UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

February 19, 2019

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

SUBJECT: NRC INSPECTION REPORT NO. 05000219/2018012, OYSTER CREEK NUCLEAR GENERATING STATION

Dear Mr. Hanson:

On December 31, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed its quarterly inspection under Inspection Manual Chapter 2561, "Decommissioning Power Reactor Inspection Program," at the permanently shut down Oyster Creek Nuclear Generating Station (Oyster Creek). On-site inspections were performed from October through December. In-office reviews of information supplied by Exelon Generation Co., LLC were also performed during the inspection period. The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and the conditions of your license. The inspection consisted of observations by the inspectors, interviews with personnel, and a review of procedures and records. The results of this inspection were discussed with Mr. Jeff Dostal, Plant Manager, and other members of your staff on January 28, 2019, and are described in the enclosed report. No findings of safety significance were identified.

In accordance with 10 Code of Federal Regulations (CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure, and your response (if any) will be made available electronically for public inspection in the NRC Public Document Room or from the NRC document system (ADAMS), accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Current NRC regulations and guidance are included on the NRC's website at www.nrc.gov; select **Radioactive Waste; Decommissioning of Nuclear Facilities**; then **Regulations**, **Guidance and Communications**. The current Enforcement Policy is included on the NRC's website at www.nrc.gov; select **About NRC, Organizations & Functions; Office of Enforcement; Enforcement documents**; then **Enforcement Policy** (Under 'Related Information'). You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 p.m. EST, Monday through Friday (except Federal holidays).

No reply to this letter is required. Please contact Briana DeBoer at 610-337-5370 if you have any questions regarding this matter.

Sincerely,

/RA/

Raymond J. Powell, Chief
Decommissioning, ISFSI, and Reactor Health
Physics Branch
Division of Nuclear Materials Safety

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

Enclosure: Inspection Report 05000219/2018012
w/Attachment

cc w/encl: Distribution via ListServ

NRC INSPECTION REPORT NO. 05000219/2018012, OYSTER CREEK NUCLEAR GENERATING STATION DATED February 19, 2019

DOCUMENT NAME: G:\DIRHP\Decom Reactor Sites\Oyster Creek\Inspection Reports\OC_4Q2018_IR.docx

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SUNSI Review Complete: BDeBoer 2/05/19

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OFFICE	DNMS/RI		DNMS/RI		DNMS/RI			
NAME	EAndrews/ea		BDeBoer/bd		RPowell/rjp			
DATE	2/7/19		2/7/19		2/19/19			

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No:	050-00219
License No:	DPR-16
Report No:	05000219/2018012
Licensee:	Exelon Nuclear
Facility:	Oyster Creek Nuclear Generating Station
Location:	Forked River, New Jersey
Dates:	October 1, 2018 - December 31, 2018
Inspectors:	E. Andrews, Acting Senior Resident Inspector H. Anagnostopoulos, Senior Health Physicist B. DeBoer, Health Physicist S. Hammann, Senior Health Physicist O. Masnyk Bailey, Health Physicist J. Nicholson, Senior Health Physicist K. Warner, Health Physicist S. Wilson, Health Physicist
Approved by:	Raymond Powell, Chief Decommissioning, ISFSI, and Reactor Health Physics Branch Division of Nuclear Materials Safety, Region I

Enclosure

EXECUTIVE SUMMARY

Exelon Generation Co., LLC
Oyster Creek Nuclear Generating Station
NRC Inspection Report No. 05000219/2018012

An announced quarterly inspection was completed at Oyster Creek Nuclear Generating Station (Oyster Creek) on December 31, 2018. On-site inspections and in-office reviews of information supplied by Exelon were performed during the inspection period from October 1 to December 31. The inspection included a review of organization and management at the site; safety reviews, design changes and modifications; self-assessments, audits and corrective actions; decommissioning performance and surveillance; maintenance and surveillance; spent fuel pool safety; occupational radiation exposure; and effluent and environmental monitoring.

