

Ginna

2Q/2015 Plant Inspection Findings

Initiating Events

Significance: G Sep 30, 2014

Identified By: Self-Revealing

Item Type: FIN Finding

Inadequate Work Packages Associated with Maintenance on the Main Generator Exciter Air Cooler Reversing Head

A self-revealing Green finding was identified for inadequate development and maintenance of work packages as required by Exelon Generation Company, LLC (Exelon) procedure CNG-MN-4.01-1003, "Work Order Planning," Revision 00701. Specifically, the work packages associated with maintenance on the main generator exciter air cooler reversing head did not adequately incorporate and comply with vendor recommendations, which resulted in a service water leak on the reversing chamber of the generator exciter air cooler, a rapid downpower, and shutdown of the reactor.

This finding is more than minor because it is associated with the procedure quality attribute of the Initiating Events cornerstone and affected 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. Specifically, the work packages associated with maintenance on the main generator exciter air cooler reversing head did not adequately incorporate and comply with vendor specifications, which resulted in a service water leak on the reversing chamber of the generator exciter air cooler, a rapid downpower, and shutdown of the reactor. Additionally, the finding is similar to Example 4.b of Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports," Appendix E, "Examples of Minor Issues," in that a performance deficiency caused a transient. In accordance with IMC 0609.04, "Initial Characterization of Findings," and Exhibit 2 of IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," the inspectors determined that this finding is of very low safety significance (Green) because the finding did not cause a reactor trip and the loss of mitigation equipment relied upon to transition the plant from the onset of a trip to a stable shutdown condition. This finding has a cross-cutting aspect in the area of Problem Identification and Resolution, Identification, because Exelon did not implement a corrective action program with a low threshold for identifying issues, and individuals did not identify issues completely, accurately, and in a timely manner in accordance with the program. Specifically, Exelon staff did not initiate condition reports and document reversing head material deficiencies identified by Exelon's vendor and recommended for repair in 2009, 2012, and 2014 [P.1].

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

Mitigating Systems

Significance: G Jun 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform 1-Hour Fire Tours as Required by the Technical Requirements Manual

The inspectors identified a Green non-cited violation of Ginna Operating License Condition 2.C.(3), "Fire Protection," because Exelon Generation Company, LLC (Exelon) failed to perform 1-hour compensatory fire tours as required by Ginna's Technical Requirements Manual (TRM). Specifically, while a fire barrier component was physically removed, the TRM required a 1-hour fire watch inspection of the affected fire zone; Exelon was performing a 6-hour fire watch. Corrective actions included performing 1-hour fire tours, reinstalling the fire barrier when the work requiring its removal was completed so that fire tours were no longer required, and entering the issue into the corrective action program.

This finding is more than minor because it adversely affected the protection against external factors (i.e., fire) attribute of the Mitigating Systems cornerstone and affected the cornerstone objective of ensuring the availability and reliability of systems that respond to initiating events to prevent undesirable consequences. In accordance with Inspection Manual Chapter (IMC) 0609, Appendix F, "Fire Protection Significance Determination Process," issued on September 20, 2013, the inspectors determined that the finding is of very low significance (Green), because for localized cable protection (task 1.4.4), an automatic suppression system protected the area where the cable protection was affected by the fire finding. Additionally, the finding has a cross-cutting aspect in the area of Human Performance, Resources, because Exelon did not ensure that procedures were adequate to support nuclear safety.

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

Significance:  Jun 30, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Inadequate Procedure Implementation Results in Inadvertent Entry into 72-Hour Technical Specification Action Statement

A self-revealing Green non-cited violation of Technical Specification (TS) 5.4.1, "Procedures," was identified for inadequate implementation of procedure M-71.4, "Removal and/or Installation of Modules within Defeated or Out-of-Service Instrument Loops." Specifically, while performing maintenance procedures for the sodium hydroxide (NaOH) flow loop power supply replacement, Exelon Generation Company, LLC (Exelon) inadvertently caused a short in electrical circuitry that resulted in an automatic switch of instrument bus 'C' from inverter 'B' to its backup power supply; this caused an entry into a 72-hour TS action statement and actuation of the control room emergency air treatment system (CREATS). Corrective actions included entering this issue into the corrective action program.

This finding is more than minor because it was associated with the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In accordance with Inspection Manual Chapter (IMC) 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2, the inspectors determined that the finding is of very low significance (Green), because the finding was not a deficiency affecting the design or qualification of a mitigating structure, system, and component; did not represent a loss of system and/or function; and did not represent an actual loss of function of at least a single train. Additionally, the finding has a cross-cutting aspect in the area of Human Performance, Avoid Complacency, because Exelon did not recognize and plan for the possibility of mistakes, latent issues, and inherent risk, even while expecting successful outcomes.

