

## Farley 2 2Q/2015 Plant Inspection Findings

---

### Initiating Events

**Significance:** G Dec 31, 2014

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

#### **Failure to perform an adequate risk assessment led to a manual reactor trip of Unit 2**

A self-revealing non-cited violation (NCV) of 10 CFR 50.65, “Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants, was identified for the licensee’s failure to properly assess and manage the increase in risk that resulted from maintenance activities while the 2B diesel generator (DG) was out of service for a planned maintenance outage the week of October 13, 2014. As a result, a Unit 2 manual reactor trip was required when cooling was lost to each reactor coolant pump (RCP) oil cooler and thermal barrier heat exchanger when the 2B startup auxiliary transformer (SAT) deenergized unexpectedly while the 2B DG was tagged out for maintenance. Corrective actions are planned that will prevent a planned diesel generator outage in the same train as the component cooling water “on-service” train. Condition reports CR 880201 and 880329 were entered into the licensee’s corrective action program.

The failure to perform an adequate qualitative risk assessment was a performance deficiency. The performance deficiency was more than minor because it adversely affected the configuration control attribute of the initiating events cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions. Specifically, the risk associated with the CCW configuration in tandem with the 2B DG outage was not considered. This contributed to a manual reactor trip caused by the loss of the 2B SAT because this operating equipment line up caused the operators to trip the Unit 2 reactor. The inspectors determined the finding had a cross-cutting aspect of “work management” in the human performance area, because the risk associated with operating the “B” train of CCW as the “on service” train while the 2B was out of service for planned maintenance was not considered. [H.5]

Inspection Report# : [2014005](#) (*pdf*)

---

### Mitigating Systems

**Significance:** G Mar 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

#### **Failure to identify deficiencies during a fire drill**

A NRC-identified NCV of Farley Nuclear Plant, Unit 1, Operating License Condition 2.C.(4), and Unit 2, Operating License Condition 2.C.(6), “Fire Protection” was identified for the licensee’s failed to identify deficiencies during a fire drill as required by procedure NMP-TR-425, “Fire Drill Program”, Version 7.2. This violation was entered into the licensee’s corrective action program as CR 10038847 and CR 10038846.

The licensee’s failure to identify deficiencies during the drill was a performance deficiency (PD). This PD was more

than minor because it was associated with the Protection Against External Events attribute (i.e., fire) of the Mitigating Systems cornerstone and adversely affected the cornerstone objective in that the failure to identify and correct fire brigade deficiencies could negatively affect the fire brigade's capability to combat an actual fire. This finding was of very low safety significance (Green) because the ability of the fire brigade to respond to the fire drill. The finding was directly related to the cross-cutting aspect of procedure adherence in the human performance area.

Inspection Report# : [2015001](#) (*pdf*)

**Significance:**  Mar 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to ensure rolling fire doors would automatically close**

A NRC-Identified NCV of Farley Nuclear Plant, Unit 1, Operating License Condition 2.C. (4), and Unit 2, Operating License Condition 2.C.(6), "Fire Protection" was identified for the licensee's failure to install rolling steel fire doors in the Appendix R 3-hour fire barriers between the auxiliary building and new fuel storage area for each of the two units in accordance with the Updated Final Safety Analysis Report (UFSAR). The licensee did not adequately locate fire detectors (fusible links or other type of labeled fire detection devices) associated with these doors to ensure these doors would automatically close under fire conditions. The licensee entered this violation in their corrective action program as CR 855837.

The licensee's failure to install the rolling steel fire doors in accordance with the approved UFSAR is a performance deficiency (PD). This PD is more than minor because the installed fire doors were associated with the Mitigating Systems cornerstone attribute of Protection Against External Factors (Fire) and adversely affected the cornerstone objective in that the fire doors would not automatically close which could allow a fire in one area to propagate to an adjacent area. The significance of this finding was determined to be of very low safety significance (Green) because the fire door, when closed, would provide a 1-hour or greater fire endurance rating. The cause of this finding was not associated with a cross-cutting area because it is not reflective of current licensee performance.

Inspection Report# : [2015001](#) (*pdf*)

**Significance:**  Mar 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to ensure DG rolling fire doors were labeled fire doors**

A NRC-identified NCV of Farley Nuclear Plant, Unit 1, Operating License Condition 2.C.(4), and Unit 2, Operating License Condition 2.C.(6), "Fire Protection" was identified for the licensee's failure to install rolling steel fire doors in the Appendix R 3-hour common fire barrier for three diesel generators in accordance with the Updated Final Safety Analysis Report (UFSAR). The installed rolling steel fire doors do not have an Underwriters Laboratory (UL) label identifying it as an "A" label fire door (3-hour fire rating), as stated in the UFSAR. The licensee entered this violation in their corrective action program as CR10029684.

The licensee's failure to install the rolling steel fire doors in accordance with the approved UFSAR is a performance deficiency. This PD is more than minor because the installed fire doors degraded one of the fire protection defense in depth elements and adversely affected the Mitigating Systems cornerstone objective in that a fire in the common hallway could propagate into the individual EDG compartments. The significance of this finding was determined to be of very low safety significance (Green) because the combustible loading on both sides of the wall was representative of a fire duration less than 1.5 hours based on FNP Fire Hazards Analysis. The cause of this finding was not associated with a cross-cutting area because it is not reflective of current licensee performance.

