



Order No. EA-12-051

RA-18-027

April 12, 2018

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Oyster Creek Nuclear Generating Station  
Renewed Facility Operating License No. DPR-16  
NRC Docket No. 50-219

Subject: Request for Rescission of Commission Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)

References:

1. NRC Order EA-12-051, Issuance of Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation, dated March 12, 2012
2. Letter from Exelon Generation Company, LLC, Report of Full Compliance with March 12, 2012 Commission Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order No. EA-12-051), dated December 1, 2016
3. NRC Letter to Exelon Generation Company, LLC, Oyster Creek Nuclear Generating Station – Safety Evaluation Regarding Implementation of Mitigating Strategies and Reliable Spent Fuel Pool Instrumentation Related to Orders EA-12-049 and EA-12-051, dated April 19, 2017
4. NRC Letter to Exelon Generation Company, LLC, Oyster Creek Nuclear Generating Station – Temporary Instruction 2515/191 Inspection Report 05000219/2017009, dated November 30, 2017
5. Letter from Exelon Generation Company, LLC, Certification of Permanent Cessation of Power Operations for Oyster Creek Nuclear Generating Station, dated February 14, 2018

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued Order EA-12-051 (Reference 1) to all power reactor licensees. The Order was effective immediately and directed Exelon Generation Company, LLC (EGC) to install reliable spent fuel pool level instrumentation at Oyster Creek Nuclear Generating Station (Oyster Creek). Specific requirements of the Order are contained in Attachment 2 of Reference 1.

In accordance with the Order implementation schedule specified in Reference 1, Oyster Creek achieved full compliance with the Order on October 9, 2016. In Reference 2, EGC provided the required report of full compliance with Order EA-12-051 and the associated Final Integrated Plan describing the spent fuel pool level instrumentation installed at Oyster Creek. In Reference 3, the NRC provided the results of their review of the spent fuel pool level

instrumentation installed at Oyster Creek and concluded that the design adequately addressed the requirements of Order EA-12-051.

In Reference 4, the NRC verified that Oyster Creek had adequately installed reliable water-level measurement instrumentation in the spent fuel pool, and determined that EGC was in compliance with NRC Order EA-12-051.

In Reference 5, EGC notified the NRC of EGC's revised plans to permanently shut down Oyster Creek and cease operation no later than October 31, 2018.

The purpose of this letter is to request rescission of the Order (Reference 1) upon docketing of the 10CFR50.82(a)(1) certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel. The enclosure to this letter provides the good cause justification for this request.

This letter contains no new regulatory commitments. If you have any questions regarding this request, then please contact David J. Distel at 610-765-5517.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 12<sup>th</sup> day of April 2018.

Respectfully submitted,



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James Barstow  
Director – Licensing & Regulatory Affairs  
Exelon Generation Company, LLC

Enclosure: Request for Rescission of Commission Order Modifying Licenses With Regard To  
Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)

cc: Director, Office of Nuclear Reactor Regulation  
NRC Regional Administrator – Region I  
NRC Senior Resident Inspector – Oyster Creek Nuclear Generating Station  
NRC Project Manager, NRR – Oyster Creek Nuclear Generating Station  
Mr. John P. Boska, NRR/JLD/JOMB, NRC  
Mr. Peter J. Bamford, NRR/JLD/JOMB, NRC  
Manager, Bureau of Nuclear Engineering – New Jersey Department of Environmental  
Protection  
Mayor of Lacey Township, Forked River, NJ

## ENCLOSURE

### Request for Rescission of Commission Order Modifying Licenses With Regard To Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)

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#### I. Proposed Order Rescission

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued Order EA-12-051, "Order to Modify Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation" (Reference 1) to Exelon Generation Company, LLC (EGC) for Oyster Creek Nuclear Generating Station (Oyster Creek). In accordance with the Order implementation schedule specified in Reference 1, Oyster Creek achieved full compliance with the Order on October 9, 2016. In Reference 2, EGC provided the required report of full compliance with Order EA-12-051 and the associated Final Integrated Plan describing the spent fuel pool level instrumentation installed at Oyster Creek. In Reference 3, the NRC provided the results of their review of the spent fuel pool level instrumentation installed at Oyster Creek and concluded that the design adequately addressed the requirements of Order EA-12-051. In Reference 4, the NRC verified that Oyster Creek had adequately installed reliable water-level measurement instrumentation in the spent fuel pool, and determined that EGC was in compliance with NRC Order EA-12-051.

