

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION I 2100 RENAISSANCE BLVD. KING OF PRUSSIA, PA 19406-2713

August 10, 2016

EA-16-057

Mr. Bryan Hanson Senior Vice President, Exelon Generation Co. President and Chief Nuclear Officer, Exelon Nuclear 4300 Winfield Rd. Warrenville, IL 60555

SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION - SUPPLEMENTAL

INSPECTION REPORT 05000219/2016011 AND ASSESSMENT

FOLLOW-UP LETTER

Dear Mr. Hanson:

On July 28, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed a supplemental inspection pursuant to Inspection Procedure (IP) 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," at your Oyster Creek Nuclear Generating Station (Oyster Creek). The enclosed inspection report (IR) documents the inspection results, which were discussed on July 28, 2016, with Mr. Garey Stathes, Site Vice President, and members of his staff.

As required by the NRC Reactor Oversight Process (ROP) Action Matrix, this supplemental inspection was conducted within the Regulatory Response Column of the NRC's ROP Action Matrix because one finding of White significance, associated with the Mitigating Systems Cornerstone, was identified in the first quarter 2016 integrated inspection report (ML16132A436). The finding was associated with inadequate instructions for the flexible coupling hose preventative maintenance template resulting in an inoperable emergency diesel generator (EDG). The final significance determination and follow-up assessment letter for this finding, which was issued on July 6, 2016, documented that Oyster Creek transitioned to the Regulatory Response Column of the ROP Action Matrix, retroactive to the first quarter of 2016. The NRC staff was informed on June 14, 2016, of your staff's readiness for this inspection.

The objectives of this supplemental inspection were to provide assurance that: (1) the root causes and the contributing causes of risk-significant performance issues were understood; (2) the extent of condition and extent of cause of risk-significant performance issues were identified; and (3) corrective actions for risk-significant performance issues were sufficient to address the root and contributing causes and prevent recurrence. The inspection consisted of examination of activities conducted under your license as they related to safety, compliance with the Commission's rules and regulations, and the conditions of your operating license.

Based on the results of this inspection, the NRC concluded that, overall, the supplemental inspection objectives were met and no significant weaknesses were identified. Additionally, no findings of significance were identified.

B. Hanson -2-

Based on the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," and the results of this inspection, the White finding will be closed. However, Oyster Creek will remain in the Regulatory Response Column until four quarters have elapsed since the White finding was originally documented in the first quarter of 2016.

In accordance with Title 10 of the Code of Federal Regulations (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any), will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records System component of the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC's Website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Silas R. Kennedy, Chief Reactor Projects Branch 6 Division of Reactor Projects

Docket No. 50-219 License No. DPR-16

Enclosure:

Inspection Report 05000219/2016011 w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

B. Hanson -2-

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DDorman, RA

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ROPAssessment Resource

SShaffer, DRP

MHenrion, DRP

SElkhiamy, DRP

APatel, DRP, SRI

EAndrews, DRP, RI

JDeVries, DRP, AA

JBowen, RI, OEDO

MFerdas, DRP

RidsNrrPMOysterCreek

Resource

RidsNrrDorlLpl1-2 Resource ROPreports Resource

DOCUMENT NAME: G:\DRP\BRANCH6\+++Oyster Creek\OC Inspection Reports 2016\2016011\OC 2016011 95001 EDG Flex Hose Failure Final.docx ADAMS Accession No.ML16228A053

☑ SUNSI Review		✓ Non-Sensitive□ Sensitive	☑ Publicly Available□ Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP		
NAME	SShaffer	SKennedy		
DATE	8/08/16	8/10/16		

U.S. NUCLEAR REGULATORY COMMISSION REGION I

Docket No. 50-219

License No. DPR-16

Report No. 05000219/2016011

Licensee: Exelon Generation Company, LLC (Exelon)

Facility: Oyster Creek Nuclear Generating Station

Location: Forked River, New Jersey

Dates: July 25, 2016, through July 28, 2016

Team Lead: S. Shaffer, Senior Project Engineer, Division of Reactor Projects

Inspectors: J. Petch, Resident Inspector, Ginna Station, Division of Reactor

Projects

Approved by: Silas R. Kennedy, Chief

Reactor Projects Branch 6 Division of Reactor Projects

SUMMARY

Inspection Report 05000219/2016011; 7/25/2016 – 7/28/2016; Oyster Creek Nuclear Generating Station (Oyster Creek); Supplemental Inspection – Inspection Procedure (IP) 95001

A Senior Project Engineer and a Resident Inspector from the Division of Reactor Projects, USNRC Region I, performed this inspection. No significant weaknesses or findings were identified. The Nuclear Regulatory Commission's (NRC) program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," (ROP) Revision 6.