The inspection consisted of observations by the inspectors, interviews with Exelon personnel, a review of procedures and records, and plant walk-downs. The U.S. Nuclear Regulatory Commission’s (NRC's) program for overseeing the safe operation of a shut-down nuclear power reactor is described in Inspection Manual Chapter (IMC) 2561, “Decommissioning Power Reactor Inspection Program."

Based on the results of this inspection, no findings of safety significance were identified.

REPORT DETAILS

1.0 Background

On September 25, 2018, Oyster Creek certified the permanent removal of fuel from the reactor vessel (Agencywide Documents and Access Management System (ADAMS) Accession No. ML18268A258). This met the requirements of 10 Code of Federal Regulations (CFR) 50.82(a)(1)(i) and 50.82(a)(1)(ii). On October 1, 2018, the NRC notified Oyster Creek that the Operating Reactor Assessment Program had ceased and that implementation of the Decommissioning Power Reactor Inspection Program would begin on October 1, 2018 (ADAMS Accession No. ML18274A221). Oyster Creek is currently in the "Post Operation Transition Phase" of decommissioning as described in IMC 2561.

2.0 Post Operation Transition Phase Performance and Status Review

2.1 Organization, Management, and Cost Controls at Permanently Shutdown Reactors (IP 36801)

a. Inspection Scope

The inspectors conducted document reviews and interviews with plant personnel to assess the licensee's performance as it related to the following areas:

- Procedures and processes the licensee established to resolve employee and safety concerns, and to assess the licensee's effectiveness at resolving identified problems;
- Implementation of Corrective Action Program (CAP) procedures;
- Implementation of a personnel reduction strategy that did not adversely challenge public health and safety;
- Implementation of regulatory requirements with respect to the site organization, staffing and staff qualifications;
- Implementation of certified fuel handler and employee training programs in accordance with licensee procedures and NRC requirements;
- Implementation of Technical Specifications, Technical Requirements Manual, Post Shutdown Decommissioning Activities Report (PSDAR) and Fire Protection Plan requirements and commitments;
- Implementation of regulatory requirements that remained applicable as described in NRC Bulletins, Generic Letters and Orders; and
- Decommissioning activities were initiated, sequenced and performed in a manner consistent with the PSDAR.

b. Observations and Findings

The inspectors determined through direct observation, reviews of newly established programs and procedures, sampling of training programs, and interviews with Exelon personnel that the appropriate regulatory requirements and commitments were followed. In addition, the inspectors verified that when issues were identified that licensee personnel appropriately documented the issue in the corrective action program.

No findings of significance were identified.

c. Conclusions

Exelon adequately implemented organization and management controls in accordance with regulatory requirements, license conditions and the Technical Specifications.

2.2 Safety Reviews, Design Changes, and Modifications at Permanently Shutdown Reactors (IP 37801)

a. Inspection Scope

The inspectors conducted document reviews and interviews with plant personnel to assess the licensee's performance as it related to the following areas:

- Determination that licensee procedures and processes conform to the regulations and guidance associated with 10 CFR 50.59;
- Evaluation of the licensee's onsite safety review committee to ensure the committee was appropriately staffed and trained to fulfill the charter;
- Implementation of a sampling of design change modifications to verify that procedures and controls were followed and confirm that the applicable changes were effectively implemented in the field and in plant procedures, drawings and training programs;
- Verification that changes made under 10 CFR 50.59 did not require prior NRC approval; and
- Verification that changes to preventive maintenance, corrective maintenance and operational procedures for required equipment were implemented in accordance with licensee processes and procedures.

b. Observations and Findings

The inspectors reviewed the change to the spent fuel pool level and temperature indications, procedural changes to Emergency Operating Procedures and Severe Accident Management Guidelines to account for site decommissioning, changes to the 230kV system, and removal of the control rod drive mechanisms. The inspectors determined that procedure requirements were met and that the changes did not require prior NRC approval.