In Reference 5, EGC notified the NRC of EGC's revised plans to permanently shut down Oyster Creek and cease operation no later than October 31, 2018.

In accordance with Section IV of the Order, EGC hereby submits a request that the Order EA-12-051 be rescinded for Oyster Creek Nuclear Generating Station (Oyster Creek) upon docketing of the 10CFR50.82(a)(1) certifications for permanent cessation of operation and permanent removal of fuel from the reactor vessel.

#### II. Basis for Rescission Request

Section IV of the Order provides the NRC's Director of the Office of Nuclear Reactor Regulation the authority to relax or rescind any or all of the conditions of the Order upon demonstration by the licensee of good cause.

By letter dated February 14, 2018 (Reference 5) EGC notified the NRC of EGC's revised plans to permanently shut down Oyster Creek and cease operation no later than October 31, 2018.

Section III of the Order states that the Commission determined that all power reactor licensees and construction permit holders must have a reliable means of remotely monitoring wide-range Spent Fuel Pool (SFP) levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. This statement forms the basis of the Order and reflects the need to effectively deploy limited resources to mitigate very low frequency events with the potential to challenge both the reactor and SFP. With reliable indication of the SFP coolant level, decision-makers can determine when to deploy resources to the SFP and avoid unnecessary deployment of staff to monitor pool level.

Upon docketing of the 10CFR50.82(a)(1) certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel, the 10CFR50 license will no longer

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authorize operation of the reactor or emplacement or retention of fuel into the reactor vessel. The safety of the irradiated fuel in the SFP will be the primary safety function for site personnel. In the event of a challenge to the safety of fuel stored in the SFP, decision-makers would not have to prioritize actions and the focus of the staff would be the SFP condition. Thus, the basis for the Order will no longer apply to the configuration of Oyster Creek.

#### III. Spent Fuel Pool Level Indication

Two physically separate and independent channels of SFP direct level indication are installed. SFP level can be monitored on indicators on panels in the Upper Cable Spreading Room. The level sensor's measurement range is between elevation 118'-6 7/8" and 96'-9". The top of the fuel assemblies stored in the fuel racks is elevation 96'-1 1/8". Therefore, the level indicators provide indication from the level at which reliable SFP Cooling System suction loss occurs (117'-10") to approximately 7'-7/8" above the top of the fuel assemblies stored in the fuel racks.

The spent fuel pool water level is monitored, and high and low level is alarmed. The SFP is provided with sufficient instrumentation to detect and alarm loss of heat removal capability. This instrumentation includes level sensors that annunciate fuel pool and skimmer tank high and low levels in the Control Room. Additionally, thermocouples monitor pool surface temperature and alarm in the Control Room when the temperature exceeds a selected value.

In addition to the instrumentation available for monitoring pool level, the level can also be observed locally from the refueling floor.

Therefore, there is adequate indication available to determine the level in the SFP.

#### IV. Conclusion

Upon docketing of the 10CFR50.82(a)(1) certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel, the 10CFR50 license will no longer authorize operation of the reactor or emplacement or retention of fuel into the reactor vessel. Since Oyster Creek is permanently shutting down and defueling, no additional fission products will be generated from the plant after shutdown and the decay heat load on the spent fuel will continue to decline.

After the station is permanently shut down and the reactor permanently defueled, the requirements of the Order are unnecessary. In the event of a challenge to the safety of fuel stored in the SFP, decision-makers would not have to prioritize event mitigation and recovery actions; the focus of the staff would be the SFP condition. Thus, the basis for the Order will no longer apply to the configuration of Oyster Creek. The evaluation that Oyster Creek has performed demonstrates good cause to support EGC's request that the Order be rescinded in its entirety upon docketing of the 10CFR50.82(a)(1) certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel.

Based on the above, the Director, Office of Nuclear Reactor Regulation is requested to rescind Order EA-12-051 for Oyster Creek Nuclear Generating Station upon docketing of the

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10CFR50.82(a)(1) certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel.

#### V. References

1. NRC Order EA-12-051, Issuance of Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation, dated March 12, 2012
2. Letter from Exelon Generation Company, LLC, Report of Full Compliance with March 12, 2012 Commission Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order No. EA-12-051), dated December 1, 2016
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