Cornerstone: Mitigating Systems

The NRC staff performed this supplemental inspection in accordance with IP 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," to assess Exelon's evaluation of a performance deficiency and violation of White significance, associated with the Mitigating Systems cornerstone, which was identified in the first quarter 2016 integrated inspection report (Agencywide Documents Access and Management System (ADAMS) Accession Number ML16132A436). The finding was associated with inadequate instructions for the flexible coupling hose preventative maintenance template resulting in an inoperable emergency diesel generator (EDG). The final significance determination and follow-up assessment letter for this finding, which was issued on July 6, 2016, documented that Oyster Creek transitioned to the Regulatory Response Column of the ROP Action Matrix, retroactive to the first quarter of 2016. The NRC staff was informed on June 14, 2016, of your staff's readiness for this inspection.

Based on the results of the inspection, the inspectors concluded that Exelon had adequately performed a root cause analysis of the event, and corrective actions, both completed and planned, were reasonable to address the related issues. Based on the guidance in Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," dated October 18, 2013, and the results of this inspection, the White finding will be closed by this report. However, Oyster Creek will remain in the Regulatory Response Column until four quarters have elapsed since the White finding was originally documented in the first quarter of 2016. (Section 4OA4)

REPORT DETAILS

4. OTHER ACTIVITIES

40A4 Supplemental Inspection (IP 95001)

.1 Inspection Scope

The NRC staff performed this supplemental inspection in accordance with IP 95001 to assess Exelon's evaluation of a White finding, which affected the Mitigating Systems cornerstone in the Reactor Safety strategic performance area. The inspection objectives were to:

- Provide assurance that the root and contributing causes of risk-significant performance issues was understood;
- Provide assurance that the scope extent of the condition and extent of cause of risk-significant performance issues were identified;
- Provide assurance that corrective actions for risk-significant performance issues were sufficient to address the root and contributing causes and prevent recurrence.

Oyster Creek entered the Regulatory Response Column of the NRC's ROP Action Matrix in the first quarter of 2016 as a result of one inspection finding of low to moderate (White) safety significance, associated with the Mitigating Systems cornerstone. This finding was identified and discussed in the first quarter 2016 integrated inspection report Inspection Report 05000219/2016001 (ML16132A436).

The finding was associated with inadequate instructions for the flexible coupling hose preventative maintenance template resulting in an inoperable EDG. The final significance determination and follow-up assessment letter for this finding, which was issued on July 6, 2016, documented that Oyster Creek transitioned to the Regulatory Response Column of the ROP Action Matrix, retroactive to the first quarter of 2016.

Exelon staff informed the NRC staff on June 14, 2016, that they were ready for the supplemental inspection. In preparation for this supplemental inspection, Exelon performed a root cause analysis (RCA) in February 2016, as part of issue report 02610027, "Emergency Diesel Generator No. 1 Coolant Leak." The White finding did not have an associated cross-cutting aspect because the performance deficiency occurred in 2004 and was determined to be not reflective of current plant performance.

The inspectors reviewed the causal evaluations referenced above, in addition to other documents listed in the Attachment, which supported Exelon's actions to address the White finding. The inspectors reviewed corrective actions, both completed and planned, to address the identified causes, extent of condition, and extent of cause.

The inspectors also interviewed Exelon personnel to ensure that the root and contributing causes and the contribution of safety culture components were understood; and corrective actions taken or planned were appropriate to address the causes and prevent recurrence. Lastly, the inspectors conducted in-plant walk downs, which included independent inspections of both EDGs.

.2 Evaluation of the Inspection Requirements

02.01 Problem Identification

a. IP 95001 requires that the inspection staff determine that Exelon's evaluation of the issue documents who identified the issue (i.e., licensee-identified, self-revealing, or NRC-identified) and under what conditions the issue was identified.

