La Salle 1
2Q/2005 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Properly Implement Fire Protection Procedure Requirements for Hot Work and Ignition Control Issues.
A finding of very low safety significance was identified by an NRC inspector conducting a routine observation of licensee maintenance activities associated with the removal and replacement of containment isolation check valve 1E51-F028. An associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was also identified.

The performance deficiency identified by the inspectors involved inadequate ignition controls for the hot work being performed on the valve. The finding was of more than minor significance in that it had a direct impact on the cornerstone objective. Specifically, the licensee's performance deficiencies allowed sparks from the work to reach an uncovered safety-related cable tray in the vicinity of the work location. Because the safety-related cable tray in question contained only cables associated with the Unit 1 reactor core isolation cooling system (RCIC), which was inoperable, unavailable, and within the allowed outage time permitted by plant Technical Specifications at the time of the finding, and because all the cables in the tray were qualified to IEEE-383-1974, "Institute of Electrical and Electronic Engineers (IEEE) Standards for Type Test of Class 1E Electric Cables, Field Splices and Connections for Nuclear Generation Stations," for flame retardation, the inspectors determined the finding to have been of very low safety significance (Green) and within the licensee's response band. Corrective actions planned and completed by the licensee included: revocation of hot work fire watch qualifications for all station mechanics; assignment of the station's Fire Marshal to provide direct oversight of remaining 1E51-F028 hot work activities once they resumed; and new and revised hot work training for all mechanical maintenance personnel prior to their recertification for the performance of hot work activity. The finding was determined to involve the cross-cutting aspect of problem identification and resolution.
Inspection Report# : 2005003*(pdf)*

Significance: G Jun 30, 2005
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Operators Fail to Note and Respond to Unit 1 Overpower Condition in a Timely Manner
A finding of very low safety significance was self-revealed when Unit 1 reactor power inadvertently rose to approximately 103.17 percent on February 23, 2005, and went unnoted by the on-watch control room crew for several minutes. A Non-Cited Violation of Condition 2.C (1) of NRC Facility Operating License No. NPF-11 for LaSalle County Station, Unit 1, was also identified.

The performance deficiency for this finding involved the collective distraction of on-watch control room personnel that removed crew focus from their primary duty of monitoring reactor and plant parameters. The finding was of more than minor significance in that it had a direct impact on initiating events cornerstone objective "to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations." Because the finding only affected the probability of a reactor trip and no mitigating systems were impacted, it was determined to have been of very low safety significance (Green) and within the licensee's response band. Corrective actions taken by the licensee in response to the event included: maintaining the reactor recirculation flow control valves in manual, pending the results of investigation into possible faults with the recirculation flow controllers; immediate relief of the on-watch Unit 1 control room crew; changing several plant process computer alarms (MWth, MWe, and reactor pressure) from low-level alarms, which annunciate only briefly and then are automatically silenced, to higher level alarms that require operator action to silence the alarm tones; and establishment of robust physical barriers around the recirculation flow control switches to prelude them from being inadvertently bumped. The finding was determined to have involved the cross-cutting aspect of human performance.
Inspection Report# : 2005003*(pdf)*

Significance: G Mar 31, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Assess and Manage Risk Associated with the 1A Circulating Water Pump Electrical Meter Replacement Results in the Trip of the 1C Circulating Water Pump
The inspectors identified a finding of very low safety significance and an associated NCV during a review of the licensee's assessment and management of the risk affiliated with maintenance on the 1A circulating water (CW) pump. The inspectors' review revealed that the licensee had failed to recognize and effectively manage the risk associated with a meter replacement. The meter was in a circuit that was common to both the 1A CW pump, which was undergoing planned maintenance, and the 1C CW pump, which was in service. This failure to effectively assess and manage maintenance risk was determined by the inspectors to be contrary to the requirements of 10 CFR 50.65(a)(4).