No findings of significance were identified.

c. Conclusions

Exelon adequately implemented safety reviews, design changes and modifications in accordance with applicable regulatory requirements, license conditions and the Technical Specifications.

2.3 Self-Assessment, Auditing, and Corrective Actions at Permanently Shutdown Reactors (IP 40801)

a. Inspection Scope

The inspectors conducted document reviews and interviews with plant personnel to assess the licensee's performance as it related to the following areas:

- Administrative procedures prescribed actions for the identification, evaluation and resolution of problems;
- Identification and correction of issues or problems in accordance with the CAP through a sampling of select issues;
- Audits of changes in the status of decommissioning and licensee organization by quality assurance personnel; and
- Observations of maintenance and surveillance activities, operations evolutions and training by licensee management.

The inspectors reviewed CAP documents on a daily basis to determine: if a sufficiently low threshold for problem identification existed; if follow-up evaluations were of sufficient quality, including extent of condition; if the licensee assigned timely and appropriate prioritization for issue resolution commensurate with the significance of the issue. Issues that were repetitive and those with the potential for safety or regulatory consequence were evaluated further to assess apparent and/or common cause and significance. The inspectors also observed a sample of condition report review group meetings to verify they implemented the CAP appropriately.

b. Observations and Findings

The inspectors determined that issues were identified by Exelon at an appropriate threshold within various functional areas of the site and entered into the CAP. Issues were effectively screened, prioritized and evaluated commensurate with safety significance. The scope and depth of evaluations were adequate in that the evaluations reviewed addressed the significance of issues and assigned an appropriate course of remedial action.

The inspectors noted that Exelon management attended pre-job briefs and surveillances at an appropriate frequency and retained their oversight role.

No findings of significance were identified.

c. Conclusions

Issues were identified by Exelon at appropriate thresholds and entered into the CAP. Issues were screened and prioritized commensurate with their safety significance. Exelon's evaluations determined the significance of issues and included appropriate corrective actions.

2.4 Spent Fuel Pool Safety at Permanently Shutdown Reactors (IP 60801)

a. Inspection Scope

The inspectors verified the safe wet storage of spent fuel in the spent fuel pool (SFP). The review included: SFP siphon and drain down protection; SFP instrumentation, alarms, and leak detection systems; SFP chemistry and cleanliness controls; and SFP system operation and electrical power supply adequacy.

b. Observations and Findings

Inspectors reviewed service water system, spent fuel pool cooling systems, and spent fuel pool design drawings and performed a walk down of the spent fuel pool, and accessible fuel pool cooling system piping, to verify no conditions existed that represented a siphon or drain path.

The inspectors reviewed the spent fuel pool weekly chemistry sampling results from December 2017 to December 2018 in order to verify spent fuel pool chemistry parameters were within the limits of Oyster Creek's renewed license commitments.

The inspectors reviewed data from the last fuel pool cooling pumps and augmented fuel pool cooling pump surveillances and verified that the pumps were operating within the expected parameters.

No findings of significance were identified.

c. Conclusions

Exelon adequately maintained the SFP within technical specification and procedural requirements for water level, chemistry, and temperature.

2.5 Maintenance and Surveillance at Permanently Shutdown Reactors (IP 62801)

a. Inspection Scope

The inspectors conducted plant tours, interviews, and directly observed maintenance and surveillance throughout the inspection period to evaluate the effectiveness of the licensee in maintaining structures, systems, and components important to the safe storage of spent fuel and proper operation of radiation monitoring and effluent control equipment.

During walkdowns, the inspectors evaluated material condition and housekeeping, assessed area radiological conditions, radiological access control and associated posting/labeling, and reviewed the overall condition of systems, structures and components that support decommissioning.

The inspectors also reviewed the maintenance history, work prioritization, and surveillance activities for the major components at the station required to be available and/or operable following the permanent cessation of power operation, which included: emergency diesel generators, emergency service water pumps, service water pumps, control room ventilation, and the fire protection system. These activities included review of

revised preventive maintenance schedules, routine walkdowns of the equipment, and observations/review of surveillance activities.