The inspectors determined that Exelon's RCA 02610027 clearly identified the issue as a self-revealing failure of the EDG No. 1 Flex hose on January 4, 2016, during a surveillance run of EDG No. 1. The evaluation identified that site implementation of Exelon's Electro-Motive Division Diesel Generator Preventative Maintenance (PM) Template did not include making PMs for the "Miscellaneous – Non-metallic flexible hose replacement" 12 year frequency template line item while performing the corrective actions for root cause 02004-1184 back in 2004.

b. IP 95001 requires that the inspection staff determine that Exelon's evaluation of the issue documents how long the issue existed and prior opportunities for identification.

The inspectors determined that Exelon's RCA 02610027 identified that Oyster Creek staff had a number of opportunities between 2004, when the PM template was implemented, and January 2016, when the failure of the EDG No. 1 flex hose occurred.

c. IP 95001 requires that the inspection staff determine that Exelon's evaluation documents the plant specific risk consequences, as applicable, and compliance concerns associated with the issue.

The inspectors identified that Exelon's RCA 02610027 did accurately document plant risk consequences associated with this plant event. However, Exelon did initiate issue report 02697036 to update the RCA to classify the risk as low to moderate risk on July 26, 2016. RCA 02610027 did adequately address compliance concerns associated with this issue and demonstrated how compliance was adequately restored.

d. Findings

No findings of significance were identified.

02.02 Root Cause, Extent of Condition, and Extent of Cause Evaluation

a. IP 95001 requires that the inspection staff determine that Exelon evaluated the issue using a systematic methodology to identify the root and contributing causes.

The inspectors determined that Exelon evaluated the White finding using a systematic methodology to identify root and contributing causes. The inspectors verified that Exelon staff implemented PI-AA-125-1001, Revision 1, "Root Cause Analysis," as well as the guidance in PI-AA-125, Revision 0, "Corrective Action Program Procedure," in the conduct of the station's causal analyses to identify the root and contributing causes. The station utilized the following systematic methods to complete the RCA:

- data gathering through interviews and document review;
- laboratory forensic examinations and third party review of the examination;
- comparative timeline;
- WHY staircase; and
- hazard-barrier-target analysis

The inspectors verified these methods were completed by reviewing the RCA and the attachments to the RCA. The inspectors also verified that the root and contributing causal conclusions were consistently understood and supported by Exelon staff through the conduct of interviews, review of laboratory data, and review of third party reports.

b. IP 95001 requires that the inspection staff determine that Exelon's RCA was conducted to a level of detail commensurate with the significance of the issue.

The inspectors determined that Exelon's RCA was conducted to a level of detail commensurate with the significance of the White finding. In accordance with PI-AA-125-1001, Revision 1 as well as PI-AA-125, Revision 0, Exelon conducted a RCA that identified the root and contributing causes associated with the failure of the EDG No. 1 flex hose failure on January 4, 2016.

RCA 02610027 focused on identifying the cause of the coolant elastomer hose failure. The RCA identified the root cause of the failure to be age-related degradation. Exelon's Electro-Motive Division Diesel Generator PM Template did not include making preventative maintenance tasks for replacing non-metallic flexible hoses. The elastomer hose connected the coolant expansion tank to the inlet tee for the engine driven coolant pump. The hose was in service for approximately 22 years with a vendor recommended replacement interval of 12 years. The hose failed because it was in-service for almost twice the recommended service length resulting in temperature related embrittlement of the elastomer. Exelon Power Labs confirmed the failure to be age-related degradation.

The RCA identified one contributing cause. The contributing cause found that five individual reviews of the EDG's PM program did not identify a PM for the non-metallic hoses. None of these reviews triggered an all-inclusive, integrated maintenance strategy review of the EDGs. The reviews were too restrictive and did not expand into the entire EDG PM program.

 c. IP 95001 requires that the inspection staff determine that Exelon's RCA included a consideration of prior occurrences of the issue and knowledge of operating experience (OE).