The performance deficiency with this issue was a failure on the part of the licensee to properly assess and manage the increase in risk from a planned maintenance evolution. The finding was of more than minor significance in that it had a direct impact on a Initiating Event Cornerstone objective. Specifically, the licensee's failure to properly assess and manage the increase in risk resulted in a plant transient that challenged the on-watch Operations crew. The inspectors determined this finding to be of very low safety significance (Green) because the finding did not contribute to both the likelihood of a transient and the likelihood that mitigation equipment or functions would not be available. Corrective actions completed by the licensee include: training to enhance worker proficiency at performing maintenance risk assessments on energized equipment, assessment of the existing production risk evaluation sheet used by work planners to determine if additional clarifications are required, discussion of this type of task at weekly work management meetings, reinforcement of Operations role in reviewing work on production risk systems, and evaluation of whether or not additional actions are required during clearance order preparations to preclude this type of event. The finding was determined to involve the cross-cutting aspect of human performance.

Inspection Report# : 2005002*(pdf)*

Mitigating Systems

Significance: G Jun 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Ineffective Corrective Actions for Water Intrusion into Safety-Related Fan Control Cabinets
A finding of very low safety significance was identified by inspectors, who determined that the licensee failed to take timely and effective corrective action for water intruding into safety-related electrical junction boxes and control cabinets via electrical conduit from the outside. An associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was also identified.

The inspectors determined that the performance deficiency associated with this issue centered around the licensee's failure to give proper priority to the issue and the actions needed to resolve it. The inspectors determined that the finding was of more than minor significance in that it had a direct impact on the Mitigating Systems cornerstone objective. Because the finding did not represent the loss of any safety function for any system or train, and because it was determined not to be potentially significant with respect to any external events such as seismic, flooding, tornado, etc., the inspectors determined it to be of very low safety significance (Green) and within the licensee's response band. Corrective actions taken or planned by the licensee include: a complete extent-of-condition review of all through roof conduits that may be susceptible to water intrusion; drilling of weep holes in all susceptible junction boxes; repairs to damage caused by water intrusion; and the sealing of the leaking conduit on Unit 1, Division 1 and Division 2 safety-related ventilation systems. The finding was determined to involve the cross-cutting area of identification and resolution of problems.

Inspection Report# : 2005003*(pdf)*

Significance: G Jun 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Nonconservative Uncorrected Bias Associated with Tank Level Instruments Used for Standby Liquid Control System Surveillances
The inspectors identified a finding of very low safety significance. During a review of test procedures used to maintain standby liquid control (SBLC) tank volume and concentration within Technical Specification limits, the inspectors identified that the licensee had used inaccurate and nonconservative instruments to measure SBLC tank level. An associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XI, "Test Control," was also identified.

The inspector-identified performance deficiency associated with this issue was a failure by the licensee's staff to utilize adequate test equipment for the performance of safety-related Technical Specification surveillance measurements of SBLC solution tank level. The inspectors determined that the finding was of more than minor significance in that it had a direct impact on the Mitigating Systems cornerstone objective. The finding was determined to be of very low safety significance because subsequent licensee analyses of SBLC tank concentrations and volumes, in accordance with GL 91-18, demonstrated that the errors in SBLC tank volume in question were sufficiently small as to not have jeopardized the capability of SBLC to have performed its safety function for either unit. Corrective actions by the licensee included: additions of sodium pentaborate chemical to each unit's SBLC tank to adjust chemistry to well within the Technical Specification required band; revision of SBLC tank sampling procedures; and the establishment of administrative controls to ensure that each unit's SBLC tank volume and sodium pentaborate solution concentration are being maintained well away from Technical Specification limits; and the procurement of new T-squares instruments for measuring SBLC tank level, which were manufactured in accordance with 10 CFR 50, Appendix B, Quality Assurance Program controls and requirements.

Inspection Report# : 2005003*(pdf)*

Significance: G Mar 31, 2005

Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Assess and Manage Risk Associated with the Cycling of the 1DG032 Manual Gate Valve Results in Inoperable and Unavailable ECCS Components
The inspectors identified a finding of very low safety significance and an associated NCV during a review of the licensee's assessment and management of the risk affiliated with the cycling of the 1DG032 manual gate valve. The gate valve was cycled during the performance of a scheduled '0' emergency diesel generator (EDG) auxiliaries inservice test on December 30, 2004. The inspectors' review revealed that the licensee had failed to recognize and effectively manage the risk associated with the operation of this valve. This valve was part of a group of manual gate valves located in essential service water systems that were known to be highly susceptible to disc/stem separation. This failure to effectively assess and manage the activity's risk was determined by the inspectors to be contrary to the requirements of 10 CFR 50.65(a)(4).

