and thus verified this performance indicator. This inspection activity represents the completion of one (1) sample relative to this inspection area (i.e., inspection procedure section 02.01) for one performance indicator (i.e., RETS/ODCM REOs).

b. Findings

No findings of significance were identified.

2. Mitigating Systems Cornerstone (71151 - 3 Samples)

a. Inspection Scope

Using the criteria specified in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 2, the inspectors verified the completeness and accuracy of performance data provided for high pressure safety injection (HPSI) system unavailability, auxiliary feedwater (AFW) systems unavailability, and safety system functional failures performance indicators. Data was reviewed for the period of June 2003 to July 2004. To verify the accuracy of the data the inspector reviewed monthly operating reports, NRC inspection reports, Ginna system action reports, and operator logs.

b. Findings

No findings of significance were identified.

3. Emergency Preparedness Cornerstone (71151 - 3 Samples)

e. Inspection Scope

The inspector reviewed Ginna's procedure for developing the data for the EP PIs which are: (1) Drill and Exercise Performance (DEP); (2) ERO Drill Participation; and (3) ANS Reliability. The inspector also reviewed Ginna's 2003/2004 drill/exercise reports, training records and ANS testing data to verify the accuracy of the reported data. Data generated since the August 2003 EP PI verification was reviewed during this inspection.

The review was conducted in accordance with NRC Inspection Procedure 71151. The acceptance criteria used for the review were 10 CFR 50.9 and NEI 99-02, Revision 1, Regulation Assessment Performance Indicator Guideline.

f. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

1. Technical Support Center Ventilation System (71152 - 1 PIR sample)

a. Inspection Scope

The Ginna TSC ventilation system is located in the TSC mechanical equipment room. The equipment room is not part of the TSC conditioned air boundary, and as such, is not pressurized when the TSC ventilation system is in the accident mode. Using the plant UFSAR and plant drawings as a guide, the inspectors performed a walkdown of the TSC ventilation system. The walkdown was performed to verify the system was properly aligned, components were adequately labeled, and the ventilation ductwork was intact.

In addition to walking down the TSC ventilation system, the inspector reviewed the following ARs that involved issues associated with the system to determine if the issue of concern was evaluated and dispositioned, and extent of condition was considered:

- AR 2004-0587, “TSC HVAC Damper Failed”
- AR 2004-1931, “TSC Ventilation System is Not Operating as Required per UFSAR 9.4.8"
- AR 2004-1936, "Evaluate TSC HVAC as Equipment Important to Safety”
- AR 2004-1966, “Metal Tape on Ductwork is Peeling”
- AR 2004-2101, “TSC Vent System Expansion Joints”

As part of this review, the inspector also interviewed several plant engineers and operations personnel.

b. Findings and Observations

Introduction. The inspectors identified a Green finding that Ginna did not adequately evaluate Technical Support Center (TSC) ventilation surveillance test failures or maintain the TSC ventilation system in a manner to ensure it would be capable of performing its intended emergency preparedness function in a reliable manner.

Description. The Ginna Technical Support Center (TSC) was installed in the early 1980's to comply with 10 CFR 50.47(b)(8) “Emergency Plans,” which required the site owner to install and maintain adequate emergency response facilities and equipment to support the emergency response plan. The Ginna Updated Final Safety Analysis Report (UFSAR), Section 9.4.8 “Technical Support Center Ventilation System,” states that the TSC ventilation system should maintain a positive air pressure of .125 inches of water in the TSC when in the emergency mode

to provide personnel protection from airborne radioactive contaminants. To maintain a positive pressure in the TSC when in the emergency mode, up to 3000 cubic feet/minute of outside air is processed through a charcoal filtration train that is isolated when the TSC ventilation system is in the normal mode of operation. On February 24, 2004, the TSC ventilation system failed surveillance test PT-37.9, "Technical Support Center Pressurization and Filter Bank Mass Air Flow," that tests, in part, the ability of the system to maintain a positive pressure of .125 inches of water when operating in the emergency mode. During the test, the TSC could only be pressurized to .057 inches of water.

The licensee appropriately documented the surveillance test failure in AR 2004 - 0587, "TSC HVAC Damper AED 18 Failed." A work order was created to correct the cause of the test failure; however, the degraded condition was not repaired until July 29, 2004. During the five-month time period that the damper was out of service, the TSC ventilation system was in an undetermined state of operability. The licensee did not appropriately assess the impact that the test failure had on the TSC Facility or implement timely corrective actions to address this issue.

In August 2004, while performing a walkdown of the TSC ventilation system, the inspectors identified a significant number of expansion joints with frayed edges and holes in ducts. Under certain accident condition, these deficiencies could allow unfiltered air to enter the TSC. The licensee wrote two ARs to document these deficiencies. The importance of these deficiencies was exacerbated by the low pressure in the ventilation system caused by the earlier damper failure.

The inspectors determined that for five months (February 24, 2004 to July 29, 2004), the TSC ventilation systems were not capable of meeting the design criteria stated in the UFSAR. In addition, the licensee failed to assess the impact this failure would have on the availability of the TSC following certain accidents. Walkdowns of the system by the inspectors also identified other system deficiencies that the licensee was unaware of and therefore had not assessed. A subsequent analysis by Ginna engineers concluded that the TSC ventilation system remained operable throughout this period because a positive pressure could be maintained in the TSC; however, the system was degraded by the failed damper and ductwork perforations.