Inspection Report# : [2015001](#) (*pdf*)

**Significance:**  Dec 31, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to Ensure Rolling Fire Doors on Units 1 and 2 Complied with Fire Code**

An NRC identified non-cited violation (NCV) of Farley Nuclear Plant, Unit 1, Operating License Condition 2.C.(4), and Unit 2, Operating License Condition 2.C.(6), “Fire Protection” was identified for the licensee’s failure to install rolling steel fire doors in the Appendix R 3-hour common fire barrier for all five diesel generators in accordance with the Updated Final Safety Analysis Report (UFSAR). Specifically, the installed rolling steel fire doors (D-702, D-705, D708, D-711, and D-714) design did not include fire detectors (fusible links or other type of labeled fire detection devices) to automatically close the doors under fire conditions, in the event of a fire in Fire Area 71 (South Hallway), as stated in the Farley Nuclear Plant UFSAR. The licensee included this deficiency in their corrective action program as CR867970 and implemented an hourly fire watch in the affected Fire Areas.

The licensee’s failure to ensure that rolling steel fire doors included fire detectors to automatically close the doors under fire conditions, in the event of a fire in Fire Area 71 (South Hallway), was determined to be a performance deficiency. The performance deficiency was more than minor because it was associated with the protection against external events (fire) attribute of the Mitigating Systems Cornerstone and it adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated this finding using the NRC’s significance determination process (SDP) and the finding was of very low safety significance. There is no cross cutting aspect for this deficiency because the problem was not indicative of current licensee performance.

Inspection Report# : [2014005](#) (*pdf*)

**Significance:**  Sep 30, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Inadequate Acceptance Criteria for Steam Generator Steam Flow Channel Checks**

Green. A NRC-identified non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures and Drawings,” was identified for the licensee’s failure to include appropriate quantitative acceptance criteria for determining that important activities have been satisfactorily accomplished. Specifically, licensee procedures FNP-1-STP-1.0 and FNP-2-STP-1.0, “Operations Daily and Shift Surveillance Requirements,” did not contain adequate acceptance criteria for steam generator (SG) steam flow channel checks. As a corrective action the licensee removed the inadequate quantitative acceptance criteria from both procedures FNP-1-STP-1.0 and FNP-2-STP-1.0. The licensee entered this issue in their corrective action program as condition reports (CRs) 814962, 838289 and 840501.

The failure to provide adequate acceptance criteria for the steam flow instruments channel check surveillance was a performance deficiency. The performance deficiency was more than minor because it was associated with the procedure quality attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the acceptance criteria allowed by Figure 1 of licensee procedure FNP-1-STP-1.0 and FNP-2-STP-1.0 for the SG steam flow channel check impacted the licensee’s determination of operability of the Unit 2 “B” SG steam flow instrument channels during low power operations in Mode 1 between May 17 and 18. This finding was evaluated using IMC 0609, Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” issued June 19, 2012. This finding screened to Green using Exhibit 2 – “Mitigating Systems Screening Questions,” because it did not represent an actual loss of function of a single train for greater than its TS allowed outage time. Redundant instruments were available to actuate the main steam isolation function at the required setpoint. The inspectors determined the finding had a cross-cutting aspect of “conservative bias” in the human

performance area, because the procedures that allowed the larger tolerance associated with the steam flow channel checks at low power levels were not questioned, but used by the operators to rationalize a satisfactory channel check. [H.14]

Inspection Report# : [2014004](#) (*pdf*)

**Significance:**  Aug 01, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

### **Installation of 1.5-hour UL Labeled Fire Door in a Required 3-hour Fire Barrier on Unit 2**

A Green NRC-identified non-cited violation (NCV) of Unit 2 Operating License Condition (OLC) 2.C. (6), Fire Protection, was identified for the failure to ensure that a fire door that was part of a fire barrier was provided with a 3-hour labeled door as required by 10 CFR 50.48 and the approved Fire Protection Program (FPP). Fire Area 2-20, Auxiliary Building Corridor is required to be separated from Fire Area 2-21, Unit 2 Train B Switchgear Room, by 3-hour rated fire barriers. The inspectors observed that fire door 2219, in the wall separating these two fire areas, was installed with a Underwriters Laboratory (UL) label fastened to it, identifying it as a 1.5-hour rating rather than a labeled 3-hour rated fire door. The licensee entered these issues into the corrective action program (CAP) as CRs 814872, 843303 and 840832, and implemented an hourly roving fire watch in the affected Fire Areas as a compensatory measure, LCO No. 2-2014-0111.

The licensee's failure to ensure that fire door 2219 was a functional UL labeled Class "A" 3-hour door, as required by the approved FPP, was determined to be a performance deficiency. The performance deficiency was more than minor because it was associated with the protection against external events (fire) attribute of the Mitigating Systems Cornerstone and it adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The significance of this finding was evaluated using IMC 0609, Appendix F, "Fire Protection Significance Determination Process", dated September 20, 2013 because the performance deficiency affected fire protection defense-in-depth strategies involving fire confinement. Using IMC 0609, Appendix F, Attachment 1, "Fire Protection Significance Determination Process Worksheet," the inspectors determined that the finding was of very low safety significance (Green) at Task 1.4.3, Question B, because the barrier door (as evidenced by a UL door label of 1.5-hours) will provide a 1-hour or greater fire endurance rating. A Cross Cutting Aspect of H.12, Avoiding Complacency was assigned to this finding because individuals did not recognize or plan for the possibility of mistakes, issues or risk during the fire door's receipt inspection, installation and post-installation surveillance (Section 1R05.02).

Inspection Report# : [2014009](#) (*pdf*)

---

## **Barrier Integrity**

---

## **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 : August 07, 2015