[7590-01-P]

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-331; NRC-2019-0194]

NextEra Energy Duane Arnold, LLC

Duane Arnold Energy Center

AGENCY: Nuclear Regulatory Commission.

ACTION: Exemption; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an exemption in response to a February 28, 2019, request from NextEra Energy Duane Arnold, LLC. The exemption allows a certified fuel handler, in addition to a licensed senior operator, to suspend security measures in an emergency or during severe weather at the Duane Arnold Energy Center (DAEC) after both the "Certification of Permanent Cessation of Operations" and the "Certification of Permanent Fuel Removal" have been docketed for the facility.

DATES: The exemption was issued on November 7, 2019.

ADDRESSES: Please refer to Docket ID **NRC-2019-0194** 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-2019-0194**. 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, contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. For the convenience of the reader, the ADAMS accession numbers are provided in a table in the "Availability of Documents" section of this document.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Mahesh Chawla, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; telephone: 301-415-8371; e-mail: Mahesh.Chawla@nrc.gov.

SUPPLEMENTARY INFORMATION:

The NRC is making the documents identified below available to interested persons through one or more of the following methods, as indicated. To access documents related to this action, see the **ADDRESSES** section of this document.

Document	ADAMS Accession No.
NextEra Energy Duane Arnold, LLC "Certification of Permanent Cessation of Power Operations" Dated January 18, 2019	ML19023A196
NextEra Energy Duane Arnold, LLC "Request for Approval of Certified Fuel Handler Training Program" Dated January 29, 2019	ML19037A016
U.S. Nuclear Regulatory Commission "Duane Arnold Energy Center - Approval of a Certified Fuel Handler Training and Continuing Training Program" Dated August 28, 2019	ML19204A287
NextEra Energy Duane Arnold, LLC "Request for Exemption from 10 CFR 73.55(p)(1)(i) and (ii) Related to the Suspension of Security Measures in an Emergency or During Severe Weather" Dated February 28, 2019	ML19059A099

The text of the exemption is attached.

Dated at Rockville, Maryland, this 12th day of November, 2019.

For the Nuclear Regulatory Commission.

/RA/

Mahesh L. Chawla,
Project Manager,
Plant Licensing Branch III,
Division of Operating Reactor Licensing,
Office of Nuclear Reactor Regulation.

ATTACHMENT:
Exemption Related to the Approval
Authority for Suspension of Security
Measures in an Emergency or During
Severe Weather

NUCLEAR REGULATORY COMMISSION

Docket No. 50-331

NextEra Energy Duane Arnold, LLC; Duane Arnold Energy Center

Exemption Related to the Approval Authority for Suspension of Security Measures in an Emergency or During Severe Weather

I. Background.

NextEra Energy Duane Arnold, LLC (NEDA) is the holder of Renewed Facility Operating License No. DPR-49 for the Duane Arnold Energy Center (DAEC). The license provides, among other things, that the facility is subject to all applicable rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC, the Commission), now or hereafter in effect. The DAEC facility consists of a boiling-water reactor located in Linn County, Iowa.

By letter dated January 18, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19023A196), NEDA provided formal notification to the NRC pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Sections 50.82(a)(1)(i) and 50.4(b)(8) of the intention to permanently cease power operations at the DAEC in the fourth quarter of 2020.

In accordance with 10 CFR 50.82(a)(1)(i)-(ii) and 50.82(a)(2), the 10 CFR Part 50 license for the facility no longer authorizes reactor operation or emplacement or retention of fuel in the reactor vessel, after certifications of permanent cessation of operations and permanent removal of fuel from the reactor vessel are docketed for the DAEC. As a result, licensed senior operators (i.e., individuals licensed under 10 CFR Part 55 to manipulate the controls of a facility and to direct the licensed activities of licensed operators) will no longer be required to support plant operating activities.

Instead, certified fuel handlers (CFHs) (i.e., non-licensed operators who have qualified in accordance with a fuel handler training program approved by the Commission) will perform activities associated with decommissioning, irradiated fuel handling, and management. Commission approval of a fuel handler training program is needed to facilitate these activities.

By letter dated January 29, 2019 (ADAMS Accession No. ML19037A016), NEDA submitted a request for Commission approval of the CFH Training and Retraining Program for the DAEC. By letter dated August 28, 2019 (ADAMS Accession No. ML19204A287), the Commission approved the CFH Training and Retraining Program for the DAEC. The CFH Training and Retraining Program is to be used to satisfy training requirements for the plant personnel responsible for supervising and directing the monitoring, storage, handling, and cooling of irradiated fuel in a manner consistent with ensuring the health and safety of the public. As stated in 10 CFR 50.2, "Definitions," CFHs are qualified in accordance with a Commission-approved training program.