Analysis. The inspector determined that failure to adequately evaluate the impact of the surveillance test failure and identify system degradation was inconsistent with the licensee's corrective action program as described in Ginna procedure IP-CAP-1, "Abnormal Condition Tracking Initiation or Notification Report." IP-CAP-1 indicates that failures, malfunctions, deficiencies are promptly identified and corrected. Contrary to this standard, degraded conditions in the TSC ventilation system were not promptly evaluated or corrected. The finding is greater than minor because it is associated with the facilities and equipment attribute of the EP Cornerstone, and impacts the objective to ensure that Ginna personnel are capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The EP Significance Determination Process (SDP) was used to assess the safety significance of this finding related to the non-risk significant planning standard 10 CFR 50.47(b)(8). Based on IMC 0609, Appendix B, "Emergency Preparedness SDP," Sheet 1 for the failure to comply with an NRC requirement and the examples provided in Section 4.8, this finding was determined to be of very low safety significance (Green). This significance

determination was supported by the subsequent Ginna analysis that concluded the TSC ventilation system remained operable with the failed damper and ductwork perforations.

Enforcement. No violation of regulatory requirements occurred. The inspectors determined that the finding did not represent a non compliance because the system remained available and USFAR design criteria are not regulatory requirements. FIN 05000244/2004-04-02, Failure to Maintain the TSC Ventilation System.

2. Occupational Radiation Safety (71121 - 1 Sample)

c. Inspection Scope

The inspector selected six issues identified in the Corrective Action Program (CAP) for review (i.e., Action Report (AR) Numbers 2004-0673, -1439, -1760, -1776, -1838, and -1909). The issues were associated with personnel contaminations during a spent primary resin transfer, improper wearing of an electronic dosimeter, work week ALARA estimates not based on actual work scope, a failure to log into the RWP system, an electronic personnel dosimeter malfunction, and dose alarms due to welding activity.

The documented reports for the issues were reviewed to determine whether the full extents of the issues were identified, appropriate evaluations were performed, and appropriate corrective actions were specified and prioritized.

d. Findings

No findings of significance were identified.

5. Mitigating Systems (7111102 and 7111107 - 2 Samples)

a. Inspection Scope

The inspector reviewed ARs associated with service water system plant issues to ensure that Ginna personnel were identifying, evaluating, and correcting problems associated with the heat sink function and that the corrective actions were appropriate. The inspector also reviewed QA audit and surveillance activities related to the service water system activities at the Ginna Power Plant.

Corrective action reports (AR) associated with selected 10 CFR 50.59 issues and plant modification issues were reviewed to ensure that Ginna personnel were identifying, evaluating, and correcting problems associated with these areas and that the planned or completed corrective actions for the issues were appropriate. The inspectors also reviewed four audits and self-assessment reports related to engineering activities, including 10 CFR 50.59 safety evaluation and plant modifications at the Ginna Station.

The listing of the action requests and self assessments reviewed is provided in Attachment 1.

b. Findings

No findings of significance were identified.

4. Public Radiation Safety (71122 - 1 Sample)

a. Inspection Scope

The inspector reviewed Ginna's Licensee Event Reports, Special Reports, and audits (Quality Assurance Surveillance Report 2004-0064-OTD) related to the radiological environmental monitoring program performed since the last inspection. The inspector determined that identified problems were entered into the corrective action program for resolution. The inspector also reviewed corrective action reports affecting environmental sampling, sample analysis, or meteorological monitoring instrumentation. Two ARs related to the problems identified in the radiological environmental monitoring program were reviewed (AR 2004-1587 and 2004-1589).

b. Findings

No findings of significance were identified.

5. Corrective Action Review by Resident Inspectors (71152 - 1 Sample)

a. Inspection Scope

As required by Inspection Procedure 71152, "Identification and Resolution of Problems," and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into Ginna's corrective action program. This review was accomplished by reviewing paper copies of each condition report, attending daily screening meetings, and accessing Ginna's computerized database.

b. Findings

No findings of significance were identified.

6. Cross-Reference to PI&R Findings Documented Elsewhere

Section 4OA2, item 1, of this report documents a finding where Ginna personnel did not adequately assess degraded conditions in the TSC ventilation system as required by IP-CAP-1.

Section 4OA3 of the report describes a finding where Ginna personnel did not initially perform an adequate extent of condition review when degraded conditions were found in the control room boundary.

4OA3 Event Follow-up

1. (Closed) LER 50-244/2004-01 Gaps in the Control Room Emergency Zone Boundary

a. Inspection Scope

The inspectors reviewed LER 50-244/2004-001, to verify the issue was properly described and the corrective actions were reasonable.

b. Findings

Introduction. The inspectors identified a Green non-cited violation of 10 CFR 50 Appendix B, Criterion lll, "Design Control," on July 22, 2004, when several breaches in the control room boundary (wall) were identified. The cumulative area of the breaches would allow air in-leakage into the control room at levels that exceeded control room design criteria assumptions. The licensee took immediate action to seal the breaches to repair this condition.