The inspectors determined that Exelon's RCA considered previous occurrences and internal events. The RCA noted that in 1994 EDG No. 1 cooling water expansion tank to inlet tee hose was replaced due to a leak. At that time the hoses were inspected and were noted to be "dried and cracked." The EDG No. 2 hoses were also replaced in 1994 and found to be brittle. No internal events related to elastomer hose failure were found. The RCA also conducted a review of external OE including industry event report database reviews as appropriate.

The RCA identified a number of different instances at other nuclear plants were coolant hoses on diesel generators have failed due to embrittlement and years in service.

d. IP 95001 requires that the inspection staff determine that Exelon's RCA addresses the extent of condition and extent of cause of the issue.

The inspectors determined that Exelon's evaluations appropriately addressed the extent of condition and extent of cause of the issue. The inspectors determined these extent of condition actions were appropriate to the circumstances, based on Exelon's knowledge of the issue when the actions were created.

RCA 02610027 included an extent of condition for the EDG No. 1 coolant hose failure. The RCA team determined all the flexible hoses used on both EDG No. 1 and EDG No. 2 were replaced or were within the 12 year replacement frequency. In addition, other safety significant diesels were evaluated to determine if they used flexible hoses and if those hoses were in a PM program. The RCA team identified a flexible fuel line on EDG No. 2 that was never replaced and subject to aging degradation. Exelon replaced the flexible fuel at the next maintenance window. The RCA team identified that the dust bin blower air inlet rubber hose and two rubber expansion joints on EDG No. 1 and EDG No. 2 are covered by a non-intrusive PM and there is no record of the components ever being replaced. It was determined that the consequence of failure is minor and no further PM/replacement requirements are needed. The RCA team determined that the diesel engine fire pumps have approximately 23 flexible rubber hoses each and the risk of a hose failure does not have any nuclear safety-related impacts. In addition, the Met Tower back-up generator was determined to have three hoses with a PM replacement frequency of 12 years.

As part of the extent of condition review, the inspectors also reviewed Exelon's Diesel Generator Excellence Team efforts to maximize the EDG's reliability, reduce unavailability, improve work practices & documentation, and develop bridging strategies and sustainable long term solutions for any identified gaps to excellence. The review found the team's effort to be detailed and thorough. The team did identify a number of maintenance items to be performed. Those items were performed on EDG No. 1 during the fall 2016 EDG No. 1 overhaul and will be performed on the EDG No. 2 during its overhaul in the fall of 2017.

The extent of cause review looked at all the PM requests generated by the subject matter expert (158 requests). The review identified that only one request was not properly captured. The review also performed a trend code review going back to 2008. The extent of cause review implemented a check of PM templates of major components that have multiple subcomponents within one PM template to ensure the cause was not systemically present. The systems chosen were Main Power Output and Start Up Transformer, BWR Refuel Bridge and small Diesel Engine PM Templates.

Overall, the inspectors determined that the scope of the extent of condition and extent of cause reviews was appropriate and addressed the root and contributing causes.

However the inspectors had the following observation:

Exelon's extent of cause review concluded that the cause was not systemically present, however, the inspectors identified that the system PM template reviews were not completed prior to the inspection. The inspectors concluded that the reviews completed to date, along with the review plan for PM template reviews, were sufficient to generate adequate assurance of the extent of cause. Since the individual system reviews had not been completed there was not sufficient data to support Exelon's extent of cause conclusion.

The NRC will perform a review of the completed system reviews once the reviews are completed and document this review in a future quarterly integrated report. Exelon documented this concern in Issue Report 02697744.

e. IP 95001 requires the inspection staff to determine that Exelon's root cause, extent of condition, and extent of cause evaluations appropriately considered the safety culture components as described in IMC 0305, "Operating Reactor Assessment Program."

The inspectors determined that Exelon's RCA 02610027 did consider the safety culture components as described in IMC 0305. The inspectors noted that Exelon performed the evaluation of the safety culture components in accordance with station procedures. Overall, the inspectors noted that Exelon appropriately identified station performance gaps including that an all-inclusive, integrated maintenance review related to emergency diesel generators was not triggered by previous emergency diesel generator failures. Finally, the inspectors noted that Exelon's corrective actions were adequate to address the performance gaps. Attachment 8 of RCA 02610027 specifically documented the safety culture review and observations.

f. Findings

No findings of significance.