The inspectors reviewed the changes to maintenance rule scoping documents for the systems that remained in the scope of the maintenance rule following the plant shutdown.

b. Observations and Findings

The inspectors noted that throughout the inspection period housekeeping in the reactor building remained satisfactory and changing radiological conditions were addressed in a prompt and timely manner by licensee staff.

The inspectors noted that in general Exelon appropriately prioritized corrective maintenance on the remaining systems required for permanent cessation of operations. The inspectors verified that when equipment issues occurred, Exelon staff implemented the appropriate troubleshooting procedures to identify and correct the equipment deficiency identified.

The inspectors verified that all systems that supported spent fuel safety continued to be scoped in to the maintenance rule and that the performance criteria were acceptable.

No findings of significance were identified.

c. Conclusions

Plant material condition and housekeeping were adequate and had not adversely impacted safe decommissioning. Workers followed work plans, surveillance procedures and industrial safety protocols and were aware of job controls specified in work instructions.

2.6 Decommissioning Performance and Status Reviews at Permanently Shutdown Plants (IP 71801)

a. Inspection Scope

The inspectors conducted document reviews, observations and interviews with plant personnel to assess the licensee's performance as it related to the following areas:

- Observations of licensee meetings that planned, reviewed, assessed and scheduled the conduct of facility decommissioning;
- Verified licensee activities were in accordance with license conditions and docketed commitments, as well as within the bounds of the docketed post shutdown decommissioning activity report;
- Assessed operability and functionality of systems necessary for safe decommissioning through control room and plant walkdowns including the following systems: radioactive effluent monitoring, spent fuel pool cooling, level and temperature control, radiation protection monitors and alarms, equipment important to emergency preparedness and equipment that provided normal and standby electrical power;

- Operator logs and data taken for normal facility operations, surveillances, maintenance and verification that data out of specification was appropriately dispositioned and resolved;
- Assessed ongoing in-plant work activities to ensure work activities were evaluated for risk in accordance with 10 CFR 50.65(a)(4), operational work risk assessments were performed and operations shift turnovers appropriately communicated pertinent plant status;
- Verified appropriate plant staffing was maintained and that appropriate management oversight of licensee and supplemental activities were performed;
- Verified pre-job briefs were conducted for facility operations including maintenance, surveillance, operations and decommissioning activities;
- Performed plant tours to assess field conditions and decommissioning abandonment activities;
- Observed in progress field work to verify activities were conducted in accordance with approved work instructions and workers were knowledgeable of tasks;
- Verified plant material condition of structures, systems and components was maintained at a high level to ensure safe storage of spent fuel;
- Verified the storage of combustibles and flammables were in accordance with plant procedures and the fire plan for the subject location;
- Verified firefighting equipment and stations were properly maintained, inventoried and readied for use; and
- Verified that the installed fire detection and suppression systems were effectively maintained, surveillances performed and were capable of performing their intended function.

b. Observations and Findings

During the inspection period the inspectors observed portions of the 230kV line removal, control rod drive mechanisms removal, and spent fuel pool level and temperature indication changes. The inspectors determined through the plant tours and activities observed that Exelon conducted activities in accordance with the regulatory requirements and plant procedures.

No findings of significance were identified.

c. Conclusions

The inspectors determined that the licensee conducted decommissioning activities in accordance with the regulations and license requirements.

2.7 Occupational Radiation Exposure (IP 83750)

a. Inspection Scope

The inspectors performed an on-site inspection on November 5-8, 2018. In-office reviews of information supplied by Exelon were also performed during the inspection period. The inspection consisted of observations by the inspectors, interviews with Exelon personnel, a review of procedures and records, and site walk-downs.

