



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 9, 2020

Mr. Don Moul
Executive Vice President, Nuclear
Division and Chief Nuclear Officer
NextEra Energy Duane Arnold, LLC
Mail Stop: EX/JB
700 Universe Blvd
Juno Beach, FL 33408

SUBJECT: DUANE ARNOLD ENERGY CENTER – WITHDRAWAL OF ORDER EA-13-109,
“ORDER MODIFYING LICENSES WITH REGARD TO RELIABLE HARDENED
CONTAINMENT VENTS CAPABLE OF OPERATION UNDER SEVERE
ACCIDENT CONDITIONS” (EPID NO. L-2019-JLD-0005)

Dear Mr. Moul:

This letter documents the withdrawal of Order EA-13-109, “Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions” (the Order) at Duane Arnold Energy Center (Duane Arnold), as described below.

By letter dated June 6, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13143A321), the U.S. Nuclear Regulatory Commission (NRC, the Commission) issued the Order to NextEra Energy Duane Arnold, LLC (NextEra, the licensee). The Order requires certain actions at Duane Arnold associated with the Fukushima Near-Term Task Force recommendations. Specifically, the Order requires that all licensees that operate boiling-water reactors with Mark I and Mark II containment designs, including Duane Arnold, implement requirements for reliable hardened containment vents capable of operation under severe accident conditions at their facilities.

Section IV of the Order required that NextEra submit to the Commission for review overall integrated plans by June 30, 2014 (Phase 1, wetwell vent), and December 31, 2015 (Phase 2, drywell vent), describing how Duane Arnold will achieve compliance with the requirements of the Order. The licensee provided a plan for compliance with Phase 1 of the Order by letter dated June 25, 2014 (ADAMS Accession No. ML14182A423). The licensee provided a plan for compliance with Phase 2 of the Order by letter dated December 22, 2015 (ADAMS Accession No. ML15358A043). By letter dated December 19, 2018 (ADAMS Accession No. ML18360A170), the licensee notified the NRC that full compliance with the Order had been achieved at Duane Arnold. The NRC staff issued a safety evaluation describing its review of the Duane Arnold compliance plan on June 21, 2019 (ADAMS Accession No. ML19168A130) and documented a compliance inspection at the Duane Arnold site by letter dated October 1, 2019 (ADAMS Accession No. ML19275D598).

Section IV of the Order also stipulates that the NRC's Director of the Office of Nuclear Reactor Regulation may, in writing, relax or rescind any of the conditions of the Order upon demonstration by the licensee of good cause.

By letter dated January 18, 2019 (ADAMS Accession No. ML19023A196), NextEra submitted to the NRC a certification of permanent cessation of operations for Duane Arnold in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.82(a)(1)(i). In this letter, NextEra provided formal notification of the intention to permanently cease operations at Duane Arnold in the fourth quarter of 2020. This letter was supplemented by a letter dated March 2, 2020 (ADAMS Accession No. ML20062E489), to certify that NextEra plans to permanently cease power operations at Duane Arnold on October 30, 2020. By letter dated August 27, 2020 (ADAMS Accession No. ML20240A067), NextEra certified to the NRC that it had permanently ceased operations at Duane Arnold on August 10, 2020. By letter dated October 12, 2020 (ADAMS Accession No. ML20286A317), the licensee notified the NRC under 10 CFR 50.82(a)(1)(ii) that, as of October 12, 2020, all fuel has been permanently removed from the Duane Arnold reactor vessel and placed in the SFP. Further, NextEra confirmed its understanding that, under 10 CFR 50.82(a)(2), the Duane Arnold 10 CFR Part 50 license no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel.

By letter dated August 8, 2019 (ADAMS Accession No. ML19220A089), NextEra requested rescission of Order EA-13-109, to be effective upon the docketing of the 10 CFR 50.82(a)(1)(i) and (ii) certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel.

The licensee's August 8, 2019, rescission request letter asserts that good cause exists to rescind the requirements of Order EA-13-109 with respect to Duane Arnold because, with the permanent removal of fuel from the reactor vessel, the function of primary containment has ceased. Additionally, according to the licensee, primary containment has no design function regarding protection of the fuel in the SFP or mitigation of SFP accident scenarios. Therefore, the licensee states that implementation of the Order requirements will no longer have any nexus to reasonable assurance of adequate protection of the public health and safety.

The NRC staff notes that the function of primary containment, as described in Chapters 1 and 6 of the Duane Arnold Updated Final Safety Analysis Report, is to: (1) completely enclose the reactor vessel, (2) retain integrity as a radioactive material barrier during and following accidents that release radioactive material into the primary containment volume, and (3) limit the release of fission products in the event of a postulated design basis accident so that offsite doses would not exceed the guideline values set forth in 10 CFR Part 100. The licensee for Duane Arnold has permanently ceased power operations and removed all fuel from the reactor vessel, as documented in the docketed 10 CFR 50.82(a)(1)(i) and (ii) certifications. In addition, the licensee is no longer authorized to operate or to emplace or retain fuel into the reactor vessel under 10 CFR 50.82(a)(2). Therefore, the NRC staff finds that a core damage event and a resulting severe accident are no longer possible at Duane Arnold due to the absence of a reactor core. As a result, the ability to operate the primary containment venting system no longer serves the underlying purpose of Order EA-13-109.

D. Moul

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Based on the above, the NRC staff concludes that the licensee has demonstrated good cause for the withdrawal of Order EA-13-109. Accordingly, the NRC is withdrawing its June 6, 2013, Order EA-13-109 with respect to Duane Arnold.

Sincerely,

Ho K. Nieh, Director
Office of Nuclear Reactor Regulation

Docket No. 50-331

cc: Listserv

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***concurrence via email**

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