

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 21, 2019

Mr. Brian R. Sullivan Site Vice President Entergy Nuclear Operations, Inc. Pilgrim Nuclear Power Station 600 Rocky Hill Road Plymouth, MA 02360-5508

SUBJECT: PILGRIM NUCLEAR POWER STATION - 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-2018-JLD-0170)

Dear Mr. Sullivan:

This letter documents the withdrawal of Order EA-13-109, "Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions," at Pilgrim Nuclear Power Station (Pilgrim), 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 Order EA-13-109 to Entergy Nuclear Operations, Inc. (Entergy, the licensee). This order requires certain actions at Pilgrim associated with the Fukushima Near-Term Task Force recommendations. Specifically, Order EA-13-109 requires that all licensees that operate boiling-water reactors with Mark I and Mark II containment designs, including Pilgrim, implement requirements for reliable hardened containment vents capable of operation under severe accident conditions at their facilities.

Section IV of Order EA-13-109 (the Order) required that Entergy 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 Pilgrim 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 30, 2014 (ADAMS Accession No. ML14188B731). By letter dated November 10, 2015 (ADAMS Accession No. ML15328A053), Entergy submitted to the NRC a certification of permanent cessation of operations for Pilgrim in accordance with Title 10 of the Code of Federal Regulations (10 CFR) Section 50.82(a)(1)(i). In this letter, Entergy provided notification to the NRC of its intent to permanently cease operations at Pilgrim no later than June 1, 2019. By letter dated June 24, 2016 (ADAMS Accession No. ML16187A325), Entergy requested an extension to comply with the requirements of Section IV of the Order concerning both Phase 1 and Phase 2 until December 31, 2019. By letter dated April 17, 2017 (ADAMS Accession No. ML17032A050), the NRC relaxed the full implementation date for Phase 1 of Order EA-13-109 until December 31, 2019. In that letter, based on the projected shutdown date of the Pilgrim reactor, the NRC staff did not find good cause to extend the designated Order EA-13-109 Phase 2 compliance date of June 30, 2019. Entergy's extension

request letter also stated that the licensee would request relaxation of the Order no later than December 31, 2019, based on the permanently shutdown condition of the plant at that time. By letter dated December 14, 2018 (ADAMS Accession No. ML18352A748), Entergy requested that the Order be rescinded at Pilgrim upon the docketing of the 10 CFR Section 50.82(a)(1) certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel.

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 June 10, 2019 (ADAMS Accession No. ML19161A033), Entergy certified to the NRC that it had permanently ceased operations at Pilgrim on May 31, 2019. In this letter, the licensee also provided notification to the NRC under 10 CFR 50.82(a)(1)(ii) that, as of June 9, 2019, all fuel has been permanently removed from the Pilgrim reactor vessel and placed in the spent fuel pool (SFP). Further, Entergy confirmed its understanding that, under 10 CFR 50.82(a)(2), the Pilgrim 10 CFR Part 50 license no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel.

The licensee's December 14, 2018, rescission request letter asserts that good cause exists to rescind the requirements of Order EA-13-109 with respect to Pilgrim 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 5 of the Pilgrim 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. Because the licensee for Pilgrim 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, and, therefore, is no longer authorized to operate or to emplace or retain fuel into the reactor vessel under 10 CFR 50.82(a)(2), the NRC staff finds that a core damage event and a resulting severe accident are no longer possible at Pilgrim due to the absence of a reactor core. As a result, the ability to operate the primary containment venting system would no longer serve the underlying purpose of Order EA-13-109.

B. Sullivan - 3 -

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 Pilgrim.

Sincerely,

Ho K. Nieh, Director

Office of Nuclear Reactor Regulation

Michel G. Evans for

Docket No. 50-293

cc: Listserv

B. Sullivan - 4 -

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## ADAMS Accession No.: ML19094A533 \*via email

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