II. Request/Action.

The Commission's regulation at 10 CFR 73.55(p)(1) addresses the suspension of security measures in an emergency (10 CFR 73.55(p)(1)(i)) or during severe weather (10 CFR 73.55(p)(1)(ii)) by stating:

> The licensee may suspend implementation of affected requirements of this section under the following conditions:
>
> (i) In accordance with §§ 50.54(x) and 50.54(y) of this chapter, the licensee may suspend any security measures under this section in an emergency when this action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent. This suspension of security measures must be approved as a

> minimum by a licensed senior operator before taking this action.
>
> (ii) During severe weather when the suspension of affected security measures is immediately needed to protect the personal health and safety of security force personnel and no other immediately apparent action consistent with the license conditions and technical specifications can provide adequate or equivalent protection. This suspension of security measures must be approved, as a minimum, by a licensed senior operator, with input from the security supervisor or manager, before taking this action.

By letter dated February 28, 2019 (ADAMS Accession No. ML19059A099), NEDA requested an exemption from 10 CFR 73.55(p)(1)(i) and (ii), pursuant to 10 CFR 73.5, "Specific exemptions." Consistent with 10 CFR 50.54(y), the proposed exemption would authorize a CFH, in addition to a licensed senior operator, to approve the suspension of security measures in an emergency or during severe weather at the DAEC.

III. Discussion.

The NRC's security rules have long recognized the potential need to suspend security or safeguards measures under certain conditions. Accordingly, 10 CFR 50.54(x) and (y), first published in 1983, allow a licensee to take reasonable actions in an emergency that depart from license conditions or technical specifications when those actions are immediately "needed to protect the public health and safety" and no actions consistent with license conditions and technical specifications that can provide adequate or equivalent protection are immediately apparent (48 FR 13970; April 1, 1983). This departure from license conditions or technical specifications must be approved, as a minimum, by a licensed senior operator. In 1986, in its final rule, "Miscellaneous Amendments Concerning the Physical Protection of Nuclear Power

Plants" (51 FR 27817; August 4, 1986), the Commission issued 10 CFR 73.55(a), stating, in part:

> In accordance with § 50.54 (x) and (y) of Part 50, the licensee may suspend any safeguards measures pursuant to § 73.55 in an emergency when this action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specification that can provide adequate or equivalent protection is immediately apparent. This suspension must be approved as a minimum by a licensed senior operator prior to taking the action.

In 1996, the NRC made a number of regulatory changes to address decommissioning. One of the changes was to amend 10 CFR 50.54(x) and (y) to authorize a non-licensed operator called a "certified fuel handler," in addition to a licensed senior operator, to approve such protective actions in an emergency situation at a permanently shutdown facility. Specifically, in addressing the role of the CFH during emergencies, the Commission stated in the proposed rule, "Decommissioning of Nuclear Power Reactors" (60 FR 37379; July 20, 1995):

> The Commission is proposing to amend 10 CFR 50.54(y) to permit a certified fuel handler at nuclear power reactors that have permanently ceased operations and permanently removed fuel from the reactor vessel, subject to the requirements of § 50.82(a) and consistent with the proposed definition of "Certified Fuel Handler" specified in § 50.2, to make these evaluations and judgments. A nuclear power reactor that has permanently ceased operations and no longer has fuel in the reactor vessel does not require a licensed individual to monitor core conditions. A certified fuel handler at a permanently shutdown and defueled nuclear power reactor undergoing decommissioning is an individual who has the requisite knowledge and experience to evaluate plant conditions and make these judgments.

In the final rule (61 FR 39298; July 29, 1996), the NRC added the following definition to 10 CFR 50.2, "[c]ertified fuel handler means, for a nuclear power reactor facility, a non-licensed operator who has qualified in accordance with a fuel handler training program approved by the Commission." However, the decommissioning rule did

not propose or make parallel changes to 10 CFR 73.55(a) regarding the role of a non-licensed CFH at a permanently shutdown facility.

In the final rule, “Power Reactor Security Requirements” (74 FR 13926; March 27, 2009), the NRC relocated the security suspension requirements from 10 CFR 73.55(a) to 10 CFR 73.55(p)(1)(i) and (ii). The role of a CFH was not discussed in the rulemaking; therefore, the suspension of security measures in accordance with 10 CFR 73.55(p) continues to require approval, as a minimum, by a licensed senior operator, even for a permanently shutdown facility.

