Ginna **20/2007 Plant Inspection Findings**

Initiating Events

Significance: 6 Mar 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure of "B" MSIV due to Inadequate Design Control

A self-revealing NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified because Ginna failed to control the proper design configuration of installed plant equipment. Specifically, Ginna failed to update records and procedures reflecting the design requirement for a vent hole to be drilled in the exhaust port plug for the main steam isolation valve (MSIV) air actuators. As a result, a replacement actuator was installed during the October 2006 refueling outage on the "B" MSIV with a solid vent plug. This caused an inadvertent closure of the MSIV on March 16, 2007, and resulted in a reactor trip. Ginna replaced the actuator with a modified version and placed this issue in the corrective action program.

The finding is more than minor because it is associated with the design control attribute of the Initiating Events cornerstone, and it adversely affected the cornerstone objective of limiting the likelihood of those events that upset plant stability during power operations. Specifically, the closure of "B" MSIV caused a reactor trip with a safety injection system actuation. The inspectors determined the finding was of very low safety significance (Green) using a Phase 1 screening of the finding in accordance with IMC 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations." The finding screened to Green because it did not contribute to the likelihood of a primary or secondary system loss-of-coolant-accident (LOCA) initiator, or to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available.

Inspection Report# : 2007002 (pdf)

Significance:

Aug 31, 2006

Identified By: NRC Item Type: FIN Finding

Failure to Correct an NRC-Identified Finding in a Timely Manner

The NRC identified a Finding for the failure to take prompt corrective action for a 2004 NRC-Identified Finding. Specifically, Ginna did not install an alarm in the control room for the RCS leakage detection function of the containment radioactive airborne particulate detector, as identified in the Updated Final Analysis Safety Report (UFSAR). The alarm was installed in August 2006, after the team questioned the status of the corrective actions.

The performance deficiency is a failure to promptly correct a condition adverse to quality. In 2004, the NRC identified that a control room alarm for the RCS leakage detection function was not present, as listed in the UFSAR. Ginna did not take corrective actions until August 2006, as a result of the PI&R Team's questions. The finding is more than minor because the deficiency 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 during power operations. Specifically, the failure to have the alarm, which would alert the operators to take actions in accordance with approved procedures, eliminates one of the first indications of a leak, which could precede a loss of primary coolant event. The finding was determined to be of very low safety significance because the finding would neither result in exceeding the TS limit for identified RCS leakage nor would the finding have affected mitigation systems resulting in a total loss of their safety function. The finding has a cross-cutting aspect in the area of problem identification and resolution because Ginna failed to take prompt corrective action for a 2004 NRC-identified condition adverse to quality.

Inspection Report# : 2006006 (pdf)

Mitigating Systems

Significance: 6 Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

ECCS Rendered Inoperable While in Mode 4

The inspectors identified a non-cited violation (NCV) of Technical Specification (TS) 3.5.3, "Emergency Core Cooling Systems" (ECCS) due to lead blankets covering the 'B' containment recirculation sump grating with the plant in the Hot Standby Mode. As a result of the covered sump grating, the recirculation function was degraded and the ECCS was not operable for approximately six hours while the plant transitioned to the Cold Shutdown Mode. This finding is more than minor because it is associated with the Mitigating System Cornerstone and affects the cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. This finding was determined to be of very low safety significance (Green) by using Phase 1 Appendix G, of the SDP. The finding screened to Green since the ECCS remained available to supply high and low pressure injection into the reactor coolant system if needed. This finding has a cross-cutting aspect in the area of problem identification and resolution because Ginna did not ensure all of the lead blankets had been removed from the 'B' containment sump grating when the error was initially identified.

Inspection Report# : 2006005 (pdf)

Significance: SL-IV Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to make a 10-CFR 50.72(b)(3)(v)(A) Notification

The inspectors identified that on two occasions Ginna failed to notify the NRC that offsite power was inoperable. Specifically, on July 17 and August 1,2006, Ginna did not report to the NRC that offsite power was inoperable. This finding was determined to be a non-cited violation of 10 CFR 50.72, "Immediate Noficiation Requirements for Operating Nuclear Power Reactors." This deficiency was evaluated using the traditional enforcement process since the failure to make a required report could adversely impact the NRC's ability to carry out its regulatory mission. Because this finding was of very low safety significance and has been entered into the corrective action program it is being treated as a NCV.

Inspection Report# : 2006004 (pdf)

Significance: Sep 30, 2006

Identified By: NRC Item Type: FIN Finding

Did not conduct a thorough operability assessment and identify that the "C" SAFW was degraded

The inspectors identified that Ginna personnel did not initially adequately assess the effects of a service water leak that occurred in the room cooler for the "C" Standby Auxiliary Feedwater (SAFW) pump. Water which had accumulated in the electrical control panel for the pump was not detected. The water was subsequently found by Ginna personnel during performance of a routine surveillance test of the "C" SAFW pump and the pump was declared inoperable until the water was removed, which resulted in approximately 19 additional hours of out-of-service time.

This finding is more than minor because it is associated with the Mitigating Systems Cornerstone and affects the cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. The finding screened to Green since it was not a design or qualification deficiency and did not result in a loss of safety function. This finding is related to the cross- cutting aspects of problem identification and resolution in that Ginna did not fully evaluate the operability of the "C" SAFW pump following the leak, which sprayed water on electrical components.

Inspection Report#: 2006004 (pdf)

Significance: SL-IV Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Ginna Did Not Notify the NRC of a Licensed Operator's Medical Condition

The inspectors identified that Ginna did not notify the NRC within 30 days of the identification of a medical condition that caused a reactor operator to fail to meet the requirements of 10 CFR 55.21. Ginna did not provide a Form 396 (medical condition certification) to the NRC in a timely manner. The finding was determined to be a non-cited violation of 10 CFR 50.74, "Notification of Change in Operator or Senior Operator Status."