Description. The control room walls at Ginna have been extensively modified since the start of commercial operation in 1969 to address various concerns involving items such as the forces generated by a high energy line break in the Turbine Building and the effects of an offsite release of toxic gas on control room personnel. To ensure the control room could withstand these postulated accidents and still provide operators with acceptable working conditions, various design limits for air in-leakage were established. For example, the Ginna UFSAR and plant TS indicate that breaches in the control room envelope that have an aggregate area of greater than 58.9 square inches will allow air to leak into the control room that will exceed the loss of coolant accident (LOCA) and toxic chemical design criteria. This hole size corresponds to an assumed air in-leakage of 500 cubic feet/minute.

The inspector determined that when these modifications were designed and installed, Ginna personnel did not ensure they would be installed using materials and techniques that would limit the amount of air in-leakage into the control room area. As a result, since January 2003, NRC inspectors and Ginna personnel have identified a series of breaches in the control room enclosure, which would allow untreated outside air to enter the control room environment. Until July 22, 2004, all of the breaches had been small, with an aggregate area of less than the 5.25 square inch LOCA design criteria and the 58.9 square inch toxic chemical design criteria described in the plant UFSAR and plant TS.

One such deficiency was identified on June 21, 2004, when Ginna maintenance personnel discovered gaps in the southeast corner of the control room between the steel plating on the east wall and the concrete south wall, while installing equipment for a new control room ventilation system. Ginna personnel estimated the area of the gaps to be 2.5 square inches. Following discovery of these gaps, the inspectors discussed the extent of condition review with Ginna engineering staff and managers. Specifically, the inspector asked if they planned to examine similar joints on the east wall of the control room as part of an extent of condition review. The inspector was informed that additional inspections of the east wall were not required since Ginna engineers believed that the similar joints were properly sealed. After several weeks, this position was reconsidered and the inspections were performed.

On July 22, 2004, the first day of the extent of condition review, Ginna maintenance and engineering personnel identified a breach in the control room boundary on the east wall of the control room that exceeded the LOCA and toxic gas limit design criteria. Similar to the June 21 discovery, the gaps were located where the east wall of the control room joined a concrete structure. In this case, the gaps were located where the east wall of the control room met the control room floor. The gaps were estimated to be 117.7 square inches. The inspector determined that had Ginna personnel conducted an adequate extent of condition review following the discovery of the gaps on June 21, this degraded condition would have been corrected earlier.

Upon discovery of the degradation, Ginna maintenance personnel restored the control room boundary to an operable condition by sealing the gaps. Since the air in-leakage through the gaps would have invalidated the assumptions in the toxic gas analysis, Ginna personnel reported the discovery of the analyzed condition to the NRC operations officer as required by 10 CFR 50.72(b)(3)(ii)(B). Although the gaps in the control room boundary also exceeded the LOCA in-leakage design criteria, this fact was not reportable to the NRC since control room operators could use potassium iodine tablets to limit their radiological intake.

Analysis. The performance deficiency associated with this event was a failure of Ginna personnel to establish measures to correctly translate the design basis of safety-related equipment into procedures, instructions, and drawings when installing a modification to the east wall of the control room structure. Because of this inadequacy, untreated outside air would leak into the control room under certain accident scenarios at levels greater than what was assumed in the plant design analysis. This finding is being documented as an inspector identified violation partially because the resident inspectors conducted discussions with plant personnel regarding the need for more thorough extent of condition inspections as required by IP-CAP-1. Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements or Ginna procedures. This finding is greater than minor because it affects the design control attribute and the Barrier Cornerstone objective of providing reasonable assurance that physical barriers will provide protection during events and accidents. In accordance with Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," the inspectors conducted an SDP Phase 1 screening. This screening determined that a Phase 3 evaluation was required because the degradation of the control room barrier function against a toxic atmosphere was affected. The Phase 3 SDP analysis concluded that this issue was of very low safety significance (Green), because of the low initiating event frequency of an inadvertent offsite release of toxic gas that would affect the Ginna control room operators. The inspectors determined this finding was a cross-cutting issue in the Problem Identification and Resolution area since Ginna personnel did not initially conduct a thorough extent of condition review when the degraded control room conditions were identified.

Enforcement. 10 CFR 50, Appendix B, Criterion lll, "Design Control" requires, in part, that measures be established to correctly translate the design basis for structures, systems, or components into specifications, drawings, procedures, and instructions. Contrary to the above, when installing plates on the east control room wall in 1978, Ginna personnel did not ensure the plate was installed in a manner that would ensure the air in-leakage design criteria was met. As a result, when the plate was installed, gaps were left in the control room wall that would allow

unfiltered air to enter the control room during certain accident scenarios at amounts that exceeded the control room design criteria. This design deficiency was not discovered until July 22, 2004, when Ginna personnel were examining this wall as part of an extent-of-condition review. Because this condition was immediately repaired and this inspector-identified finding has been entered into the Ginna station corrective action program in Action Report 2004-1877, “Gap In Control Room Boundary Between Floor and Armor Plate,” this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000244/2004004-03, Failure to Establish Appropriate Design Controls When Modifying the Control Room.

4OA5 Other Activities

(Closed) URI 05000244/2003013-01: Non-Rated Cable Tunnel Hatch

Introduction. A very low safety significance (Green) NCV was identified for failure to comply with 10 CFR 50.48, "Fire Protection," related to the non-rated penetration that separated the safety-related cable tunnel (CT) area from the main transformer area. This significance determination was based on the frequency (on the order of 1 in 100,000 years) of safety-related cable damage from a non-extinguished fire in the CT, as the result of a severe failure of main transformer and the chance of subsequent core damage (on the order of 1 in 100) given the cable damage. The licensee has completed a modification to the cable tunnel escape hatch to correct this condition.