02.03 Corrective Actions

a. IP 95001 requires the inspection staff to determine that (1) Exelon specified appropriate corrective actions for each root and/or contributing cause, or (2) an evaluation stating no actions are necessary is adequate.

Overall, the inspectors found that Exelon specified appropriate corrective actions for each root cause, contributing cause, extent of condition, and extent of cause for the White finding. Exelon's corrective actions to address the root and contributing causes were assigned in accordance with station procedure PI-AA-125-1001, Revision 1, as well as the guidance in PI-AA-125, Revision 0.

RCA 02610027 Corrective Actions included:

- Replace failed right bank flex hose on EDG No. 1
- Replace left and right bank flex hoses on EDG No. 2
- Develop EDG Performance Improvement Plan
- Identify other non-metallic hoses within the EDG system and compare against the current PM program. Implement additional maintenance PMs to address any gaps identified

Review the PM program for the EDGs to ensure preventive maintenance is consistent with the PM template, vendor's recommendations, and all learnings from the diesel excellence team Implement a case study to address knowledge weaknesses of station personnel related to EDG reliability, top 10 probabilistic risk assessment issues, and provide training to appropriate staff Replace the other non-metallic hoses identified during reviews at their next respective maintenance outage

Overall, the inspectors determined that the corrective actions were appropriate and addressed the root and contributing causes

b. IP 95001 requires that the inspection staff determine that Exelon prioritized corrective actions with consideration of risk significance and regulatory compliance.

The inspectors determined that Exelon appropriately prioritized corrective actions with consideration of risk significance and regulatory compliance. Exelon immediate corrective actions included replacing the failed flex hose on EDG No. 1 and both flex hoses on EDG No. 2. Exelon also modified the PM template for the EDGs to replace the flex hoses on a pre-scheduled basis. This action restored compliance with the cited violation of Title 10 of the Code of Federal Regulations 50, Appendix B, Criterion V, "Procedures."

The station has implemented or is in the process of implementing a number of other corrective actions to ensure that similar problems do not exist with other templates and that future changes to templates preclude the loss of essential maintenance.

RCA 02610027 developed and implemented corrective actions to address the programmatic aspects of the violation, as well as completing the extent of cause review which identified additional procedures which did not receive adequate technical reviews.

c. IP 95001 requires that the inspection staff determine that Exelon established a schedule for implementing and completing the corrective actions.

The inspectors determined that Exelon established an appropriate schedule for implementing and completing the corrective actions. All immediate corrective actions are complete. A number of reviews and long term corrective actions were not completed prior to the inspection but all were scheduled to be complete by the end of 2016. The inspectors determined that Exelon's schedule for completing the remaining reviews and corrective actions was appropriate.

d. IP 95001 requires that the inspection staff determine that Exelon developed quantitative and/or qualitative measures of success for determining the effectiveness of the corrective actions to prevent recurrence.

The inspectors determined that Exelon developed quantitative and qualitative measures of success for determining the effectiveness of the corrective actions to prevent recurrence. Exelon established measures for determining the effectiveness of the corrective actions in RCA 02610027, including an effectiveness review scheduled in December of 2017 following completion of the corrective actions for RCA 02610027.

e. IP 95001 requires that the inspection staff determine that Exelon's planned or taken corrective actions adequately address a Notice of Violation (NOV) that was the basis for the supplemental inspection.

The inspectors determined that Exelon's planned and completed corrective actions adequately, restored compliance with the NOV of 10 CFR 50 Appendix B Criterion V. The issue was properly evaluated for root, contributing causes and an extent of cause and extent of condition review was completed. Appropriate corrective actions were developed and implemented, including corrective actions to preclude repetition of the failure mechanism.

f. Findings

No findings were identified.

02.04 Evaluation of IMC 0305 Criteria for Treatment of Old Design Issues

The inspectors determined this issue did not meet the IMC 0305 criteria for an old design issue.

4OA6 Exit Meeting and Regulatory Performance Meeting

On July 28, 2016, the inspectors presented the inspection results to Mr. Garey Stathes, Site Vice President, and other members of his staff, who acknowledged the inspection results. The inspectors asked Exelon if any of the material examined during the inspection should be considered proprietary. Exelon did not identify any proprietary information.

