



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

September 1, 2015

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

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR OYSTER CREEK NUCLEAR
GENERATING STATION (REPORT 05000219/2015005)**

Dear Mr. Hanson:

On August 13, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of Oyster Creek Nuclear Generating Station (Oyster Creek). The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2014, through June 30, 2015. This letter informs you of the NRC's assessment of your facility, and its plans for future inspections at your facility.

The NRC determined that performance at Oyster Creek during the most recent quarter was within the Regulatory Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because one finding of White significance, associated with the Mitigating Systems cornerstone, was identified in the fourth quarter 2014 integrated inspection report (ADAMS Accession No. ML15042A072). The finding was associated with an inadequate review of a change in maintenance process that caused an inoperable emergency diesel generator (EDG). The final significance determination and follow-up assessment letter for this finding issued on April 27, 2015, documented that Oyster Creek transitioned to the Regulatory Response Column of the ROP Action Matrix in accordance with Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," retroactive to the fourth quarter of 2014. On July 14, 2015, your staff notified the NRC of your readiness for a supplemental inspection to review the actions taken to address the White finding described above. In response, the NRC will conduct a supplemental inspection in accordance with Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," during the week of August 31, 2015. The objectives of the 95001 inspection are to provide assurance that the root cause and contributing causes of risk-significant performance issues are understood, the extent of condition and extent of cause are understood, and the corrective actions are sufficient to address the root and contributing causes and prevent recurrence. The NRC will notify you of the results of this inspection via a separate inspection report which will be publically available.

In the second calendar quarter of 2015, Oyster Creek's PI for "Unplanned Scrams per 7000 Critical Hours" crossed the Green-to-White threshold, based on PI data submitted in July 2015. Specifically, this PI crossed the Green-to-White threshold due to unplanned scrams on July 11, 2014; October 12, 2014; March 22, 2015; and May 7, 2015. Because the White PI was not in the same Cornerstone as the White finding related to the EDG, discussed above, Oyster Creek will remain in the Regulatory Response Column of the ROP Action Matrix. On August 18,

2015, your staff notified the NRC of your readiness for a supplemental inspection to review the actions taken to address the White PI. The NRC will conduct a supplemental inspection using Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area." The objectives of the 95001 supplemental inspection were discussed above.

On April 27, 2015, the NRC issued the final significance determination and follow-up assessment letter (ML15112A147) for a Yellow finding associated with the inadequate application of materials, parts, equipment and processes associated with electromatic relief valves. The letter stated that, because the finding was considered an old design issue in accordance with IMC 0305, it will not be used as input in the assessment process or NRC Action Matrix. However, in accordance with IMC 0305, the NRC will conduct a supplemental inspection using Inspection Procedure 95002, "Supplemental Inspection for One Degraded Cornerstone or Any Three White Inputs in a Strategic Performance Area," when Exelon staff notify us of their readiness for this inspection. The objectives of this 95002 inspection are to provide assurance that root and contributing causes of risk-significant performance issues are understood, to independently assess and provide assurance that the extent of condition and the extent of cause are identified, and to provide assurance that corrective actions are sufficient to address the root and contributing causes and prevent recurrence.

The enclosed inspection plan lists the inspections scheduled through June 30, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. In addition to baseline inspections, the NRC will perform Inspection Procedure 60855.1, "Operation of an Independent Spent Fuel Storage Installation at Operating Plants," and Temporary Instruction (TI) 2515-191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communications/Staffing/Multi-Unit Dose Assessment Plans." The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security-related inspections, which will be sent via separate, non-publicly available correspondence.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," which requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," which requires licensees to have a reliable means of remotely monitoring wide-range Spent Fuel Pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these orders. This audit includes an onsite component in order for the NRC to evaluate licensee plans for complying with the orders, as described in site-specific submittals, and to receive and review information relative to associated open items. This onsite activity will occur in the months prior to a declaration of compliance for the first unit at each site, and will aid staff in development of an ultimate Safety Evaluation for

the site. The date for the onsite component at your site has been scheduled for the week of May 2, 2016. A site-specific audit plan for the visit will be provided in advance to allow sufficient time for preparations.

