

**NUCLEAR REGULATORY COMMISSION**

[Docket No. 50-331; NRC-2020-0176]

**NextEra Energy Duane Arnold, LLC**

**Duane Arnold Energy Center**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Environmental assessment and finding of no significant impact; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption in response to a February 25, 2020, as supplemented by letter dated May 29, 2020, request from NextEra Energy Duane Arnold, LLC (NEDA, the licensee) for Duane Arnold Energy Center (DAEC). The exemption would permit the licensee to use funds from the DAEC decommissioning trust fund (DTF, the Trust) for spent fuel management activities and site restoration. The exemption would also allow such withdrawals without prior notification to the NRC. The NRC staff is issuing a final Environmental Assessment (EA) and final Finding of No Significant Impact (FONSI) associated with the proposed exemption.

**DATES:** The EA and FONSI referenced in this document are available on August 4, 2020.

**ADDRESSES:** Please refer to Docket ID **NRC-2020-0176** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2020-0176**. Address questions about NRC docket IDs in Regulations.gov to Jennifer Borges; telephone: 301-287-9127; e-mail:

Jennifer.Borges@nrc.gov. For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- **NRC's Agencywide Documents Access and Management System**

**(ADAMS):** You may obtain publicly-available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in this document. In addition, for the convenience of the reader, the ADAMS accession numbers are provided in a table in the **AVAILABILITY OF DOCUMENTS** section of this document.

**FOR FURTHER INFORMATION CONTACT:** Scott P. Wall, Office of Nuclear Reactor Regulation; U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-2855; e-mail: [Scott.Wall@nrc.gov](mailto:Scott.Wall@nrc.gov).

**SUPPLEMENTARY INFORMATION:**

**I. Introduction**

The NRC is considering issuance of an exemption from sections 50.82(a)(8)(i)(A) and 50.75(h)(1)(iv) of title 10 of the *Code of Federal Regulations* (10 CFR) for Renewed Facility Operating License No. DPR-49, issued to NEDA for DAEC, located in Linn County, Iowa. The licensee requested the exemption by letter dated February 25, 2020 (ADAMS Accession No. ML20056E054), as supplemented by letter dated May 29, 2020 (ADAMS Accession No. ML20153A371). The exemption would allow the licensee to use funds from the Trust for spent fuel management and site restoration activities, in the same manner that funds from the Trust are used under 10 CFR 50.82(a)(8) for

decommissioning activities. In accordance with 10 CFR 51.21, the NRC prepared the following EA that analyzes the environmental impacts of the proposed action. Based on the results of this EA, which are provided in Section II, and in accordance with 10 CFR 51.31(a), the NRC has determined not to prepare an environmental impact statement for the proposed licensing action and is issuing a FONSI.

## **II. Environmental Assessment**

### *Description of the Proposed Action*

The proposed action would partially exempt NEDA from the requirements set forth in 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv). Specifically, the proposed action would allow NEDA to use funds from the Trust for spent fuel management and site restoration activities not associated with radiological decommissioning and would exempt NEDA from the requirement for prior notification to the NRC for these activities.

The proposed action is in accordance with the licensee's application dated February 25, 2020, as supplemented by letter dated May 29, 2020.

### *Need for the Proposed Action*

By letter dated January 18, 2019 (ADAMS Accession No. ML19023A196), NEDA submitted to the NRC a certification in accordance with 10 CFR 50.82(a)(1)(i), stating its determination to permanently cease power operations at DAEC in the fourth quarter of 2020. By letter dated March 2, 2020 (ADAMS Accession No. ML20062E489), NEDA updated this certification, stating that it plans to permanently cease power operations at DAEC on October 30, 2020.

As required by 10 CFR 50.82(a)(8)(i)(A), decommissioning trust funds may be used by the licensee if the withdrawals are for legitimate decommissioning activity expenses, consistent with the definition of decommissioning in 10 CFR 50.2. This definition addresses radiological decommissioning and does not include activities

associated with spent fuel management or site restoration. Similarly, the requirements of 10 CFR 50.75(h)(1)(iv) restrict the use of decommissioning trust fund disbursements (other than for ordinary and incidental expenses) to decommissioning expenses until final decommissioning has been completed. Therefore, exemption from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) is needed to allow NEDA to use funds from the Trust for spent fuel management and site restoration activities.

NEDA stated that Table 1 of Attachment 1 of the application dated February 25, 2020, demonstrates that the Trust contains the amount needed to cover the estimated costs of radiological decommissioning, as well as spent fuel management and site restoration activities. The adequacy of funds in the Trust to cover the costs of activities associated with spent fuel management, site restoration, and radiological decommissioning through license termination is supported by the DAEC Post-Shutdown Decommissioning Activities Report and site-specific Decommissioning Cost Estimate submitted by NEDA in a letter dated April 2, 2020 (ADAMS Accession No. ML20094F603). The licensee stated that it needs access to the funds in the Trust in excess of those needed for radiological decommissioning to support spent fuel management and site restoration activities not associated with radiological decommissioning.

The requirements of 10 CFR 50.75(h)(1)(iv) further provide that, except for withdrawals being made under 10 CFR 50.82(a)(8) or for payments of ordinary administrative costs and other incidental expenses of the Trust in connection with the operation of the Trust, no disbursement may be made from the Trust without written notice to the NRC at least 30 working days in advance. Therefore, an exemption from 10 CFR 50.75(h)(1)(iv) is also needed to allow NEDA to use funds from the Trust for spent fuel management and site restoration activities without prior NRC notification.