The inspectors reviewed the occupational radiation exposure program to verify it meets regulatory requirements. The inspectors observed radiation protection (RP) technician job

coverage of maintenance activities, toured the radiologically controlled areas, and interviewed radiation workers, RP management and technicians. The inspectors reviewed dose records for 2018, radiation surveys, as low as reasonably achievable (ALARA) plans, radiation work permits, instrument calibrations, the site radiological groundwater protection program, and radiation protection related procedures that had been revised since the previous inspection in May of 2018. The inspectors also reviewed training and qualifications of RP staff and individuals required to wear respiratory protection in emergency situations.

b. Observations and Findings

The inspectors determined that survey records were clear, complete and timely, and RP technicians used appropriate instruments for the surveys. The inspectors observed that the majority of routine surveys, instrument calibrations and daily source checks of instruments were performed on back shift. The inspectors verified technician training and qualifications were complete and up-to-date. The inspectors verified that ALARA plans were performed as needed and were effective in limiting worker exposure. The inspectors determined that the to-date occupational dose for 2018 was acceptable for the scope of the radiological activities that had been performed. The inspectors reviewed radiological groundwater protection program documents and sample results as part of this inspection and found no technical issues and determined the samples had been taken in accordance with Exelon procedures and industry standards. The inspectors noted that RP staffing was reduced but appeared to be adequate.

No findings of significance were identified.

c. Conclusions

Exelon adequately implemented the occupational radiation exposure program in accordance with the regulatory requirements.

2.8 Radioactive Waste Treatment, and Effluent and Environmental Monitoring (IP 84750)

a. Inspection Scope

The inspectors performed an on-site inspection on December 17-20, 2018. The inspection consisted of observations by the inspectors, interviews with Exelon personnel, a review of reports and records, and site walk-downs.

The inspectors reviewed activities and documentation associated with radioactive effluent control and site radiological environmental monitoring program (REMP) to determine the effectiveness of site radiological programs. The inspectors reviewed radioactive gaseous and liquid effluent release permits, the annual REMP report, and the annual effluent report. The inspectors toured the meteorological tower and selected environmental monitoring and sample stations to determine if they are adequately maintained. The inspectors toured radwaste facilities to determine if gaseous, liquid, and solid radwaste are adequately stored in the engineered storage tanks or areas, as appropriate.

b. Observations and Findings

The inspectors verified that effluent releases to the environment were being properly controlled, monitored, and quantified as required by NRC regulations. The inspectors verified that the annual radiological effluent and the annual REMP reports demonstrated that calculated doses were below regulatory dose criteria of 10 CFR 50, Appendix I. The inspectors determined that the meteorological tower and selected environmental monitoring stations were adequately maintained.

The inspectors' routine review of condition reports revealed a large number of issues dealing with radwaste facilities, processing systems, and equipment. Further inspection revealed a large number of open work orders in these areas as well. The inspectors toured radwaste facilities, including the new radwaste (NRW) building and low level radwaste (LLRW) building. The inspectors found degraded conditions, including poor material conditions, lighting, heating, and housekeeping and storage in both facilities.

As part of the tour the inspectors used installed cameras to observe various rooms where used resin, filter media, and/or water were not contained within handling or processing systems (as designed) including the filter sludge tank room, the SL-T-3A/3B cubicles, and the fill aisle in NRW. The inspectors noted that the licensee planned for a significant amount of throughput, at a steady pace, for these facilities during the transition to Safe Storage of Spent Fuel (SAFSTOR).

At the debrief, the inspectors expressed their concern with the condition of the radwaste buildings, particularly areas where used resin, filter media, and/or water was not adequately contained. The inspectors requested a follow-up call to discuss the licensee's plans for radwaste processing and the ability to get to a SAFSTOR condition while maintaining robust barriers to environmental releases. During that call, the licensee described recovery plans for both LLRW and NRW facilities and systems. These recovery plans and associated actions will be items of follow up inspection in 2019.

No findings of significance were identified.

c. Conclusions

While there were no findings of significance identified during this inspection, the degraded material conditions of the radwaste systems and facilities warrant follow up during future inspections as described above.

