Dresden 2
3Q/2016 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Sep 30, 2016
Identified By: Self-Revealing
Item Type: NCV Non-Cited Violation
Failure to Assess Scope Changes to Corrective Maintenance Activities Affecting Safety-Related Structures, Systems, and Components (SSC)
A finding of very low safety significance and associated NCV of TS 5.4.1.a, "Procedures," was self-revealed for the licensee's failure to maintain maintenance procedures appropriate for the circumstances that could affect performance of safety related equipment. Specifically, procedures MA–AA–716–010, "Maintenance Planning," Revision 20 and DAP 15–18, "Work Order Supplemental Information and Lessons Learned," Revision 17 did not ensure that scope revisions in support of corrective maintenance activities performed on high pressure coolant injection (HPCI) piping in 2013 were properly reviewed and evaluated for technical adequacy directly resulting in a through-wall steam leak on the Unit 2 HPCI inlet drain pot drain piping and safety system inoperability in May 2016. Immediate corrective actions included the replacement of the failed piping section, a determination of the extent of condition of susceptible piping to include the scheduling of a replacement work window, and changes to the maintenance planning procedures requiring engineering scope determination and oversight of scope changes for safety related corrective maintenance. The performance deficiency was determined to be more than minor, and thus a finding, in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone Attribute of Procedure Quality and adversely affected 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). Specifically, the failure to ensure work planning procedures controlled the process of major revisions to corrective maintenance activities ensuring adequate engineering reviewing and assessment resulted in continued degradation and ultimate failure of the Unit 2 HPCI inlet drain pot drain piping. The inspectors applied IMC 0609, Attachment 4, "Initial Characterization of Findings," issued June 19, 2012, to this finding. The inspectors answered "No" to all questions within Table 3, "Significance Determination Process Appendix Router," and transitioned to IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," June 19, 2012. The inspectors answered "No" to all questions in Exhibit 2, "Mitigating Systems Screening Questions." Therefore, the finding was screened as very low safety significance (Green). This finding has a cross cutting aspect in the area of Problem Identification and Resolution, Evaluation, because the licensee failed to thoroughly evaluate corrective maintenance scope changes to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. Specifically, the licensee incorrectly removed scope without engineering evaluation for adequacy from the Unit 2 HPCI inlet drain pot drain line corrective maintenance following a through wall leak in 2012. Piping that was identified as part of the extent of condition of the failure in 2012, was removed from the scope of corrective maintenance activities due to maintenance personnel short falls. This specific piping failed in May of 2016 resulting in the loss of the HPCI system safety function. [P.2]
Inspection Report# : 2016003 *(pdf)*

Significance: G Jul 01, 2016
Identified By: NRC
Item Type: FIN Finding
Main Steam Acoustic Safety/Relief Valve Monitoring Channel Calibration Not Performed
The inspectors identified a finding of very-low safety significance for the failure to perform a 24-month channel calibration of the Regulatory Guide 1.97 safety/relief valve acoustic monitoring system in accordance with the Technical Requirements Manual. Specifically, the licensee failed to perform a channel calibration, where the channel calibration shall encompass all devices in the channel required for channel operability and the channel functional test. The performance deficiency was determined to be more-than-minor because the finding was associated with the Mitigating System's cornerstone attribute of Procedure Quality and affected the cornerstone's objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to maintain the acoustic safety/relief valve position indicators instrumentation in accordance with the Technical Requirements Manual. The performance deficiency affected the design or qualification of a mitigating system, structure or component; however, the system, structure or component maintained its functionality based on successful completion of channel functionality checks. Since the system, structure or component remained functional, the inspectors screened the finding as having very low safety significance (Green). The inspectors did not identify a cross cutting aspect associated with this finding because the finding was not representative of the licensee's current performance.
Inspection Report# : 2016009 *(pdf)*