In summary, by letter dated February 25, 2020, as supplemented by letter dated May 29, 2020, NEDA requested an exemption to allow Trust withdrawals, without prior written notification to the NRC, for spent fuel management and site restoration activities.

*Environmental Impacts of the Proposed Action*

The proposed action involves an exemption from regulatory requirements that are of a financial or administrative nature and that do not have an impact on the environment. The NRC has completed its evaluation of the proposed action and concludes that there is reasonable assurance that adequate funds are available in the Trust to complete all activities associated with radiological decommissioning as well as spent fuel management and site restoration. There is no decrease in safety associated with the use of the Trust to also fund activities associated with spent fuel management and site restoration. Section 50.82(a)(8)(v) of 10 CFR requires a licensee to submit a financial assurance status report annually between the time of submitting its site-specific decommissioning cost estimate and submitting its final radiation survey and demonstrating that residual radioactivity has been reduced to a level that permits termination of its license. Section 50.82(a)(8)(vi) of 10 CFR requires that if the remaining balance, plus expected rate of return, plus any other financial surety mechanism does not cover the estimated cost to complete radiological decommissioning, additional financial assurance must be provided to cover the cost of completion. These annual reports provide a means for the NRC to continually monitor the adequacy of available funding. Since the exemption would allow NEDA to use funds from the Trust that are in excess of those required for radiological decommissioning, the adequacy of the funds dedicated for radiological decommissioning are not affected by the proposed exemption. Therefore, there is reasonable assurance that there will be no environmental impact due to lack of adequate funding for radiological decommissioning.

The proposed action will not significantly increase the probability or consequences of radiological accidents. The NRC staff has concluded that the proposed action has no direct radiological impacts. There would be no change to the types or amounts of radiological effluents that may be released; therefore, there would be no change in occupational or public radiation exposure from the proposed action. There are no materials or chemicals introduced into the plant that could affect the characteristics or types of effluents released offsite. In addition, the method of operation of waste processing systems would not be affected by the exemption. The proposed action will not result in changes to the design basis requirements of structures, systems, and components (SSCs) that function to limit or monitor the release of effluents. All the SSCs associated with limiting the release of effluents will continue to be able to perform their functions. Moreover, no changes would be made to plant buildings or the site property from the proposed action. Therefore, there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential non-radiological impacts, the proposed action would have no direct impacts on land use or water resources, including terrestrial and aquatic biota, as it involves no new construction or modification of plant operational systems. There would be no changes to the quality or quantity of non-radiological effluents and no changes to the plant's National Pollutant Discharge Elimination System permits would be needed. In addition, there would be no noticeable effect on socioeconomic conditions in the region, no environment justice impacts, no air quality impacts, and no impacts to historic and cultural resources from the proposed action. Therefore, there are no significant non-radiological environment impacts associated with the proposed action.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

### *Environmental Impacts of the Alternatives to the Proposed Action*

As an alternative to the proposed action, the NRC staff considered denial of the proposed action (i.e., the “no-action” alternative). Denial of the proposed action would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

### *Alternative Use of Resources*

There are no unresolved conflicts concerning alternative uses of available resources under the proposed action.

### *Agencies or Persons Consulted*

No additional agencies or persons were consulted regarding the environmental impact of the proposed action. On July 10, 2020, the NRC notified Iowa State representatives of the EA and FONSI.

## **III. Finding of No Significant Impact**

The licensee has requested an exemption from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv), which would allow NEDA to use funds from the Trust for spent fuel management and site restoration activities, without prior written notification to the NRC. The proposed action would not significantly affect plant safety, would not have a significant adverse effect on the probability of an accident occurring, and would not have any significant radiological or non-radiological impacts. The reason the human environment would not be significantly affected is that the proposed action involves an exemption from requirements that are of a financial or administrative nature and that do not have an impact on the human environment. Consistent with 10 CFR 51.21, the NRC conducted the EA for the proposed action, and this FONSI incorporates by reference the EA included in Section II. Therefore, the NRC concludes that the proposed action will not have significant effects on the quality of the human environment. Accordingly, the

NRC has determined not to prepare an environmental impact statement for the proposed action.

Other than the licensee's letter dated February 25, 2020, as supplemented by letter dated May 29, 2020, there are no other environmental documents associated with this review. These documents are available for public inspection as indicated in Section I.

Previous considerations regarding the environmental impacts of operating DAEC are described in the "Final Environmental Statement Related to Operation of Duane Arnold Energy Center," dated March 1973 (ADAMS Accession No. ML091200609) and NUREG-1437, Supplement 42, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Duane Arnold Energy Center," Final Report, dated October 2010 (ADAMS Accession No. ML102790308).

#### **IV. Availability of Documents**

<b>Date</b>	<b>Title</b>	<b>ADAMS Accession No.</b>
2/25/2020	Letter from NEDA to NRC titled "Request for Exemptions from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv)"	ML20056E054
5/29/2020	Letter from NEDA to NRC titled "Response to Request for Additional Information (RAI) - Request for Exemptions from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv)"	ML20153A371
4/2/2020	Letter from NEDA to NRC titled "Post Shutdown Decommissioning Activities Report"	ML20094F603
3/2/2020	Letters from NEDA to NRC titled "Certification of Permanent Cessation of Power Operations"	ML20062E489
1/18/2019		ML19023A196
10/2010	NUREG-1437, Supplement 42, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Duane Arnold Energy Center," Final Report	ML102790308

3/1973	"Final Environmental Statement Related to Operation of Duane Arnold Energy Center"	ML091200609
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Dated: July 30, 2020.

For the Nuclear Regulatory Commission.

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