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

Significance:  Jun 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Inadequate Preferred Auxiliary Feedwater Protection from Potential Block Wall Failures

The inspectors identified a Green non-cited violation of Title 10 of the Code of Federal Regulations (10 CFR) 50, Appendix B, Criterion III, "Design Control," because Exelon Generation Company, LLC (Exelon) did not provide for

verifying or checking the adequacy of design, such as by the performance of design reviews and calculations to ensure that masonry block wall failures in the intermediate building would not challenge preferred auxiliary feedwater (AFW) piping operability. Corrective actions included installation of a temporary modification which corrected the condition and entering this issue into the corrective action program.

This finding is more than minor because it is associated with the design control attribute of the Mitigating Systems cornerstone and affects the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, if nonsafety-related block wall 8-973-8I failed following a design basis seismic event, portions of the turbine-driven and 'B' motor-driven AFW systems could be impacted by falling blocks. In accordance with Inspection Manual Chapter (IMC) 0609.04, "Initial Characterization of Findings," and Exhibits 2 and 4 of IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At Power," the performance deficiency was a deficiency affecting external event mitigation systems (seismic/fire/flood/severe weather protection degraded). The performance deficiency did not involve the degradation of equipment or function specifically designed to mitigate a seismic, flooding, or severe weather initiating event (e.g., seismic snubbers, flooding barriers, tornado doors) only a reasonable doubt regarding the operability of the turbine-driven AFW system. Therefore, the inspectors determined that this finding is of very low safety significance (Green). Additionally, the finding has a cross-cutting aspect in the area of Problem Identification and Resolution, Identification, because Ginna did not implement a corrective action program with a low threshold for identifying issues, and individuals did not identify issues completely, accurately, and in a timely manner in accordance with the program.

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

Significance: G Mar 31, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Inadequate Corrective Actions Result in Failure of Bus 18 Undervoltage Solid State Switchboard Card

A self-revealing Green NCV of Title 10 of the Code of Federal Regulations (10 CFR), Appendix B, Criterion XVI, "Corrective Action," was identified for failure to establish measures to assure that a condition adverse to quality associated with the availability of the bus 18 solid state switchboard card (SS1) was promptly identified and corrected. Specifically, Ginna did not adequately complete previous corrective actions to ensure carbon resistors in risk significant components were identified and replaced in a timely manner which resulted in the failure of a safety-related bus undervoltage solid state switchboard card and indication of an undervoltage condition. Exelon technicians replaced the failed card, completed an extent of condition review and entered the issue into the CAP

The inspectors determined the self-revealing performance deficiency was more than minor because it was associated with the equipment performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors also determined the deficiency did not affect the design or qualification of a mitigating structure, system, and component; did not represent a loss of system and/or function; and did not represent an actual loss of function of at least a single train. Therefore, the inspectors determined this finding to be of very low safety significance (Green). In accordance with IMC 0612, the finding does not have a cross-cutting aspect, because the performance deficiency occurred more than 3 years ago, would not likely occur today under similar circumstances, and is not reflective of present plant performance. (Section 1R12)

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

Significance: N/A Feb 04, 2015

Identified By: Licensee

Item Type: VIO Violation

Incomplete/Inaccurate Medical Information Resulted in Issuance of an Initial Senior Operator License without

a Required Medical Restriction and Failure to Report a Permanent Change in Medical Status

Exelon Generation Company, LLC (Exelon) identified two apparent violations (AVs): (1) An AV of Title 10 of the Code of Federal Regulations (10 CFR) 50.9, "Completeness and Accuracy of Information," and (2) An AV of 10 CFR 50.74, "Notification of Change in Operator or Senior Operator Status." Specifically, on October 8, 2008, Ginna submitted certified copies of an NRC senior operator license application that did not specify that the applicant required a restriction (to take medication as prescribed for high blood pressure) in order to maintain medical qualifications. The NRC issued the senior operator's initial license on December 5, 2008, but without the necessary medical restriction (AV #1). From October 8, 2008, until July 16, 2014, Ginna had several additional opportunities to identify that the blood pressure medication was required to compensate for a disqualifying medical condition and that a license condition was required during the licensee's biennial licensed operator requalification program reviews and medical examinations. On July 16, 2014, a period that exceeded 30 days from when the condition was identified, the facility notified the NRC of the medical condition via a letter requesting amendment to the operator's license to include the restriction (AV #2). On August 28, 2014, the NRC issued the license amendment with the new restriction. This issue was entered into Exelon's corrective action program.