Under 10 CFR 73.5, the Commission may, upon application of any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 73, as it determines are authorized by law, will not endanger life or property or the common defense and security, and are otherwise in the public interest. As explained below, the proposed exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest.

A. The Exemption Is Authorized by Law.

The proposed exemption from 10 CFR 73.55(p)(1)(i) and (ii) would permit, as a minimum, a CFH, in addition to a licensed senior operator, to approve the suspension of security measures in an emergency or during severe weather at the DAEC when it is permanently shutdown. Although the exemption is effective upon receipt, the actions permitted by the exemption may not be implemented at the DAEC until the 10 CFR Part 50 license no longer authorizes operation of the reactor or emplacement or retention of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). The intent of the proposed exemption is to align these regulations with 10 CFR 50.54(y).

Per 10 CFR 73.5, the NRC may grant specific exemptions from the requirements of 10 CFR Part 73, as are authorized by law. Granting the proposed exemption is

consistent with the Atomic Energy Act of 1954, as amended, and not otherwise inconsistent with NRC regulations or other applicable laws. Therefore, the exemption is authorized by law.

B. The Exemption Will Not Endanger Life or Property or the Common Defense and Security.

Permitting, as a minimum, a CFH, in addition to a licensed senior operator, to approve the suspension of security measures in an emergency or during severe weather at the DAEC when it is permanently shutdown will not endanger life or property or the common defense and security for the reasons discussed below.

First, 10 CFR 73.55(p)(2) will continue to require that "[s]uspended security measures must be reinstated as soon as conditions permit."

Second, the suspension of security measures for emergencies under 10 CFR 73.55(p)(1)(i) will continue to be invoked only "when this action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent." Thus, the exemption would not prevent the licensee from meeting the underlying purpose of 10 CFR 73.55(p)(1)(i) to protect the public health and safety.

Third, the suspension of security measures for severe weather under 10 CFR 73.55(p)(1)(ii) will continue to be used only when "the suspension of affected security measures is immediately needed to protect the personal health and safety of security force personnel and no other immediately apparent action consistent with the license conditions and technical specifications can provide adequate or equivalent protection." The requirement in 10 CFR 73.55(p)(1)(ii) to receive input from the security supervisor or manager will remain. Therefore, the exemption would not prevent the

licensee from meeting the underlying purpose of 10 CFR 73.55(p)(1)(ii) to protect the health and safety of the security force.

Additionally, by letter dated August 28, 2019, the NRC approved the DAEC CFH Training and Retraining Program. The NRC staff found that, among other things, the program addresses the safe conduct of decommissioning activities, the safe handling and storage of spent fuel, and the appropriate response to plant emergencies. Because a CFH at the DAEC will be sufficiently trained and qualified under an NRC-approved program, the NRC staff considers the CFH to have sufficient knowledge of operational and safety concerns, such that allowing the CFH to suspend security measures in emergencies or during severe weather will not result in undue risk to the public health and safety.

In addition, since the exemption allows a CFH the same authority currently given to the licensed senior operator under 10 CFR 73.55(p)(1)(i) and (ii), no change is required to physical security. Since no change is required to physical security, the exemption would not reduce the overall effectiveness of the DAEC physical security plan and would not adversely impact the licensee's ability to physically secure the site or protect special nuclear material at the DAEC, and thus, would not have an effect on the common defense and security. The NRC staff has determined that the exemption would not reduce security measures currently in place to protect against radiological sabotage. Instead, the exemption would align the requirements of 10 CFR 73.55(p)(1)(i) and (ii) with the existing requirements of 10 CFR 50.54(y).

For these reasons, permitting, as a minimum, a CFH, in addition to a licensed senior operator, to approve the suspension of security measures in an emergency or during severe weather at the DAEC when it is permanently shutdown will not endanger life or property or the common defense and security.

C. The Exemption Is Otherwise in the Public Interest.

The proposed exemption would allow a CFH, in addition to a licensed senior operator, to approve the suspension of security measures in an emergency when "immediately needed to protect the public health and safety" or during severe weather when "immediately needed to protect the personal health and safety of security force personnel" at the DAEC when it is permanently shutdown. If the exemption is not granted, the DAEC will be required to have a licensed senior operator available to approve the suspension of security measures in an emergency or during severe weather for a permanently shutdown plant, even though there would no longer be a requirement for a licensed senior operator after the certifications required by 10 CFR 50.82(a)(1)(i) and (ii) are submitted.