From July 1, 2014, through June 30, 2015, the NRC issued two severity level (SL) IV traditional enforcement violations associated with impeding the regulatory process. The NRC plans to follow-up on these violations by conducting Inspection Procedure 92702, or standard baseline inspection procedures, as described in IMC 0305, Section 13.02.b.

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

Please contact Silas Kennedy at (610) 337-5046 with any questions you have regarding this letter.

Sincerely,

/RA/

Michael L. Scott, Director
Division of Reactor Projects

Docket Nos. 50-219
License Nos. DPR-16

Enclosure: Oyster Creek Nuclear Generating Station Inspection/Activity Plan

cc w/encl: Distribution via ListServ

the site. The date for the onsite component at your site has been scheduled for the week of May 2, 2016. A site-specific audit plan for the visit will be provided in advance to allow sufficient time for preparations.

From July 1, 2014, through June 30, 2015, the NRC issued two severity level (SL) IV traditional enforcement violations associated with impeding the regulatory process. The NRC plans to follow-up on these violations by conducting Inspection Procedure 92702, or standard baseline inspection procedures, as described in IMC 0305, Section 13.02.b.

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

Please contact Silas Kennedy at (610) 337-5046 with any questions you have regarding this letter.

Sincerely,

/RA/
 Michael L. Scott, Director
 Division of Reactor Projects

Docket Nos. 50-219
 License Nos. DPR-16

Enclosure: Oyster Creek Nuclear Generating Station Inspection/Activity Plan

cc w/encl: Distribution via ListServ

Distribution w/encl:

- | | | |
|-------------------|---------------------------|-----------------------|
| D. Dorman, RA | A. Ziedonis, DRP | DRS Branch Chiefs (6) |
| D. Lew, DRA | S. Elkhiamy, DRP | N. McNamara, RI, SLO |
| M. Scott, DRP | Amar Patel, DRP, SRI | D. Tifft, RI, SLO |
| J. Colaccino, DRP | E. Andrews, DRP, RI | D. Screnci, RI, PAO |
| R. Lorson, DRS | J. DeVries, DRP, AA | N. Sheehan, RI, PAO |
| G. Suber, DRS | K. MorganButler, RI, OEDO | RidsNrrDirslpab Res |
| S. Kennedy, DRP | RidsNrrPMOysterCreek Res | ROPassessment Res |
| C. Bickett, DRP | RidsNrrDorlLp1-2 Res | |
| | ROPreports Resource | |

DOC NAME: S:\ROP ASSESSMENT MEETINGS\ROP-16 MID-CYCLE REVIEW\BRANCH 6\OYSTER CREEK\OC ROP-16 MC LETTER.DOCX

ADAMS Accession No.: **ML15229A114**

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive		<input checked="" type="checkbox"/> Publicly Available	
		<input type="checkbox"/> Sensitive		<input type="checkbox"/> Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP	RI/DRP	RI/DRP	
NAME	APatel/AVZ for via email	AZiedonis/ AVZ	SKennedy/ SRK	MScott/ MLS	
DATE	08/26 /15	08/25 /15	08/ 25 /15	08/ 26 /15	