Description. During the triennial fire protection inspection completed on November 21, 2003 (NRC Inspection Report 05000244/2003013), the team identified that the CT escape hatch was not designed and tested to prevent the passage of burning main transformer oil into the CT. As such, the escape hatch was a non-rated penetration that did not minimize the probability and effect of a main transformer fire or explosion, as required by 10 CFR 50.48, "Fire Protection." This issue was important because it had not been previously identified as a vulnerability in the plant’s fire hazard analysis. It was determined that safety-related cables in the CT, for systems needed to safely shut down the plant, were vulnerable to fire damage in the event of a severe main transformer failure.

Analysis. IR 05000244/2003013 identified the failure to meet the requirements of 10 CFR 50.48 relative to the non-rated CT escape hatch penetration as a performance deficiency. The issue was more than minor because it was associated with the Mitigating Systems cornerstone attribute of protection against external factors and affected the objective of ensuring the capability of systems to respond in the event of a fire. Using the Fire Protection significance determination process, IMC 0609, Appendix F, the finding required a Phase 2 analysis because of the effect on the fixed fire suppression system and of the reduced effectiveness of the fire brigade in combating the postulated fire scenario. The finding was determined to need a detailed Phase 3 fire risk evaluation because the Phase 2 SDP, using conservative assumptions, determined that the issue could have been greater than very low safety significance. The Phase 3 evaluation was needed to ensure a thorough review of factors such as ignition frequency, suppression capability, and shutdown methods. The significance of this finding had not been determined at the conclusion of that inspection.

The Phase 3 evaluation was subsequently completed with assistance from the office of Nuclear Reactor Regulation (NRR) and Sandia National Labs. The analysis considered a severe failure of the main transformer causing burning transformer oil to flow through the non-rated CT escape hatch, which jeopardized the integrity of the cables needed to ensure a safe shutdown. It was assumed a main transformer explosion would result in a reactor trip and the loss of off-site power (LOOP). The LOOP would also cause the reactor coolant pumps (RCP) to stop. Relative to the assumed effects of fire-related cable damage in the CT: seal injection flow to the reactor coolant pumps would be lost and render the pump seals vulnerable to failure; and power would be lost to the block valves associated with one or both power operated relief valves (PORV). This condition could **leave operators unable to isolate a PORV that may have spuriously opened or stuck open after lifting in response to a high pressure condition.**

The analysis estimated an increase in the frequency of a non-extinguished CT fire leading to cable damage in the range of low E-5 per reactor year, given the condition of the CT escape hatch. This was based on a severe failure of the main transformer frequency in the mid-E-4 per reactor year range and the approximate 0.05 chance that the CT fixed fire suppression system would not extinguish the fire before cable damage occurred. The 0.05 unavailability factors for a fixed suppression system were established in the "Fire Induced Vulnerability Evaluation" (FIVE) methodology. It was assumed that if the CT escape hatch was a properly designed fire barrier, the frequency of cable damage due to the severe failure of the main transformers would be negligible.

The analysis developed a conditional core damage probability (CCDP), assuming that the fire damaged cables in the CT, in the low E-2 range. This was based on assuming a reactor trip, a LOOP, loss RCP of seal cooling, and the potential for the inability to isolate a stuck open PORV. The failure to establish secondary cooling was the dominant contributor to risk, followed by RCP seal failure, failure of control room operators to recognize the fire in the CT, and a non-isolated stuck open PORV.

The increase in CDF (*CDF) was estimated to be in the mid E-7 range, by taking the product of the increase in the non-extinguished CT fire frequency and the CCDP given cable damage. Given a *CDF in this range, using IMC 0609 Appendix H, the potential for an increase in the large early release frequency (*LERF) was negligible, because the Ginna containment is of the large dry design. Based on this comprehensive evaluation of the initiation event frequency, surviving mitigating systems and operator actions to mitigate the impact of the fire event, the finding was considered to have a very low safety significance (Green).

Enforcement. 10 CFR Part 50.48, "Fire Protection" requires that each operating nuclear power plant have a fire protection plan that satisfies Criterion 3 of Appendix A. Appendix A, Criterion 3, states that structures, systems, and components important to safety shall be designed and located to minimize, consistent with other requirements, the probability and effect of fire and explosion.

Contrary to the above, the Cable Tunnel, which is a structure important to safety, that contains systems and components important to safety, was not adequately designed to minimize, consistent with other requirements, the effect of fire and explosion. Specifically, the cable tunnel hatch is a non-rated penetration and the cable tunnel would be vulnerable to fire damage in the

event of a severe main transformer failure and systems used to shut down the plant could have been challenged. Ginna initiated corrective actions under AR 2003-2994 and 2003-3006, which included sealing the escape hatch opening. This issue is being treated as an NCV consistent with Section VI.A.1 of the NRC Enforcement Policy: NCV 0500044/2004004-04, Non-Rated Cable Tunnel Hatch.

4OA6 Meetings, Including Exit

Exit Meeting Summary

On October 27, 2004, the inspectors presented the inspection results to Mr. Tom Marlow, and other members of the licensee staff. The licensee acknowledged the conclusions and observations presented.

The inspector asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information is presented in this report.