The inspectors determined that Exelon's failure to provide complete and accurate information to the NRC in the senior operator license application and to notify the NRC of a change in a senior operator's status for a condition which was known by the licensee were performance deficiencies that were within their ability to foresee and correct and should have been prevented. The inspectors determined that traditional enforcement applies, as the issue affected the NRC's ability to perform its regulatory function. Namely, the NRC relies upon Exelon to ensure all licensed operators meet the medical conditions of their licenses. If, during the term of the individual operator license, an operator develops a permanent physical or mental disability that causes the operator to fail to meet the requirements of 10 CFR 55.21, "Medical Examination," the licensee shall notify the NRC within 30 days of learning of the diagnosis, in accordance with 10 CFR 50.74(c). Additionally, the NRC issued a senior operator license to the applicant based on information that was not complete and accurate in all material aspects. The performance deficiencies were screened against the Reactor Oversight Process per the guidance of Inspection Manual Chapter 0612, Appendix B, "Issue Screening." No associated Reactor Oversight Process finding was identified and no cross-cutting aspect was assigned. These issues constitute AVs in accordance with the NRC's Enforcement Policy.
Inspection Report# : [2015007](#) (*pdf*)

Significance:  Aug 22, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Inadequate Test Control for Main Steam Isolation Valve (MSIV) Solenoid-Operated Valves

The inspectors identified a finding of very low safety significance involving a non-cited violation of Title 10 of the Code of Federal Regulations (10 CFR) 50, Appendix B, Criterion XI, "Test Control," in that Exelon Generation Company, LLC (Exelon) did not assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service was identified and performed in accordance with written test procedures. Specifically, the inspectors determined that the solenoid-operated valves that actuate the MSIVs were not satisfactorily (independently) tested to demonstrate that the isolation valves would perform satisfactorily in service. In response, Exelon entered the issue into the corrective action program, evaluated current operability, and initiated efforts to develop satisfactory testing methods.

The finding was more than minor because it was associated with the equipment performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," the inspectors determined the finding was of very low safety significance (Green) because it was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating

event. This finding did not have a cross-cutting aspect because the most significant contributor of the performance deficiency was not reflective of current licensee performance.

Inspection Report# : [2014007](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Significance:  Mar 31, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Inadequate Protective Action Recommendation Flowchart

A self-revealing Green NCV of 10 CFR 50.54(q)(2), 10 CFR 50.47(b)(10), and 10 CFR 50, Appendix E, “Emergency Planning and Preparedness for Production and Utilization Facilities,” Section IV.B.1, was identified for Exelon inadequately maintaining the effectiveness of its Emergency Plan. Specifically, 10 CFR 50.54(q)(2) requires reactor licensees to follow and maintain the effectiveness of an emergency plan that meets the requirements in 10 CFR 50, Appendix E and the planning standards of 50.47(b), and Exelon did not adequately maintain the effectiveness of its Emergency Plan when Exelon implemented changes to the protective action recommendation (PAR) flowchart that would have resulted in Exelon inappropriately recommending evacuation of downwind areas and many more emergency response planning areas (ERPAs) than intended. Exelon corrective actions included issuing NERP Revision 04000 and CNG-EP-1.01-1013 Revision 00200, which corrected the PAR flowchart text, and ensuring all emergency directors were adequately trained and aware of the NERP and CNG-EP-1.01-1013 revisions.

The inspectors determined that the inadequate maintenance of the Emergency Plan was more than minor because it was associated with the procedure quality attribute of the Emergency Preparedness cornerstone and affected the cornerstone objective to ensure that the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. An inadequate PAR resulting in evacuations of ERPAs when no evacuations are otherwise called for is less significant than an emergency action level overclassification resulting in an unnecessary PAR, because there is a potential dose avoidance benefit to the public at the General Emergency level. In this instance, a PAR is made, which is sufficient to ensure public health and safety, although some additional risk will be incurred. The (b)(10) risk-significant planning standard functions are still met, although Exelon did fail to comply with the planning standard. Therefore, the inspectors determined the finding was of very low safety significance (Green). The finding has a cross-cutting aspect in the area of Human Performance, Change Management, because Exelon did not use a systematic process for evaluating and implementing change so that nuclear safety remained the overriding priority. (Section 1EP4)

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

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

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