



August 8, 2019

NG-19-0091  
L-2019-141

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

Duane Arnold Energy Center  
Docket No. 50-331  
Renewed Facility Operating License No. DPR-49

NextEra Energy Duane Arnold, LLC's Request for Rescission of Commission Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation"

- References:
1. Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," dated March 12, 2012 (ML12056A044)
  2. NextEra Energy Duane Arnold, LLC, "Certification of Permanent Cessation of Power Operations," dated January 18, 2019 (ML19023A196)

On March 12, 2012, the Nuclear Regulatory Commission ("NRC" or "Commission") issued Order EA-12-051 (Reference 1) to NextEra Energy Duane Arnold, LLC (NEDA). A discussion of NEDA's implementation of the Order is included in the Enclosure.

By letter dated January 18, 2019 (Reference 2), NEDA provided formal notification to the NRC pursuant to 10 CFR 50.82(a)(1)(i) and 10 CFR 50.4(b)(8) of the intention to permanently cease power operations at the DAEC in the fourth quarter of 2020.

The purpose of this letter is to request rescission of Order EA-12-051 upon docketing of the Title 10 Code of Federal Regulations (CFR) 50.82(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 submittal, please contact Michael Davis, Licensing Manager at 319-851-7032.

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I declare under penalty of perjury that the foregoing is true and correct.  
Executed on August 8, 2019.



Dean Curtland  
Site Director, Duane Arnold Energy Center  
NextEra Energy Duane Arnold, LLC

Enclosure

cc: Director, Office of Nuclear Reactor Regulation  
USNRC Regional Administrator Region III  
USNRC Project Manager, Duane Arnold Energy Center  
USNRC Resident Inspector, Duane Arnold Energy Center

Enclosure to NG-19-0091

NextEra Energy Duane Arnold, LLC's Request for Rescission of Commission Order  
EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool  
Instrumentation"

3 pages follow

## **1 Request for Order Rescission**

NextEra Energy Duane Arnold, LLC (NEDA) hereby submits a request that U.S. Nuclear Regulatory Commission (NRC) Order EA-12-051, "Order Modifying Licensees with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation," be rescinded for the Duane Arnold Energy Center (DAEC) upon docketing of the Title 10 Code of Federal Regulations (CFR) 50.82(a)(1) certifications for permanent cessation of operation and permanent removal of fuel from the reactor vessel.

## **2 Background**

On March 12, 2012, the NRC issued Order EA-12-051, "Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation," (Reference 1) to NEDA for DAEC. By letter dated December 8, 2016 (Reference 2), NEDA notified the NRC, as required by Item IV.C.3 of Order EA-12-051, that full compliance with the requirements of the Order had been achieved for the DAEC. In Reference 3, the NRC verified that DAEC had adequately installed reliable water-level measurement instrumentation in the Spent Fuel Pool (SFP), and determined that DAEC was in compliance with the NRC Order EA-12-051.

By letter dated January 18, 2019 (Reference 4), NEDA provided formal notification to the NRC pursuant to 10 CFR 50.82(a)(1)(i) and 10 CFR 50.4(b)(8) of the intention to permanently cease power operations at the DAEC in the fourth quarter of 2020. Consequently, NEDA requests the requirements of NRC Order EA-12-051 be rescinded for DAEC upon docketing of the 10 CFR 50.82(a)(1) certifications for permanent cessation of operation and permanent removal of fuel from the reactor vessel.

Order EA-12-051, Section IV.C., states that "the Director, Office of Nuclear Reactor Regulation may, in writing, relax or rescind any of the above conditions upon demonstration by the Licensee of good cause."

## **3 Basis for Rescission Request**

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 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 the SFP. With reliable indication of the SFP coolant level, the plant staff can determine when to deploy resources to the SFP and avoid unnecessary deployment of personnel to monitor SFP level.

Upon docketing of the 10 CFR 50.82(a)(1) certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel, the 10 CFR Part 50 license will no longer 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. Thus, the basis for the Order no longer applies to DAEC.

Additionally, once the DAEC is permanently shut down and defueled, no additional fission products will be generated from the plant and the decay heat load in the spent fuel will continue to decline.

Indication for Spent Fuel Pool level is provided in the Control Room on Panel 1C-04 as well as locally on Panels 1C-65 and 1C-66. A Control Room annunciator on panel 1C-04, FUEL POOL HI/LO LEVEL, will actuate when level is low (37'1") (4" below normal 37'5") or level is high (37'8"). This alarm is utilized to satisfy Technical Specification L3.7.8 to maintain SFP water level greater than or equal to 36' in the pool. If a high or low level condition exists, an alarm light (red) will illuminate on local Panels 1C-65 & 1C-66. In addition to the instrumentation available for monitoring SFP level, the level can be observed locally from the refueling floor via clearly marked levels on the pool wall. Based on the above, there is adequate indication available to determine the level in the SFP.

The proposed request is similar to those approved by the NRC for the permanently shut down and defueled Kewaunee Power Stations (ML14066A204), San Onofre Nuclear Generating Station, Units 2 and 3 (ML14111A069), Vermont Yankee Nuclear Power Station (ML14321A696), Fort Calhoun Station Unit 1 (ML16320A287), Oyster Creek Nuclear Generating Station (ML18176A070), and Pilgrim Nuclear Power Station (ML19094A680).

#### **4 Conclusion**

Based on the above, NEDA has demonstrated good cause to support the request that the Order be rescinded in its entirety. Therefore, the Director, Office of Nuclear Reactor Regulation is requested to rescind Order EA-12-051 for DAEC upon docketing of the 10 CFR 50.82(a)(1) certifications for permanent cessations of operations and permanent removal of fuel from the reactor vessel.

#### **5 References**

1. NRC Order Number EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," dated March 12, 2012 (ML2056A044)
2. NextEra Energy Duane Arnold, LLC, "Final Compliance with EA-12-051 Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," dated December 8, 2016 (ML17130A796)

3. NRC letter, "Duane Arnold Energy Center – Safety Evaluation Regarding Implementation of Mitigating Strategies and Reliable Spent Fuel Pool Instrumentation Related to Orders EA-12-049 and EA-12-051," dated May 26, 2017 (ML17129A037)
4. NextEra Energy Duane Arnold, LLC, "Certification of Permanent Cessation of Power Operations," dated January 18, 2019 (ML19023A196)