4OA7 Licensee-Identified Findings

The following violation of very low safety significance (Green) was identified by Ginna and was a violation of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as an NCV:

- Technical Specification (TS) 5.4.1 requires that procedures for Fire Protection Programs be implemented. Contrary to this requirement, on June 21, 2004, a continuous fire safety watch posted as a compensatory measure in accordance with TRM Firewatch Posting, SC-3.15.17, in the Cable Tunnel, secured his watch at approximately 1500 hours and left fire door F-3 propped open with ventilation ducts running through it. He erroneously assumed that the door was still under an hourly surveillance. At 1850 hours, a fire brigade individual conducting a plant tour identified the door as propped open with no compensatory actions in place and immediately notified supervision. This finding is greater than minor in that it is associated with the Mitigating Systems Cornerstone and if left uncorrected would become a more significant safety concern in the event of a cable tunnel fire in that access to safe shutdown equipment would be significantly reduced by a failure of this barrier. This finding screens to Green under Appendix F of IMC 0609, Significance Determination Process. The failure was identified as a “High” degradation in the fire category of “Fire Confinement,” with a Fire Damage State Three (FDS3) and screens to Green in Task 2.2.2 Question 5 of Appendix “F.” This finding is in Ginna’s corrective action program as AR 2004-1640.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

S. Adams, Manager, Ginna Production
P. Bamford, Operations Manager
B. Flynn, Special Projects Manager Ginna Station
T. Harding, Senior Licensing Engineer
K. Holmes, Technician, Radiation Protection
J. Hotchkiss, Mechanical Maintenance Manager
W. Lipscomb, Assistant to Senior Vice President
R. Marchionda, Fleet Nuclear Assessment Manager
J. Pacher, Primary Systems and Reactor Engineering Manager
R. Ploof, Scheduling Manager
J. Smith, Manager, Ginna Maintenance
W. Thomson, Manager, Radiation Protection
T. White, Balance of Plant Systems Engineering Manager
J. Widay, Vice President, Ginna Station
G. Wrobe, Nuclear Safety and Licensing Manager

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Opened and Closed

05000244/2004-001	FIN	No Alarm on R-11 to Provide Early Detection of RCS Leakage (Section 1R19)
05000244/2004-002	FIN	Failure to Maintain the TSC Ventilation System (Section 2OA2).
05000244/2004-003	LER	Gaps in the Control Room Emergency Zone Boundary (Section 4OA3)
05000244/2004-004	NCV	Non-Rated Cable Tunnel Hatch (Section 4OA5)

Closed

05000244/2003-013-01	URI	Non-Rated Cable Tunnel Hatch (Section 4OA5)

Discussed

None

LIST OF DOCUMENTS REVIEWED

Section 1R07: Heat Sink Performance

Action Reports

AR 2000-1396 on leakage by MOV-4313
AR 2004-0655, dated 3/1/04 for INPO SEN 247 (2/26/04) on Kewaunee lakeweed issue
Action Reports related to the Service Water System (08) from 7/1/03 to 7/7/04

Calculations

Analysis DA-ME-98-139, Rev 1. EDG Lube oil and Jacket water Hx Service Water Differential Pressure limits
Design Analysis DA-ME-98-138, Rev 1. EDG Lube oil and Jacket water Hx Service Water Plugging Limits and Thermal performance.
Design Analysis DA-ME-99-081, Rev 0. RSSP-25 Test Acceptance Criteria Development for the Service Water System Flow Test

Drawing

Drawing 33013-2806, Rev. 3, Intake Heater Replacement

Documents

Service Water System Reliability Optimization Program (SWSROP) Manual, Rev. 6.
Maintenance Repetitive Task P401083 for Inspect and Clean SAFW Pump Room Cooler B.
Maintenance Repetitive Task P401084 for Inspect and Clean SAFW Pump Room Cooler A.
Maintenance WO #'s 199902169 and 199903533 for AFA-1B and AFA01A SAFW PMP Room Coolers with photos of "A" SAFW Cooler.
SYS51, Rev. 18, SWS Training System Description, dated 12/10/2002.
WO # 20202832, Completed on 10/20/03 for Screenhouse underwater inspection and cleaning.
WO # 20203073, Completed on 6/27/03 for Inspection of Discharge structure, revetment and SW return outlet structure.
IP-IIT-4, Rev. 0, Erosion/Corrosion Program, Interface Procedure.
EP-3-P-0138, Rev. 3, Erosion/Corrosion Control Monitoring Program.
SEG-6.0, Rev. 0, Erosion/Corrosion Program Manual.
Maintenance Repeat Tasks P200267, P201240, P201455, P201174, and P200308 on SW intake items.
Photos - Intake structure heaters.