The identified performance deficiency with this finding was a failure on the part of the licensee to have accurately assessed and properly managed the risk associated with the cycling of the 1DG032 manual gate valve. The finding was of more than minor significance in that it had a direct impact on an objective of the Mitigating Systems cornerstone. Specifically, the licensee's failure to properly assess and effectively manage the risk associated with the 1DG032 valve cycling evolution resulted in the interruption of supporting cooling water flow to Unit 1 Division 1 emergency core cooling system (ECCS) components, rendering these components inoperable and unavailable. Because the finding impacted only a single Division of the unit's ECCS; did not represent the loss of an entire system's safety function; did not result in a Technical Specification allowed outage time being exceeded; and the finding was not related to external events such as fire, flooding, or adverse weather; the inspectors concluded that the safety significance of this issue was very low (Green). Corrective actions completed by the licensee include: hanging tags on susceptible valves to warn personnel of the potential for stem/disc separation; validation of all essential service water valves susceptible to stem/disc separation and providing a listing of these components to plant operations; revision of applicable operating procedures to include a precaution that identifies the valves that are susceptible to stem/disc separation, and a requirement to verify the applicability of valves prior to operation.

Inspection Report# : 2005002*(pdf)*

Barrier Integrity

Significance: G Dec 31, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform Effective Corrective Action on Degraded/Nonconforming Unit 1 RCIC F028 Containment Isolation Check Valve
The inspectors identified a finding of very low safety significance and an associated NCV during a review of the maintenance and performance history surrounding the 1E51-F028 reactor core isolation cooling (RCIC) containment isolation check valve. The licensee failed to effectively diagnose and correct a recurring performance problem with the valve sticking open following a failed local leak rate test (LLRT) and maintenance performed during the most recent Unit 1 refueling outage (L1R10) in January 2004. This failure to effectively diagnose and correct a degraded and nonconforming condition was determined to constitute a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action."

The performance deficiency with this issue was a failure on the part of the licensee to have properly diagnosed the 1E51-F028 degraded condition and to have effectively enacted repairs in early 2004. The finding was of more than minor significance in that it had a direct impact on this cornerstone objective. Specifically, the licensee's failure to properly diagnose and effectively correct a degraded condition with the 1E51-F028 containment isolation check valve resulted in a subsequent failure, which occurred with the unit operating at power in a condition where the valve was required to be operable. Because the finding did not represent a degradation of the radiological barrier function provided for the control room, auxiliary building, reactor building, or the standby gas treatment (SBGT) system, and did not represent a degradation of the smoke or toxic gas barrier function for the control room, and did not represent an actual open pathway in the physical integrity of the primary containment or involve an actual reduction in defense-in-depth for the atmospheric pressure control or hydrogen control functions of the primary containment, it was determined to be of very low safety significance. Corrective actions planned or completed by the licensee included replacement of the 1E51-F028 valve disc and spring on September 17, 2004; replacement of the entire 1(2)E51-F028 check valves on both units during refuel outages in 2006 and 2007 with valves manufactured using austenitic stainless steel; repair of the ball float valve in the Unit 1 RCIC barometric condenser vacuum tank air discharge separator; repairs to the 1E51-F028 check valve line slope; and an additional on line test for the 1E51-F028 check valve by April 29, 2005, to confirm that it is operating properly The finding was determined to involve the cross-cutting aspect of problem identification and resolution.