3.0 Exit Meeting

On January 28, 2019, the inspectors presented the inspection results to Mr. Jeff Dostal, Plant Manager, and other members of the Exelon staff who acknowledged the inspection results. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Oyster Creek Personnel

J. Buchta, Radiation Protection Technician
M. Caldeira, Engineer 3
R. Csillag, Site DC Engineering Lead
J. Dostal, Site Decommissioning Director
J. Frank, Site DC Regulatory Assurance Lead
S. Johnston, Site DC Operations Lead
A. Krukowski, Site DO Operations Lead
K. Leonard, Principal Project Manager
J. McCarthy, Radiation Protection Decommissioning Specialist
J. Murphy, Technical Specialist
M. Naughton, Technical Specialist
E. O'Brien, Environmental Specialist
J. Raby, Radiation Protection Supervisor
W. Saraceno, Engineering Manager
R. Sweeney, Equipment Operator
H. Tritt, Site DC Engineering Lead
K. Wolf, Site DC Manager Radiation Protection and Chemistry
K. Zadroga, Radiation Protection Supervisor

ITEMS OPENED, CLOSED, AND DISCUSSED

None

Attachment

LIST OF DOCUMENTS REVIEWED

2.1 Organization, Management, and Cost Controls at Permanently Shutdown Reactors (IP 36801)

Procedures
PI-DC-125, Decommissioning Corrective Action Program Procedure, Revision 1
PI-DC-120, Decommissioning Issue Identification and Screening Procedure, Revision 1
TQ-DC-150, Certified Fuel Handler Training Program, Revision 0
TQ-DC-151, Non-Certified Operator Training Program, Revision 0

2.2 Safety Reviews, Design Changes, and Modifications at Permanently Shutdown Reactors (IP 37801)

Procedures
205.5, Rod Withdrawal/Insertion During Refueling, Revision 45
CC-DC-209, Fire Protection Program Configuration
CC-OC-118, Oyster Creek Implementation of Diverse and Flexible Coping Strategies (FLEX) and Spent Fuel Pool Instrumentation Program, Revision 3
DC-AA-300-1005, Decommissioning Transition – Scoping and Screening Procedure, Revision 3
DC-AA-410, Decommissioning Configuration Change Control for Physical Plant Changes, Revision 1
DC-AA-410-F-01, Decommissioning Equivalent Change Package, Revision 1
DC-AA_420, Abandoned Equipment During Decommissioning, Revision 0
DC-OC-716-010, Decommissioning Maintenance Planning Process, Revision 0
EP-011, Methodology for Assigning and Maintaining the Quality Classification of Components, Revision 16
LS-DC-106, Safety Review Committee, Revision 0

Condition Reports
4184625 4181692

Drawings
DJP 3C-251-42-001, Primary Wide Range Spent Fuel Pool Level Instrumentation Loop Diagram, Sheet 2, Revision 0
DJP 3C-251-42-002, Secondary Wide Range Spent Fuel Pool Level Instrumentation Loop Diagram, Sheet 2, Revision 0

Work Orders
4834020

Miscellaneous
DC-AA-420-2018-001, Main Transformers – 230KV Transmission Line Removal
EC 624625, Fuel Pool Level and Temperature, Revision 0
ECR 10-00467, ECR TCCP to Install Fuel Pool Temperature Indicating Gauge, Revision1
ECR 14-00389, Reliable Spent Fuel Pool Level Instrumentation (Fukushima), Revision 3
Safety Review Committee Meeting Minutes, dated October 12, 2018

2.3 Self-Assessment, Auditing, and Corrective Actions at Permanently Shutdown Reactors (IP 40801)

Procedures
NO-DC-10, Decommissioning Quality Assurance Program, Revision 0
PI-DC-125, Decommissioning Corrective Action Program Procedure, Revision 1
PI-DC-120, Decommissioning Issue Identification and Screening Procedure, Revision 1