This deficiency was evaluated using the traditional enforcement process since the failure to make a required report could adversely impact the NRC's ability to carry out its regulatory mission. Because this finding was of very low safety significance and has been entered into the corrective action program it is being treated as an NCV.

Inspection Report# : 2006004 (pdf)

Significance:

Aug 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Reactor Startup and Power Operation with the SAFW System Inoperable

The NRC identified a NCV for operating in an unanalyzed condition that was in violation of the Ginna Technical Specifications. Specifically, with the SAFW system inoperable, a reactor mode change was made and the plant was operated at power for approximately ten days, a period in excess of the TS allowed outage time.

The performance deficiency is the failure to properly evaluate the interaction of the flow transmitters to the operation of the SAFW system, which caused the Ginna staff to not recognize that the system had been in an unanalyzed condition from April 8 until April 18, 2005. This resulted in the failure to identify that they had violated multiple conditions prohibited by TS. The finding is more than minor because it is associated with the Mitigating Systems Cornerstone objective to ensure the operability, availability, and reliability of both trains of the SAFW system. The specific attribute is human performance, which affected equipment operability. The Region I Senior Risk Analyst (SRA) determined that this issue was of very low safety significance. This finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not properly evaluate the effect of the isolation of the flow transmitters on the operability of the SAFW system.

Inspection Report# : 2006006 (pdf)

Significance: 6 Aug 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Use OE to Identify that the TS Basis for the AFW and SAFW Systems Was Invalid

The team identified a NCV of 10CFR50, Appendix B, Criterion XVI, "Corrective Action," for a failure to identify that the TS basis for the AFW and SAFW systems was incorrect. Specifically, the TS Basis for the AFW and SAFW systems stated that the recirculation function was not required for operability of the pumps. This change was originally made in the mid-1990's. However, Ginna missed several opportunities during the review of industry OE, to identify and correct the problem, most recently during a 10CFR50.59 screening for a TS Basis change in 2004.

The performance deficiency is the failure to identify, using industry Operating Experience (OE), that the basis for the operability of a safety-related system was inaccurate. Specifically, the TS Basis for the AFW and SAFW systems stated that the recirculation line was not required for system operability. This finding is more than minor because if left uncorrected, it could become a more significant safety concern. It affects the design control attribute of the Mitigating Systems Cornerstone and the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). This finding was determined to be of very low safety significance because it did not result in the loss of a safety function, it did not result in outage time for one or more trains of a structure, system or component (SSC) to exceed its allowed TS outage times, and it is not potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding has a cross-cutting aspect in the area of problem identification and resolution for operating experience because Ginna did not effectively incorporate operating experience to identify an invalid TS basis for the AFW and SAFW systems.

Inspection Report# : 2006006 (pdf)

Barrier Integrity

Identified By: NRC Item Type: FIN Finding

Did Not Maintain the Containment Penetration Cooling System in accordance with the UFSAR and System

The inspectors identified a finding in that Ginna did not adequately maintain the containment penetration cooling system as described in the Updated Final Safety Analysis Report (UFSAR) and system drawings to ensure it would be capable of performing its intended function in a reliable manner.

This finding is more than minor because it is associated with the Barrier Integrity Cornerstone and affects the cornerstone objective of providing reasonable assurance that the physical design barriers (fuel cladding, RCS, and containment) protect the public from radionuclide releases caused by accidents or events. This finding was determined to be of very low safety significance (Green) using the Phase 1 screening of the SDP. The finding screened to Green since it did not represent an actual open pathway in the physical integrity of the reactor containment. This finding has a cross-cutting aspect in the area of problem identification and resolution because Ginna personnel did not identify the containment penetration cooling system deficiencies issues during periodic system walkdowns.

Inspection Report# : 2006005 (pdf)

Emergency Preparedness

Significance: 6 Mar 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Ginna Communicators Not Adequately Trained To Implement EPIP 5-7

The inspectors identified an NCV of 10 CFR 50.47(b)(15), radiological emergency response training, when they noted that the assigned Emergency Response Organization (ERO) communicators have not been fully trained on all communicator responsibilities as outlined in Emergency Plan Implementing Procedure (EPIP) 5-7. For example, since December 2006, contrary to EPIP 5-7, maintenance personnel who were filling the role of ERO communicator have not been trained to respond to the control room when medical and fire events have occurred at the station and properly implement their communicator duties. Ginna issued a condition report to address the training deficiency. The inspectors determined that the failure to ensure that control room communicators were fully trained on ERO communicator responsibilities as described in procedure EPIP 5-7 was more than minor because it was associated with the ERO readiness aspect of the Emergency Preparedness cornerstone, and it affected the objective to ensure Ginna is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The EP SDP was used to assess the safety significance of this finding related to the non-risk significant planning standard 10 CFR 50.47(b)(15). 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 4.15, this finding was determined to be of very low safety significance (Green). The finding screened to Green, because the individuals were not trained to the expectations outlined in EPIP 5-7; however, they had received training on their communicator duties for declared events. This finding has a cross-cutting aspect in the area of human performance, because Ginna maintenance personnel who were filling the role of ERO communicator were not fully trained on the roles and responsibilities of the position as outlined in EPIP 5-7.

Inspection Report#: 2007002 (pdf)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the <u>cover letters</u> to security inspection reports may be viewed.

Miscellaneous

Last modified: August 24, 2007