Plant Modification

PCR No. 2000-0014, Rev. 2, Refurbish Intake Structure Screens

Procedures

Procedure No. CH-S-CW/SW-CHLOR, Rev. 9. Circulating Water and Service Water Sampling and Monitoring During Chlorination.Procedure No. CH-NAOCL-SW-INJ-O, Rev. 14. Service Water Sodium Hypochlorite Injection System Operation
Procedure No. CH-CL2-CAP-O&C&M, Rev. 4. Capital Controls Chlorine Monitors Operation, Calibration and Maintenance
Procedure No. O-6.13, Rev. 134. Daily Surveillance Log
Procedure No. CH-BIOBOX-O, Rev. 2. Bio-boxes Operation
Procedure No. EL004, Rev. 0. Monitoring for Zebra Mussel Mortality with Bio-boxs
Procedure No. PT-2.3, Rev. 95. Safeguard Power Operated Valve Operation.
Procedure No. RSSP-2.1, Rev. 59. Safety Injection Functional Test
Procedure No. RSSP-25, Rev. 2. Service Water System Flow Test
Procedure No. PT-16F-A , Rev. 0. AFW Pump-A SW Flush
Procedure No. PT-2.7.1, Rev. 56. Service Water Pumps (and Valve quarterly Testing)
Procedure No. O-6.1, Rev. 16. Auxiliary Operator Rounds and Log Sheets
Procedure No. M-1306.1, Rev. 15. Ginna Winterizing Inspection Program
Procedure No. PT-16Q-T, Rev. 38. Aux Feedwater Turbine Pumps (quarterly Testing and SW strainer cleaning)
Procedure P-13, Rev 26. Rev. 12, Auxiliary Operator Tour Guidelines

Section 1R17: Permanent Plant Modifications

Action Reports

2001-0595, 2002-2155, 2002-2157, 2002-2350, 2002-2715, 2003-0032, 2003-1487, 2003-1490, 2003-1528, 2003-2310, 2003-2318, 2003-3051, 2003-3085, 2004-0577, 2004-0903, 2004-1769

Calculations

DA-ME-2001-001	Determination of the Valve Disc Angle for Throttling AOV-624 and AON-625 Prior to Entering the Sump Recirculation Phase, Rev. 0
DA-ME-2002-052	ECCS Flow Results with 857 Valves Open During RHR Pump Surveillance Tests, Rev. 0
DA-NS-2003-040	Cycle 31 Reactor Engineering Calculations, Rev. 0
DA-ME-2003-043	Evaluation of Minimum Wall for Safety Relief Nozzle and the Pressurizer Spray Nozzle (Refer: AR-2003-2318), Rev. 0
DA-ME-2003-042	Credibility Evaluation (Reactor Vessel Material Surveillance)
NSL-0000-DA027	Residual Heat Removal Pump NPSH Calculations During Accident Conditions, Rev 1

Documents

2002-0589 Revision to DG operations during Severe Weather or Seismic Event, Rev. 0
2003-0163 Changes to Calibration Procedure for App R Source Range Drawer, Rev. 0
2003-0175 RHR Pump Testing Setpoint Upgrade, Rev. 0
2004-0042 EDG Lube Oil Temp Low Limit, Rev. 0
2004-0081 EDG Building Air Intake Canopy Modification, Rev. 0
2003-0256 Operation with Control Rods in Manual
2004-0128 Construct Offsite Diesel Fuel Oil Storage Facility
2004-0217 PCNs for Verifying Operability of Offsite Power
2003-0012 TRM Upgrade for Valve HVC-142 (PCR 2002-0045 R0)
2003-0024 PCN to S-12.2 for Boric Acid Corrosion Control Program Implementation
2003-0039 Loss of Spent Fuel Pool Cooling
2003-0046 MOV 9746 Yoke to Operator Bolting (Bolting Failure-Replacement, Upgrade of Stud/Nut)
2003-0271 Reactor Vessel Closure Head Replacement (PCR 2001-0042)
2004-0089 Containment Isolation Valve Verification (Procedure Change Only, S-30.7) to Allow Valves 921 AND 922 to be in Closed Position for Maintenance Activities
2003-0442 Safety Classification Changes (Local Temperature Indicators on EDGs)
2003-0620 Replacement of Velan Check Valve with Anchor Darling
SA 2003-0031 Engineering Human Performance Self Assessment, May 3, 2004
SQUA-2003-0025-ERD Surveillance of Implementation of a Configuration Change (PCR 2001-0047)
SQUA-2003-0093-DHK Surveillance of Implementation of PCR 2002-0023 (CRFC Motor Cooler Coils)
SQUA-2003-0150-EMS Surveillance of 10CFR 50.59 Determinations, Reviews and Evaluations
MDCN 2475 Gap Closure Plate for Deck Plate (PCR 2003-0032)
MDCN 2479 Deck Plate and Pipe Gap Closure Plates (PCR 2003-0032)
CPI-APPX-R-SR-32 Calibration of Appendix R Source Range, N32R, Rev. 6
DBCOR 2003-0020 Basis for Change of Minimum RHR Differential Pressure at 1725 GPM, dated March 14, 2003
DBCOR 2004-0001 ALCO Owner's Group (AOG) Technical Committee Meeting Report, dated August 14, 1998
DUF 2001-0118 Control Rod Drive Cabinet Cooling Modification, Rev. 0
PSAER 2001-0025 Control Rod Drive Cabinet Cooling Modification, Rev. 0
TPCN 2003-T-0055 Change to Procedure CPI-APPX-R-SR-32, Rev. 6
EWR-4998 Engineering Work Request Design Criteria Steam Generator Penetration
CIE 2004-0002 Change Impact Evaluation Offsite Diesel Fuel Oil Storage Facility
SCA-XX-0032 Parts Safety Classification
PO 4500028395 Purchase Order Sealing Devices, Inc.
TSR 2001-0140 Technical Staff Request Throttling of MOV 3996
Ginna Station Technical Specifications
Work Order 20203293, dated April 16, 2003

Drawings

33013-1247	Auxiliary Coolant Residual Heat Removal, Rev 37
33013-2867	Containment Sump B Screen Modification, Rev 1
33013-2310	Steam Generator Containment Penetration Modification