Miscellaneous
4130395, Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation Self-Assessment, dated August 17, 2018
NOSA-OYS-18-08, Fitness-for-Duty, Access Authorization, and Corporate Security Audit Report, dated August 22, 2018

2.4 Spent Fuel Pool Safety at Permanently Shutdown Reactors (IP 60801)

Procedures
311, Fuel Pool Cooling System, Revision 125
311.1, TBCCW Cooling to Spent Fuel Pool, Revision 20
311.2, AMFM-B500 Filtration System, Revision 1
ABN-16, Loss of Fuel Pool Cooling, Revision 7
ABN-18, Service Water Failure Response, Revision 7
ABN-19, Reactor Building Closed Cooling Water Failure Response, Revision 10
CY-OC-120-500, Fuel Pool System Sample Collection, Revision 10
OP-AA-390, Spent Fuel Pool Material Control, Revision 2
SP-11-002, Fuel Pool Heat-Up Rate Determination, Revision 0

Drawings
GE 237E756, Spent Fuel Pool Cooling Flow Diagram, Sheet 1, Revision 60

Miscellaneous
WO 04388309, Fuel Pool Cooling Pump 'A' Operability Test, dated April 1, 2017
WO 04388362, Augmented Fuel Pool Cooling Pump-D Comprehensive, dated August 9, 2018
WO 04637114, Fuel Pool Cooling Pump 'B' Operability Test, dated September 28, 2017

2.5 Maintenance and Surveillance at Permanently Shutdown Reactors (IP 62801)

Procedures
101.2, Oyster Creek Site Fire Protection Program, Revision 73
205.95.0, Reactor Flood-up/Drain-down, Revision 28
341, Emergency Diesel Operation, Revision 117
654.4.003, Control Room HVAC System Operability Test, Revision 16
ABN-16, Loss of Fuel Pool Cooling, Revision 7
ABN-18, Service Water Failure Response, Revision 7
ABN-19, RBCCW Failure Response, Revision 10
DC-OC-104-1001, Integrated Risk Management T&RM for Oyster Creek, Revision 0
ER-AA-310, Implementation of the Maintenance Rule, Revision 11
ER-AA-310-1001, Maintenance Rule Scoping, Revision 4
ER-AA-310-1002, Maintenance Rule Functions – Safety Significant Classifications, Revision 3
OP-DC-104, Integrated Risk Management, Revision 0
WC-DC-100, Decommissioning Work Control Process, Revision 0

Condition Reports

3974232	3977372	3977733	3980694	4004318	4033456
4036121	4040399	4047409	4136430	4159422	4171010
4176666	4179110	4191010	4193941		

Work Orders

4352750	4384229	4692895	4783808	4831158	4850102

Miscellaneous
Maintenance Rule Expert Panel Meeting Packages, dated October 2 and October 17, 2018

2.6 Decommissioning Performance and Status Reviews at Permanently Shutdown Plants (IP 71801)

Procedures
CY-AB-120-300, Spent Fuel Pool, Revision 18

Condition Reports
04199506 04199725 04199886

Miscellaneous
ALARA Plan 18-513, Control Rod Drive (CRD) Recovery Actions & NI removal
ALARA Work-in-Progress Review 1, 2, and 3, for ALARA Plan 18-513
ALARA Waiver for ALARA Plan 18-513, Storage of IRM and SRFM detectors
Oyster Creek Decommissioning Status Meeting Presentation, dated December 13, 2018
Radiation Protection & Chemistry Daily Update, dated December 3, 2018
RHD-2018-21761-855, Rx 119 ESP-Steam Separator, dated November, 26, 2018
RHD-2018-21762-855, Rx 119 ESP-Steam Dryer, dated November, 26, 2018
RWP OC-1-18-00513, Drywell Control Rod Drive Removal and Support Work, Revision 0
WO 0485741, Reactor Building 105 Ton/10 Ton Crane – Monthly, dated December 11, 2018

