Davis-Besse
2Q/2013 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2013
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
OPERATIONS COMMUNICATIONS AND WORK COORDINATION ERROR RESULTS IN SERVICE WATER SYSTEM TRANSIENT
A self-revealed finding of very low safety significance (Green) and associated NCV of TS 5.4.1(a) were identified when the licensee failed to properly implement plant procedures for placing Component Cooling Water (CCW) Pump 3 in spare status. Specifically, the licensee did not isolate service water (SW) to the standby CCW heat exchanger prior to racking out the CCW Pump 3 breaker. As a result, SW Train 1 header pressure significantly dropped, an automatic isolation of SW cooling and realignment to circulating water cooling from Turbine Plant Cooling Water (TPCW) occurred, and the licensee entered the Loss of SW Abnormal Operating procedure. The condition was corrected, and corrective action documents were generated to review the event. The inspectors determined that the licensee's failure to implement procedures for placing CCW Pump 3 in spare status was a performance deficiency that was reasonably within the licensee's ability to foresee and correct and should have been prevented. This finding was associated with the Initiating Events Cornerstone of reactor safety and was of more than minor significance because it directly impacted the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors evaluated the finding using IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power." Using Exhibit 1, which contains the screening questions for the Initiating Events Cornerstone of reactor safety, the inspectors determined that the finding screened as very low safety significance (Green), because it did not adversely impact any accident, transient, support system loss, steam generator tube rupture, or external event initiators.
This finding was determined to have a cross-cutting aspect in the area of human performance, decision-making component, because the licensee failed to communicate decisions and the basis for decision to personnel who have a need to know the information in order to perform work safely, in a timely manner. (H.1(c))
Inspection Report# : 2013003 *(pdf)*

Significance: G Dec 31, 2012
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
OPERATOR ERROR IN RESPONSE TO A SMALL POWER TRANSIENT MOMENTARILY RENDERS TS EQUIPMENT INOPERABLE
A self-revealed finding of very low safety significance and an associated NCV of Technical Specification (TS) 5.4.1 (a) were identified following the control room crew's response to a small power rise that occurred while shifting the plant's Integrated Control System (ICS) to the "track" mode of operation on October 24, 2012. Specifically, the Unit Supervisor, a licensed senior reactor operator (SRO), directed an on-shift reactor operator (RO) to place the Steam Generator/Reactor Demand control station for the ICS in manual and lower power in response to the observed reactor power increase. However, because the plant's control rod drive (CRD) control station (known as the "Diamond panel") was already in manual as part of the planned ICS transfer to "track" mode, the signal from the Steam Generator/Reactor Demand control station only was passed through to the Feedwater (FW) System and not to the CRD System. As a result, average coolant temperature and pressurizer level both rose due to a mismatch between

reactor power and steam generator power and caused an unplanned short-duration entry into TS Limiting Condition for Operation (LCO) 3.4.9, Condition A, for pressurizer level above the TS limit of 228 inches. The condition was corrected and corrective action program documents generated to review the event. This finding was associated with the Initiating Events Cornerstone of reactor safety and was of more than minor significance because it directly impacted the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors reviewed this finding using the guidance contained in Appendix B, "Issue Screening," of IMC 0612, "Power Reactor Inspection Reports." The inspectors determined that the licensee's incorrect actions in attempting to respond to the power transient by taking the Steam Generator/Reactor Demand control station for the ICS to manual and attempting to reduce power using that station with the Diamond panel in manual was a performance deficiency that was reasonably within the licensee's ability to foresee and correct and should have been prevented. The finding screened as very low safety significance (Green) because it did not adversely impact any of the following parameters:
o Loss-of-Coolant Accident initiators;
o Transient initiators;
o Support System Loss initiators;
o Steam Generator Tube Rupture initiators; or
o External Event Initiators.
The finding had a cross-cutting aspect in the area of problem identification and resolution, corrective action program (CAP) component, because the licensee failed to take corrective action for the ICS/Unit Load Demand (ULD) power error anomaly in a timely manner, commensurate with the issue's safety significance and complexity. (P.1(d))
Inspection Report# : 2012005 *(pdf)*

Mitigating Systems

Significance: G Mar 31, 2013
Identified By: NRC
Item Type: FIN Finding
FAILURE TO MAINTAIN STATION BLACKOUT DIESEL GENERATOR OUTPUT CABLES IN AN ENVIRONMENT CONSISTENT WITH DESIGN
The inspectors identified a finding of very low safety significance for the licensee's failure to maintain normally energized medium voltage cables BPGD302C, C1, D, and D1 in an environment consistent with the cable design. The cables, which are output cables for the station blackout diesel generator (SBODG), were not designed for long-term water submergence, and were in an electrical manhole that was flooded for a period of several months, perhaps as long as a year or more. Continuous water submergence of energized medium voltage cables not designed for water submergence can accelerate deterioration of such cables and potentially affect the ability of the cables to withstand electrical transients. The licensee's procedures and programs for medium voltage cables did recognize the issue and provided a sump pump to address water intrusion into the electrical manhole, but did not provide for any preventative maintenance (PM) or operational checks of the sump pump to ensure its capability to meet its intended function. In response to the finding the licensee increased the frequency of monitoring for water in the manhole. No violation of NRC requirements was identified.
The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the SBODG was to provide electrical power to emergency core cooling systems in the event of a loss of all alternating current power. The inspectors determined that the finding was of very low safety significance because it was not a deficiency affecting the design or qualification of the SBODG and there was no loss of any system or function due to the flooded conditions of the cables. The finding was determined to have a cross-cutting aspect in the

area of Human Performance, Work Control Component, because the licensee failed to appropriately coordinate the impact of changes to the work scope or activity on the plant. Specifically, although the licensee's intent was to address potential water submergence of energized medium voltage risk-significant cables to reduce the risk of early cable failure through the installation of a permanent sump pump, the licensee failed to schedule and coordinate the appropriate PM for the pump when it was installed. (H.3(b))