Procedures

A-405	Evaluation of Commercial Grade Items for Safety Related Applications, Rev 10
C6	Alarm Response Procedure
EP-3-P-0126	Equivalency Evaluation, Rev 12
IP-DES-2	Plant Change Process, Rev 18
IP-DES-4	Set point Change Process, Rev 5
IP-LPC-7	Updated Final Safety Analysis Report (UFSAR), Periodic and Continuous Updating, Rev 4
IP-SEV-1	Preparation, Review and Approval of 50.59 Applicability Determinations and 50.59 Screens, Rev 11
IP-SEV-2	Preparation, Review and Approval of 50.59 Evaluations, Rev 11
O-6.9	Operating Limits for Ginna Station Transmission
O-6.13	Daily Surveillance Log
PT-2.2Q	Residual Heat Removal System – Quarterly, Rev. 23, dated April 5, 2004

Section 2OS1: Access Control to Radiologically Significant Areas

Documents

RWP 03-1036, Rev. 00, Replace letdown DI filter (A.K.A. RC filter) and most recent job surveys made on September 24 and 27, 2003
RWP 04-1017, Rev. 01, Transfer spent resin from the alpha spent resin tank to the radwaste cask and most recent job surveys made on March 2 thru 4, 2004
RWP 04-1020, Rev. 00, Replace spent fuel pool filters and modify housing swing arm and most recent job surveys made on July 27, 2004
RWP 04-0001, Rev. 00, Perform routine maintenance and tests in non-high-radiation areas and job surveys made on August 25 and 26, 2004
Listing of current locked high radiation areas and high radiation areas as of August 24, 2004
Radiation protection program ongoing self-assessment, Second quarter 2004, August 23, 2004
Quality assurance surveillance report no. SQUA-2004-0012-TJD, March 1, 2004, Control of radioactive material
Quality assurance surveillance report no. SQUA-2004-0028-OTD, March 10, 2004, Personnel contamination
Quality assurance surveillance report no. SQUA-2004-0058-OTT, April 30, 2004, Chemistry and radiation protection technician training

Procedures

Procedure A-1, Rev. 70, Radiation control manual
Procedure A-1.1, Rev. 41, Access control to locked high radiation and very high radiation areas
Procedure A-1.8, Rev. 20, Radiation Work Permits
Procedure RPA-PREJOB, Rev. 1, Radiation protection pre-job brief and turnover guidelines
Procedure RPA-PERFORMANCE-IND, Rev. 1, Radiation protection performance indicator guidelines
Procedure CHA-Performance-IND, Rev. 2, Primary chemistry performance indicators
Procedure IP-LPC-8, Rev. 4, NRC performance indicators
Procedure RP-JC-Job coverage, Rev. 6, Job coverage
Procedure RP-SUR-LABEL, Rev. 5, Labeling and control of radioactive material
Procedure RP-SUR-POST, Rev. 5, Radiological postings and boundary control
Procedure RP-SUR-RADIATION, Rev. 3, Performance of radiation surveys
Procedure RF-71, Rev. 4, Tri-Nuclear Corporation underwater filter/vacuum unit operating procedure

Section 2OS2: ALARA Planning and Controls

Documents

Draft five-year ALARA plan as of August 24, 2004
ALARA committee meeting minutes on contaminated areas on May 10, 2004
Basis document for tracking contaminated square footage dated August 3, 2004

Procedures

Procedure A-1.6.1, Rev. 28, ALARA job reviews
Procedure A-1.8, Rev. 20, Radiation Work Permits
Procedure RP-ALA-REVIEW, Rev. 6, ALARA job review preparation
Procedure RP-EXP-EXT-LIMIT, Rev. 18, Determining external exposure control levels

Section 2OS3: Radiation Monitoring Instrumentation

Documents

Quality assurance surveillance report no. SQUA-2004-0062-OTD, June 1, 2004, Radiological protection measurements

Procedures

Procedure RPA-INS-M&TE, Rev. 7, Radiation protection measurement and test equipment control

Procedure INS-C-ASP1, Rev. 2, Calibration of Eberline ASP-1 meter
Procedure INS-C-ASP2, Rev. 2, Calibration of Eberline ASP-1 meter
Procedure INS-C-GILIAN, Rev. 3, Calibration of the Gilair 5 air sampler
Procedure INS-O-GILIBRATOR, Rev. 0, Gilibrator primary standard airflow calibrator operation
Procedure RP-JC-AMS4, Rev. 10, Routine operation of the Eberline AMS-4 air monitoring system

Section 4OA2: Identification and Resolution of Problems

Action Reports

2004-1793	Obsolete Parts in Stock Without Label
2004-1858	RHR NRC Performance Indicator Data in Error
2004-2067	MSCV 3519 Movement
2004-2452	Ladder Improperly Used
2004-2534	Higher Than Normal Winds are Pressurizing the TSC