2.7 Occupational Radiation Exposure (IP 83750)

Procedures
RP-AB-461-F-07, Revision 2, Access Controls During Irradiated Component Movement At Oyster Creek
RP-AA-460, Revision 34, Controls for High and Locked High Radiation Areas
RP-AA-460-002, Revision 5, Additional High Radiation Exposure Control
RP-AA-500-1001, Revision 8, Control of RAM Storage Areas and Containers Stored Outside
RP-AA-700, Revision 6, Controls for Radiation Protection Instrumentation
RP-AA-441, Revision 10, TEDE ALARA Evaluation
RP-AA-401-1002, Revision 11, Radiological Risk Management
DC-AA-300, Revision 4, Decommissioning Transition Planning
DC-AA-300-1003, Revision 3, Decommissioning Transition – Site Planning

Condition Reports
4139577, 4148202, 4168888, 4176275, 4179858, 4181112, 4193335

Miscellaneous

August 10, 2018, Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation Self-Assessment

June 5, 2018, Oyster Creek Nuclear Generating Station Zirconium Fire Analysis for Drained Spent Fuel Pool, Analysis No. C-1302-226-E310-457

April 18, 2018, Exelon Generation Company, LLC, Environmental Report Post-Shutdown Decommissioning Activities Report, Oyster Creek Generating Station

October 2013 Final Report, Groundwater Protection Initiative Self-Assessment Exelon Oyster Creek Generating Station

2.8 Radioactive Waste Treatment, and Effluent and Environmental Monitoring (IP 84750)

Condition Reports

3958325	3963368	4013813	4016598	4077991	4183747
3960823	4010378	4016598	4033304	4114780	4204813

Miscellaneous

2017 Annual Radioactive Effluent Release Report for Oyster Creek Generating Station

2017 Annual Radiological Environmental Operating Report for Oyster Creek Generating Station

CY-OC-130-501, Attachment 3, Effluents data for September 2018

Letter, “Oyster Creek Generating Station Proposed RGPP Modification”, AMO Environmental Decisions, 9/20/2018

List, action requests related to radioactive waste processing systems and facilities written in 2017 and 2018

List, open work requests related to radioactive waste processing systems and facilities

List, Oyster Creek 10CFR50.75(g) Report of Spills and Other Occurences

Oyster Creek Environmental Assessment FMEA Component Risk Evaluation, dated 12/14/2011

Position paper OC-18-005, “Radioactive Liquid Effluent Discharge Study”, dated 10/16/2018

Radiological survey no. N5C-2018-20442-23

Radiological survey no. N5C-2018-20835-23

Radiological survey no. N5D-2017-18986-1602

Radiological survey no. N5E-2017-18946-782

Radiological survey no. N5F-2017-18555-310

Radiological survey no. N5F-2018-20508-310

Radiological survey no. PUA-2018-21455-387

Radiological survey no. RET-2018-19568-301

Radiological survey no. UAB-2018-21367-916

Report, “Oyster Creek Nuclear Generating Station Gaseous Effluent Releases-Elevated, for the period of 1/1/2018 to 1/31/2018”

Report, Evaluation of Cesium-137 in Environmental Samples from Amergen Property East of the Oyster Creek Generating Station”, 1/24/2007

LIST OF ACRONYMS USED

ADAMS	Agencywide Document Access and Management System
ALARA	As Low As Reasonably Achievable
CAP	Corrective Action Program
CFR	Code of Federal Regulations
Exelon	Exelon Generation Co., LLC
GPO	Government Printing Office
IMC	Inspection Manual Chapter
LLRW	Low Level Radwaste
NRC	U.S. Nuclear Regulatory Commission
NRW	New Radwaste
Oyster Creek	Oyster Creek Nuclear Generating Station
PARS	Publicly Available Records System
PSDAR	Post Shutdown Decommissioning Activities Report
REMP	Radiological Environmental Monitoring Program
RP	Radiation Protection
SAFSTOR	Safe Storage of Spent Fuel
SFP	Spent Fuel Pool