Significance: G Mar 31, 2016
Identified By: Self-Revealing
Item Type: NCV Non-Cited Violation
Failure to Maintain Design Control of the 2/3 Emergency Diesel Generator
A finding of very low safety significance and an associated NCV of Title 10 of the Code of Federal Regulations Part 50, Appendix B, Criterion III, "Design Control," was self-revealed associated with the licensee's failure to assure that the applicable design basis for applicable structures, systems, and components were correctly translated into specifications, procedures, and instructions. Specifically, since initial plant construction the licensee failed to correctly identify the effect a loss of non-safety 2/3 emergency diesel generator (EDG) room ventilation could have on maintaining operability of the 2/3 EDG. On November 6, 2015, during a planned maintenance outage of the normal non-safety related instrument air pneumatic supply and a failure resulting in the depressurization of the back-up non-safety related nitrogen system, the 2/3 EDG ventilation intake and exhaust dampers failed closed making the 2/3 EDG inoperable for approximately 20 minutes on two occasions from the time of discovery of the condition. The licensee incorrectly believed that a loss of the non-safety related instrument air system and its non-safety related back-up nitrogen system would cause the dampers to fail in the conservative open position. This feature was never tested; and therefore the licensee incorrectly believed the non-safety related control systems for the room ventilation system would not adversely affect the safety-related EDG's operability.
The performance deficiency was determined to be more than minor, and thus a finding, in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Design Control attribute of the Mitigating Systems Cornerstone and affected the associated cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences, and if left uncorrected could lead to a more significant safety concern. The finding screened as very low safety significance (Green) because the inspectors answered "no" to questions A.1. through A.4. of IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, dated June 19, 2012. This finding has a cross-cutting aspect in the area of Human Performance, Training, because the licensee did not ensure licensed operations and engineering personnel properly understood the operation and configuration of the 2/3 diesel generator ventilation system under accident conditions and its impact on the safety-related 2/3 EDGs ability to accomplish its design function. Specifically, the licensee incorrectly believed that the 2/3 EDG room ventilation system failed in a conservative manner with a loss of its non-safety related pneumatic supply systems. Corrective Action Program

documents and other engineering products up until September 2015 incorrectly state that the 2/3 EDG's operability was not adversely affected by a loss of damper control pneumatics as the dampers were expected to fail open. [H.9]
Inspection Report# : 2016001 *(pdf)*

Barrier Integrity

Significance: G Dec 31, 2015
Identified By: Self-Revealing
Item Type: NCV Non-Cited Violation
Failure to Maintain Design Control of Secondary Containment Interlock Doors
A finding of very low safety significance (Green) and an associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was self-revealed on September 4, 2015, when the integrity of the Secondary Containment for Units 2 and 3 was not maintained for 39 minutes when interlock features designed to prevent both doors of a Secondary Containment interlock from being simultaneously open prevented the closure of Reactor Building to Turbine Building doors 47 and 48 following simultaneous operation during routine access of the interlock by plant personnel.
The performance deficiency was determined to be more than minor because it was associated with the Barrier Integrity cornerstone attribute of design control, and adversely affected the associated cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The finding screened as very low safety significance (Green) because the inspectors answered yes to the Barrier Integrity Screening Question C.1, Exhibit 3 of IMC 0609, Appendix A. This finding has a cross cutting aspect in the area of Human Performance, Conservative Bias, because the licensee did not use decision making-practices that emphasize prudent choices over those that are simply allowable. Specifically, the licensee failed to implement a modification which addressed a known design deficiency in the 570 foot elevation Secondary Containment interlock in 2013. The licensee reasoned that the interlock was a low traffic area and that it would be unlikely that the doors would be open simultaneously. [H.14]
Inspection Report# : 2015004 *(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G Jun 30, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Implement and Maintain Written Procedures Regarding Breathing Air Quality Testing
A finding of very-low safety significance and an associated NCV of Title 10 of the Code of Federal Regulations (CFR), Part 20.1703, was an NRC-identified finding for failure to implement and maintain written procedures regarding breathing air quality that resulted in the failure to perform a continuous in-line breathing air quality test during filling of self-contained breathing apparatus (SCBA) cylinders since 2009. Specifically, on May 4, 2016, during an inspection of the licensee's air compressor, the inspectors identified that the in-line carbon monoxide (CO)

detector located at the compressor high-pressure filling station was inoperable since 2009, the procedure does not specify an alternative method of CO monitoring during the filling of the SCBA cylinders. Without specifying an alternative method of monitoring and only relying on the high-temperature safety shut-off, hazardous CO gas could be introduced into the SCBA cylinders, thus degrading the Grade-D air quality, during a compressor malfunction. The licensee's corrective actions included but were not limited to revising the applicable procedures, servicing or replacing the CO monitor by the manufacturer, and installing a new air compressor at the facility.
The inspectors determined that that the finding was more than minor in accordance with Inspection Manual Chapter (IMC) 0612, in that the finding impacted the program and process attribute of the Occupational Radiation Safety Cornerstone and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation through the use of SCBAs during an emergency response use by maintaining certified air quality. Specifically, the licensee failed to implement and maintain written procedures regarding an alternative method of monitoring air quality testing to maintain the Grade-D air quality during filling of SCBA cylinders. The finding was determined to be of very-low safety significance in accordance with IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," because it was not an as low as reasonably-achievable planning issue, there was no overexposure nor substantial potential for an overexposure, and the licensee's ability to assess dose was not compromised.
The inspectors concluded that the cause of the issue involved a cross-cutting component in the area of human performance, resources, in that, the license did not ensure the adequacy of the procedure describing the alternate methods of CO monitoring during filling of Grade D air into the SCBA cylinders. [H.1]
Inspection Report# : 2016002 *(pdf)*

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

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