Inspection Report# : 2004005*(pdf)*

Significance: G Dec 31, 2004
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Inadequate VE System Test Procedure Causes Auxiliary Electric Equipment Room High Humidity Condition and Renders Multiple Control Room Annunciator Alarms Inoperable

A finding of very low safety significance and an associated NCV were self-revealed following a trip of the 'A' train of the auxiliary electric equipment room (AEER) ventilation (VE) system while operating in the purge mode. Written procedures for the operation of the VE system failed to properly account for ventilation compressor heat load capacity limitations during VE system alignment in the purge mode. The lack of proper written procedural guidance was determined to constitute a Non-Cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings."

The performance deficiency with this issue was a failure on the part of the licensee to establish and maintain adequate written procedures for the testing and operation of the VE system in the purge mode. The finding was of more than minor significance in that if left uncorrected it would constitute a more significant safety concern. The finding was determined to be of very low safety significance because it only involved the barrier function provided for the AEER. Corrective actions planned and completed by the licensee include revisions to procedures LTS-400-17, LOP-VC-01, and LOP-VE-01 to account for the newly identified limitations associated with VE operation in the purge mode.
Inspection Report# : 2004005*(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G Sep 30, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
Entry into a Neutron Radiation Area by Operations Personnel without Procedurally Required Neutron Radiation Dose Estimates
The inspectors identified a Green finding and associated Non-Cited Violation (NCV) when they observed operations personnel entering a posted neutron dose area without proper neutron monitoring, contrary to the licensee's Technical Specifications. This finding was considered NRC-identified as radiation protection personnel were unaware of this issue until questions by inspectors indicated a lack of proper neutron dose control for both this event and similar past occurrences.

The cause of the error was a failure of communication between the operations and radiation protection (RP) staff. The finding, under the Occupational Radiation Safety Cornerstone, does not involve the application of traditional enforcement because it did not result in actual safety consequences or potential to impact the NRC's regulatory function, and was not the result of any willful actions. The finding was more than minor as it involves the failure of the licensee to adhere to procedures to monitor and control radiation exposure, a key attribute under the objective of the radiation safety cornerstone to ensure adequate protection of worker health and safety from exposure to radiation. The finding is of very low safety significance because the personnel involved were using electronic dosimeters that alarm to warn workers of higher than expected dose rates or accumulated dose. The issue was a Non-Cited Violation of Technical Specifications 5.4.1(a), which requires written procedures be established, implemented, and maintained in accordance with the requirements of Regulatory Guide 1.33. Section 7.e(7). of Regulatory Guide 1.33 lists the requirement for radiation protection procedures for personnel monitoring. RP-AA-210, "Dosimetry Issue, Usage, and Control," is the plant procedure governing neutron dose estimation and monitoring.

The licensee conducted a human performance investigation to determine the cause of the event and identified a failure of communication between the RP and operation staffs. The individuals involved were coached, site personnel were informed of the event, and RP staff personnel were provided additional training on the requirements for entering neutron areas.
Inspection Report# : 2004004*(pdf)*

Significance: SL-III Mar 31, 2004
Identified By: Self Disclosing
Item Type: VIO Violation
Unauthorized entry into Unit 1 694' Reactor Building raceway HRA by contract personnel.
On January 25, 2004, a contract foreman and three contract workers were assigned to conduct outage work associated with a valve located in the reactor building. In preparation for the work, the foreman signed in on a radiation work permit (RWP) associated with entry into HRAs located in the turbine and auxiliary buildings but not for entry into the Unit 1 reactor building raceway described below. The three contract workers signed in on a pre-outage RWP associated with minor maintenance activities which did not permit entry into HRAs. During a walk down of the work, the contract workers could not locate the valve, and the foreman took the contract workers into a posted HRA in the Unit 1 reactor building raceway to locate the valve. Prior to entering the HRA, at least one of the contract workers told the foreman that the contract workers were not signed in on an RWP that permitted entry into HRAs. Before entering the HRA, two of the contract workers were aware that they had not received a briefing by radiation protection personnel for the HRA, a prerequisite for entry into HRAs. Therefore, the actions of the foreman and two contractor workers are considered a willful violation, representing careless disregard of requirements, and the violation has been categorized in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600 at Severity Level III.
Inspection Report# : 2004002*(pdf)*

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : August 24, 2005