OFFICIAL RECORD COPY

Oyster Creek
Inspection / Activity Plan
07/01/2015 - 06/30/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			71124 - REMP		1
1	08/03/2015	08/06/2015	IP 71124.07	Radiological Environmental Monitoring Program	
			EXM2/1 - INITIAL OL EXAMINATION		5
1	01/04/2016	01/08/2016	U01929	FY16-OC INITIAL OPERATOR LICENSING EXAM	
1	02/01/2016	02/12/2016	U01929	FY16-OC INITIAL OPERATOR LICENSING EXAM	
			EP - EP EXERCISE		5
1	09/28/2015	10/02/2015	IP 7111407	Exercise Evaluation - Hostile Action (HA) Event	
1	09/28/2015	10/02/2015	IP 7111408	Exercise Evaluation – Scenario Review	
			71151 - RP CHEM PI VERIFY AND HP INSPECTIONS		1
1	11/02/2015	11/05/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	11/02/2015	11/05/2015	IP 71124.02	Occupational ALARA Planning and Controls	
1	11/02/2015	11/05/2015	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	11/02/2015	11/05/2015	IP 71124.04	Occupational Dose Assessment	
1	11/02/2015	11/05/2015	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	11/02/2015	11/05/2015	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	
			71124.08 - RADWASTE		1
1	02/08/2016	02/12/2016	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			7111121 - CDBI		6
1	03/07/2016	03/11/2016	IP 7111121	Component Design Bases Inspection	
1	03/21/2016	03/25/2016	IP 7111121	Component Design Bases Inspection	
1	04/04/2016	04/08/2016	IP 7111121	Component Design Bases Inspection	
			71124 - 05 RAD MONITORING INSTRUMENTATION		1
1	04/18/2016	04/22/2016	IP 71124.05	Radiation Monitoring Instrumentation	
			ISFSI - ISFSI LOADING CAMPAIGN INSPECTION		1
1	04/18/2016	04/22/2016	IP 60855	Operation Of An ISFSI	
1	04/18/2016	04/22/2016	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			71124 - 01 EXPOSURE CONTROL		1
1	09/05/2016	09/08/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			71124 - 02 ALARA		1
1	09/05/2016	09/08/2016	IP 71124.02	Occupational ALARA Planning and Controls	
			7111108G - INSERVICE INSPECTION		1
1	09/26/2016	09/30/2016	IP 7111108G	Inservice Inspection Activities - BWR	

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.

Oyster Creek
 Inspection / Activity Plan
 07/01/2015 - 06/30/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			EP - EP PROGRAM INSPECTION		1
1	09/26/2016	09/30/2016	IP 7111402	Alert and Notification System Testing	
1	09/26/2016	09/30/2016	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	09/26/2016	09/30/2016	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
			71124 - 01EXPOCONTROL02 ALARA 03 AIRBORNE04 DOSE		1
1	09/26/2016	09/30/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	09/26/2016	09/30/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1	09/26/2016	09/30/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	09/26/2016	09/30/2016	IP 71124.04	Occupational Dose Assessment	
			71152BI - PI&R BIENNIAL		4
1	10/31/2016	11/04/2016	IP 71152B	Problem Identification and Resolution	
1	11/14/2016	11/18/2016	IP 71152B	Problem Identification and Resolution	
			71124 - 71151 PI VERIFY 71124.01 .02 .03 .04 .05		1
1	11/07/2016	11/11/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	11/07/2016	11/11/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1	11/07/2016	11/11/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	11/07/2016	11/11/2016	IP 71124.04	Occupational Dose Assessment	
1	11/07/2016	11/11/2016	IP 71124.05	Radiation Monitoring Instrumentation	
1	11/07/2016	11/11/2016	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	11/07/2016	11/11/2016	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	
			71124 - 71124.01 RAD EXPOSURE CONTROL		1
1	03/06/2017	03/09/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			7111105T - TRIENNIAL FIRE PROTECTION		5
1	03/20/2017	03/24/2017	IP 7111105T	Fire Protection [Triennial]	
1	04/03/2017	04/07/2017	IP 7111105T	Fire Protection [Triennial]	
			7111111B - OYSTER CREEK REQUAL INSP W/ P/F RESULTS		2
1	06/05/2017	06/09/2017	IP 7111111B	Licensed Operator Requalification Program	
			TI-191 - FUKUSHIMA LESSONS-LEARNED		1
1	05/15/2017	05/19/2017	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			71124 - RAD ENV TEAM INSPECT 71124.05 06 07		3
1	06/19/2017	06/23/2017	IP 71124.05	Radiation Monitoring Instrumentation	
1	06/19/2017	06/23/2017	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1	06/19/2017	06/23/2017	IP 71124.07	Radiological Environmental Monitoring Program	

This report does not include INPO and OUTAGE activities.
 This report shows only on-site and announced inspection procedures.