Upon completion of the exit meeting, the Region I Chief, Reactor Projects Branch 6, Mr. Silas R. Kennedy, conducted the Regulatory Performance Meeting, in accordance with IMC 0305, with Mr. G. Stathes, Site Vice President, and other members of his staff. The purpose of the meeting was to discuss Exelon's corrective actions in response to the White finding and NOV. Based on the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," and the results of this inspection, the White finding will be closed by this inspection report. However, Oyster Creek will remain in the Regulatory Response Column of the NRC's ROP Action Matrix for four full quarters following the initiation of the White finding. Therefore Oyster Creek will return to the licensee response column of the ROP action matrix on January 1, 2017

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION KEY POINTS OF CONTACT

Licensee Personnel

- G. Stathes, Site Vice-President
- M. Gillin, Plant Manager
- J. Barstow, Corporate Licensing Director
- T. Cappuccino, Regulatory Assurance/On-line Manager
- D. Chernesky, Maintenance Director
- T. Ferenga, Performance Improvement Manager
- R, Gropp, Corporate Licensing
- J. Jimenez, Regulatory Manager
- D. Jones, Electrical Design Engineering
- M. McKenna, Regulatory Assurance Manager
- H. Ray, Senior Manager Design Engineering
- J. Renda, Work Management Director
- J. Stanley, Engineering Director
- E. Swain, Acting Operations Director
- C. Symonds, Director of Training
- H. Tritt, Design Engineering
- D. Yatko, Design Engineer

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Closed

05000219/2016001-03

NOV

Inadequate Instructions for the Flexible Coupling Hose Preventative Maintenance Resulting in an Inoperable Emergency Diesel Generator (Section4OA4)

LIST OF DOCUMENTS REVIEWED

Procedures

PI-AA-120, "Issue Identification and Screening Process," Rev. 3

PI-AA-125, "Corrective Action Program (CAP) Procedure," Rev. 2

PI-AA-125-1001, "Root Cause Analysis Manual," Rev. 1

MA-OC-861101, "Diesel Generator Inspection (24 Month) – Mechanical," Rev. 20

PI-AA-126-1001-F-01, "Focused Area Self-Assessment," Rev. 0

AD-AA-101-1002, "Writer's Guide and Process Guide for Procedures and T&RM," Rev. 1

LS-AA-104-1003, "50.59 Screening Form," Rev. 4

LS-AA-104-1002, "50.59 Applicability Review Form," Rev. 5

636.1.010, "Diesel Generator Inspection (24 Month)," Rev. 21

636.4.003, "Diesel Generator #1 Load Test," Rev. 101

Condition Reports

00650654	02598933	02624638
01575045	02607247	02624649
01699790	02607966	02624831
02505684	02610027	02625012
02584237	02616773	02697036
02587999	02620771	02697744
02595446	02624311	02697751

Maintenance Orders / Work Orders

C2032237

C2035542

C2035546

C2035879

C2035893

R2221036

R2239442

<u>Miscellaneous</u>

Diesel Generator Excellence Team Report

Pre-NRC Supplemental Inspection 95001 EDG #1 Cooling Water Hose Failure FASA

EMD Emergency Diesel Generator PCM Template – 2016

02607247-19, Oyster Creek EDG-1 Cooling System Lost Parts Evaluation, Rev. 0

117.3-1, "Aging Management Activities to Meet Oyster Creek License Renewal Regulatory Commitments," Rev. 2

Engine Systems, Inc., "Safety Related Certificate of Conformance," Dated January 1, 2016
Restated Station Blackout Agreement Between Forked River Power LLC and Exelon Generation
Company

IQ Review, Small Diesel Engine, Rev. 8

IQ Review, Electro-Motive Division Diesel Generator, Rev. 12

Excel Spreadsheet, EDG PMs vs. PCM Template Requirements, Dated July 28, 2016

LIST OF ACRONYMS USED

Agencywide Documents Access and Management System Emergency Diesel Generator ADAMS

EDG

Inspection Procedure IΡ Inspection Manual Chapter IMC

Notice of Violation NOV

U. S. Nuclear Regulatory Commission Operating Experience NRC

OE Preventive Maintenance PMRCA Root Cause Analysis Reactor Oversight Process ROP