Section 4OA5: Other

Calculations and Engineering Evaluations

DA-ME-94-082	86-10 Evaluations of Various Issues and IDR 92-0068 Resolution, Rev. 0
DA-ME-94-118-04	Cable Tunnel Smoke Barrier - PENQ-04, Rev. 0
DA-ME-94-118-05	Cable Tunnel Smoke Barrier - PENQ-05, Rev. 0
DA-ME-94-118-06	Cable Tunnel Smoke Barrier - PENQ-06, Rev. 0
DA-EE-2000-066,	Appendix R Conformance Analysis, Rev. 1
DA-EE-2001-028,	Vital Battery 8 Hour Capacity, Rev. 0
DA-ME-2000-075,	Design Analysis, Pressurizer, Volume Control Tank and RWST Evaluations of Appendix R, Rev. 0

Diagrams

33013-1237,	Auxiliary Feedwater (FW), Rev. 43
33013-1247,	Auxiliary Coolant Residual Heat Removal (AC), Rev. 37
33013-1250,	Station Service Cooling Water, Safety-Related (SW), Sh. 1, Rev. 36
	Station Service Cooling Water, Safety-Related (SW), Sh. 2, Rev. 28
	Station Service Cooling Water, Safety-Related (SW), Sh. 3, Rev. 25
33013-1258,	Reactor Coolant Pressurizer (RC), Rev. 24
33013-1260,	Reactor Coolant (RC), Rev. 23
33013-1261,	Containment Spray (SI), Rev. 24
33013-1262,	Safety Injection and Accumulators (SI), Sh. 1, Rev. 22
	Safety Injection and Accumulators (SI), Sh. 2, Rev. 6
33013-1265,	Chemical and Volume System Charging (CVCS), Sh. 1, Rev. 9
	Chemical and Volume System Charging (CVCS), Sh. 2, Rev. 9

Documents

R. E. Ginna Nuclear Power Plant Fire Protection Program, Rev. 2
R. E. Ginna Updated Final Safety Analysis, Section 9.5.1, Fire Protection Systems
Appendix R, Alternate Safe Shutdown List, November 4, 2003
RG&E Interoffice Correspondence, December 2, 2003 "Power Supply Adequacy for ER-FIRE.1"
TSC Diesel Generator's Loading Ability During Fire Scenarios
Self Assessment 2003-0004, Fire Response Procedures and Drawings
SQUA-2003-0043-EDK, Fire Protection Systems Barriers and Equipment

Drawings

D-064-016,	Appendix R Analysis Process Monitoring Evaluation Diagram, Rev. 4
D-064-017,	Appendix R Analysis CVCS Evaluation Diagram, Rev. 3
03200-0102,	AC Power Distribution Panels
33013-1793,	ABELIP Cabinet Wiring Diagram, Sh. 1, Rev. 2
	ABELIP Cabinet Wiring Diagram, Sh. 2, Rev. 3
33013-1794,	IBELIP Cabinet Wiring Diagram, Sh. 1, Rev. 3
	IBELIP Cabinet Wiring Diagram, Sh. 2, Rev. 5
33013-2093,	Ginna Power Supplies Bus Duct Layout, Sh. 1 and 2, Rev. 5
33013-2539,	AC System Plant Load Distribution, Rev. 6
33013-2612,	PORV Solenoid Valves 8616A, 8616B, 8619A, 8619B, 8620A and 8620B, Rev. 1

Procedures

ER-FIRE.2,	Alternate Shutdown For Cable Tunnel Fire, Rev. 11
FPS-1	Fire Barrier Control Procedure, Rev. 7
FRP-15.0	Cable Tunnel Fire Response Plan Procedure, Rev. 4
FRP-21.0	Turbine Building Basement Fire Response Plan Procedure, Rev. 5
SC-3	Fire Emergency Plan, Rev. 36
SC-3.1	Fire Emergency General Information, Rev. 18
SC-3.1.1	Fire Alarm Response (Fire Brigade Activation), Rev. 14
SC-3.13	Fire Communications, Rev. 11

LIST OF ACRONYMS

ADAMS	Agency-Wide Documents Access and Management System
ALARA	As Low As Reasonably Achievable
AR	Action Report
CAP	Corrective Action Program
CCDP	Conditional Core Damage Probability
CDP	Core Damage Probability
CEDE	Committed Effective Dose Equivalent
CFR	Code of Federal Regulation
CT	Cable Tunnel
DG	Diesel Generator

ECR	Engineering Change Request
EP	Emergency Preparedness
FIVE	Fire Induced Vulnerability Evaluation
HRA	High Radiation Area
IMC	Inspection Manual Chapter
IP	Inspection Procedure
LOCA	Loss of Coolant Accident
NRC	U.S. Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
OECE	Occupational Exposure Control Effectiveness
OS	Occupational Radiation Safety
PARS	Publicly Available Records
PCR	Plant Change Request
PI	Performance Indicator
PORV	Power Operated Relief Valve
QA	Quality Assurance
QC	Quality Control
RCA	Radiologically Controlled Area
RCP	Reactor Coolant Pum
REMP	Radiological Environmental Monitoring Program
RETS/ODCM REOs	Radiological Effluents Technical Specifications/Offsite Dose Calculation Manual Radiological Effluent Occurrences
RP	Radiation Protection
RHR	Residual Heat Removal
RWP	Radiation Work Permit
SA	Self Assessment
SDP	Significance Determination Process
SE	Safety Evaluation
SI	Safety Injection
SPCR	Setpoint Change Request
TE	Technical Equivalency Evaluation
TLD	Thermoluminescent dosimeter
TS	Technical Specifications
UC	UFSAR Change
UFSAR	Updated Final Safety Analysis Report
URI	Unresolved Item
VHRA	Very High Radiation Area