Inspection Report# : 2013002 *(pdf)*

Barrier Integrity

Significance: G Mar 31, 2013
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
CONTAINMENT ISOLATION VALVE RENDERED INOPERABLE BY "WRONG COMPONENT" OPERATOR ERROR
A self-revealed finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, Drawings," were identified for the licensee's failure to properly implement the procedure for the Hydrogen Dilution System Train 1 quarterly surveillance test. Specifically, a non-licensed operator inadvertently repositioned the incorrect motor-operated valve (MOV) and caused an unplanned entry into Technical Specifications (TS) Limiting Condition for Operation (LCO) 3.6.3, Condition A, for an inoperable component cooling water (CCW) containment isolation valve (CIV). Upon identification, the valve was tested and returned to operable status within the TS allowable time. The finding was determined to be more than minor because, if left uncorrected, the failure to follow plant procedures and the mispositioning of plant equipment would have the potential to lead to a more significant safety concern. This finding was associated with the Barrier Integrity Cornerstone because a CIV forms part of the containment pressure boundary that provides reasonable assurance that the physical design barriers protect the public from radionuclide releases caused by accident or events. The inspectors evaluated the finding using IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power." The inspectors used Exhibit 3 – "Barrier Integrity Screening Questions" for the reactor containment. The finding screened as very low safety significance (Green) because there was no actual open pathway in the physical integrity of reactor containment, containment isolation system, or heat removal components; and there was no impact on the hydrogen control function in containment. This finding had a cross-cutting aspect in the area of Human Performance, Work Practices Component, because personnel failed to use human error prevention techniques to ensure that work was performed safely. (H.4(a))

Inspection Report# : 2013002 *(pdf)*

Significance: G Sep 30, 2012
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
OPERATOR ERROR RESTORING ESSENTIAL MCC TO SERVICE RENDERS TS EQUIPMENT INOPERABLE
A self-revealed finding of very low safety significance and an associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," were identified for the licensee's failure to properly implement the procedure for restoring power to motor control center (MCC) E16B. Specifically, the operator repositioned circuit breakers at the incorrect MCC, inadvertently removing power from plant equipment supplied by MCC E16A and causing an unplanned entry into Technical Specification (TS) Limiting Condition for Operation (LCO) 3.3.15,

Condition A, for an inoperable channel of station vent normal range radiation monitoring. As an immediate corrective action, the operating crew performed steps to restore the unintentionally lost loads associated with MCC E16A and exited LCO 3.3.15 Condition A in a timely manner. This finding was associated with the Barrier Integrity Cornerstone because a high radiation level in the station vent, as measured by the radiation monitors, is used to detect a potential threat to control room personnel and automatically isolate the control room normal ventilation system. The inspectors determined that the finding was more than minor because, if left uncorrected, the failure to follow plant procedures and the mispositioning of plant equipment would have the potential to lead to a more significant safety concern. The inspectors evaluated the finding using IMC 0609, Appendix A, the "Significance Determination Process for Findings At-Power." The inspectors used Exhibit 2 – "Barrier Integrity Screening Questions for the Control Room, Auxiliary, Reactor, or Spent Fuel Pool Building." The finding screened as very low safety significance (Green) because it only represented a degradation of the radiological barrier function provided for the control room. The finding had a cross-cutting aspect in the area of human performance, work practices component, because personnel failed to use human error prevention techniques to ensure that work was performed safely. (H.4(a))
Inspection Report# : 2012004 *(pdf)*

Significance: G Sep 30, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO USE MATERIAL SPECIFIED MINIMUM YIELD STRESS IN STRUCTURAL DESIGN
The inspectors identified a finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to use material specified minimum yield stress in accordance with American Institute for Steel Construction design standards in evaluations of safety-related structural components. The licensee entered this issue into their corrective action program (CAP) as condition reports (CRs) 2011-98333 and 2012-13249 and initiated corrective actions to resolve identified design standard non-conformance. The finding was determined to be more than minor because the finding was associated with the Barrier Integrity Cornerstone attribute of design control and affected the cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, compliance with the design standards ensured safety-related structures would function as designed during accident and maximum seismic conditions. The finding was considered to be of very low safety significance since this was a design deficiency confirmed to not result in a loss of operability or functionality. The inspectors determined there was no cross-cutting aspect associated with this finding because the cause of the performance deficiency was the licensee's revision to the Updated Safety Analysis Report (USAR) that allowed certified material test report yield strength in structural design calculations which was not reflective of current licensee performance due to the age of the revision.

Inspection Report# : 2012004 *(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the cover letters to security inspection reports may be viewed.

Miscellaneous

Last modified : September 03, 2013