This exemption is in the public interest for the following reasons. Without the exemption, there would be uncertainty regarding how the licensee will invoke the temporary suspension of security measures that may be needed for protecting the public health and safety or the personal health and safety of the security force personnel in emergencies or during severe weather given the differences between the requirements in 10 CFR 73.55(p)(1)(i) and (ii) and 10 CFR 50.54(y). The exemption would allow the licensee to make decisions pursuant to 10 CFR 73.55(p)(1)(i) and (ii) without having to maintain a staff of licensed senior operators at a nuclear power reactor that has permanently ceased operations and permanently removed fuel from the reactor vessel. The exemption would also allow the licensee to have an established procedure in place to allow a CFH to suspend security measures in an emergency or during severe weather after the certifications required by 10 CFR 50.82(a)(1)(i) and (ii) have been submitted.

Finally, the consistent and efficient regulation of nuclear power plants serves the public interest and this exemption would assure consistency between the regulations in 10 CFR Part 73 and 10 CFR 50.54(y) and the requirements concerning licensed operators in 10 CFR Part 55.

The NRC staff has determined that granting the proposed exemption would allow the licensee to designate a CFH with qualifications appropriate for a permanently shutdown and defueled reactor to approve the suspension of security measures in an emergency to protect the public health and safety and during severe weather to protect the personal health and safety of the security force personnel at the DAEC when it is permanently shutdown, which is consistent with the similar authority provided by 10 CFR 50.54(y). Therefore, the exemption is in the public interest.

D. Environmental Consideration.

The NRC's approval of the proposed exemption belongs to a category of actions that the Commission, by rule or regulation, has declared to be a categorical exclusion, after first finding that the category of actions does not individually or cumulatively have a significant effect on the human environment. Specifically, the NRC's approval of the exemption is categorically excluded from further environmental analysis under 10 CFR 51.22(c)(25).

Under 10 CFR 51.22(c)(25), the granting of an exemption from the requirements of any regulation of Chapter I to 10 CFR is a categorical exclusion provided that: (i) there is no significant hazards consideration; (ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite; (iii) there is no significant increase in individual or cumulative public or occupational radiation exposure; (iv) there is no significant construction impact; (v) there is no significant increase in the potential for or consequences from radiological accidents; and (vi) the

requirements from which an exemption is sought involve: recordkeeping requirements; reporting requirements; inspection or surveillance requirements; equipment servicing or maintenance scheduling requirements; education, training, experience, qualification, requalification or other employment suitability requirements; safeguard plans, and materials control and accounting inventory scheduling requirements; scheduling requirements; surety, insurance or indemnity requirements; or other requirements of an administrative, managerial, or organizational nature.

The NRC staff has determined that granting the proposed exemption involves no significant hazards consideration because allowing a CFH, in addition to a licensed senior operator, to approve the security suspension at a permanently shutdown and defueled power plant does not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. The proposed exemption is unrelated to any operational restriction. Accordingly, there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite and no significant increase in individual or cumulative public or occupational radiation exposure. The proposed exemption is not associated with construction, so there is no significant construction impact. The proposed exemption does not concern the source term (i.e., potential amount of radiation in an accident) or mitigation. Thus, there is no significant increase in the potential for or consequences from radiological accidents. Finally, the requirement regarding suspensions of security measures involves either safeguards, materials control, or managerial/organizational matters.

Therefore, pursuant to 10 CFR 51.22(b) and (c)(25), no environmental impact statement or environmental assessment need be prepared in connection with the approval of the proposed exemption.

IV. Conclusion.

Accordingly, the Commission has determined that, pursuant to 10 CFR 73.5, the proposed exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest. Therefore, the Commission hereby grants the licensee's request for an exemption from the requirements of 10 CFR 73.55(p)(1)(i) and (ii) to permit, as a minimum, a CFH, in addition to a licensed senior operator, to approve the suspension of security measures in an emergency or during severe weather at the DAEC once the certifications required under 10 CFR 50.82(a)(1) have been submitted.

The exemption is effective upon receipt.

Dated at Rockville, Maryland, this 7th, day of November 2019.

For the Nuclear Regulatory Commission.

/RA/

Craig G. Erlanger, Director,
Division of Operating Reactor Licensing,
Office of Nuclear Reactor Regulation.