

# Brunswick 1

## 1Q/2016 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:**  Jun 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

#### **Inadequate Procedure for the 1B Conventional Service Water Pump Strainer Repair**

An NRC-identified Green NCV of 10 CFR Part 50, Appendix B, Criterion V, Instructions, Procedures, and Drawings, was identified for the licensee's failure to have an adequate procedure to perform maintenance on the 1B conventional service water (CSW) pump strainer. Specifically, between August 28, 2009, and May 11, 2015, licensee procedure MNT NGGC-0009, Application of Protective Coatings, was not adequate to perform repairs on the 1B CSW pump strainer, which resulted in through wall leaks on three occasions. As corrective actions, the licensee repaired the weld, recoated the inside of the affected strainer area with Belzona coating using qualified individuals, and updated procedure MNT-NGGC-0009. The licensee entered this issue into the CAP as NCR 747712.

The inspectors determined that the licensee's failure to have an adequate procedure to perform maintenance on the 1B CSW pump strainer was a performance deficiency. The finding was more than minor because if left uncorrected, it had the potential to lead to a more significant safety concern. Specifically, it could have led to a more significant failure of the 1B CSW pump strainer and the service water system. Using IMC 0609, Appendix A, issued June 19, 2012, the SDP for Findings At-Power, the inspectors determined the finding was of very low safety significance (Green) because the finding did not affect the design or qualification of a mitigating SSC, the finding did not represent a loss of system and/or function, the finding did not represent an actual loss of a function of a single train for greater than the TS allowed outage time, the finding did not represent an actual loss of a function of one or more non-TS trains of equipment, and did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. The finding has a cross-cutting aspect in the area human performance associated with the documentation attribute because the licensee failed to create and maintain complete, accurate and up-to-date documentation to correct the 1B CSW pump strainer through-wall leak issue on three occasions.

Inspection Report# : [2015002](#) (*pdf*)

**Significance:**  Jun 18, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

#### **Failure to Identify Conditions Adverse to Quality**

An NRC-identified Green non-cited violation (NCV) of the Code of Federal Regulations (10 CFR) Part 50, Appendix B, Criterion XVI, Corrective Action, was identified for licensee failure to identify conditions adverse to quality during the evaluation of an emergency diesel generator (EDG) output breaker failure on March 16, 2015. Specifically, the licensee missed that an internal change made to a relay was a condition adverse to quality. Further, the licensee failed to reclassify a corrective action document to higher significance when information arose indicating that the

event in question was a loss of safety function. The licensee documented these issues in their corrective action program, completed the necessary reviews for a condition adverse to quality, and reclassified the original event to Significance Level 1.

The inspectors determined that the finding was more than minor in accordance with Manual Chapter 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because, if left uncorrected, additional unqualified relays would likely have been installed in the plant. Using Manual Chapter 0609, Appendix A, Exhibit 1, effective July 1, 2012, the finding screened as Green for each unit by answering "no" to the questions related to an actual loss of function of a system, a single train, non-technical specification equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for >24 hrs. The finding had a cross-cutting aspect for "Evaluation" in the area of Problem Identification & Resolution because the most likely cause of the missed conditions adverse to quality was a lack of thorough investigation during the evaluations (for cause and reportability) of the relay issue [P.2]

Inspection Report# : [2015007](#) (pdf)

**Significance:** G Jun 18, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

### **Insufficient Material Evaluation of Commercially Dedicated Allen Bradley Relays**

An NRC-identified Green NCV of 10 CFR Part 50, Appendix B, Criterion III, Design Control was identified for the licensee's inadequate commercial grade dedication technical evaluation that resulted in non-conforming relays being installed in the control circuits for emergency diesel generator output breakers. This led to specification of a relay that was unsuitable for the application being installed in the control circuit for two emergency diesel generator output breakers and failure of one of those breakers to close. The licensee documented this issue in their corrective action program and performed corrective actions to mitigate the effects of the undetected changes on the relay.

The inspectors determined that the finding was more than minor in accordance with Manual Chapter 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because, if the process for detecting commercial grade item changes using material evaluations was left uncorrected, additional undetected design or process changes would likely occur. Using Manual Chapter 0609, Appendix A, issued June 19, 2012, "The Significance Determination Process (SDP) for Findings At-Power," the inspectors determined the finding required a detailed risk evaluation because the effect on two emergency diesel generators was considered a loss of function. For Unit 1, the regional Senior Reactor Analyst used demand data to adjust the probability that an emergency diesel generator would fail to start and ran a condition assessment on SAPHIRE. Because of limited exposure time, the finding was determined to be Green for Unit 1. For Unit 2, the conditions for exposure occurred during an outage with the reactor cavity filled, and both EDGs would be available. The SRA determined the significance to be bounded by the at power risk analysis performed for Unit 1. Because of the low exposure time, and the high likelihood of operators recovering the failure to start of the EDGs, this issue was Green for Unit 2. The inspectors did not identify a cross-cutting aspect associated with this finding because the original relay evaluation was done in 1999 and was not indicative of current licensee performance.

Inspection Report# : [2015007](#) (pdf)

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## **Barrier Integrity**

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## **Emergency Preparedness**

## Occupational Radiation Safety

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## Public Radiation Safety

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## 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.

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## Miscellaneous

Last modified : July 11, 2016