

**NUCLEAR REGULATORY COMMISSION**  
**[Docket Nos. 50-334 and 50-412; NRC-2018-0193]**  
**FirstEnergy Nuclear Operating Company**  
**FirstEnergy Nuclear Generation, LLC**  
**Beaver Valley Power Station, Units 1 and 2**

**AGENCY:** Nuclear Regulatory Commission.

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

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is making a finding of no significant impact (FONSI) for a proposed issuance of an exemption to FirstEnergy Nuclear Operating Company (FENOC, the licensee), for Beaver Valley Power Station (BVPS), Units 1 and 2, located in Beaver County, Pennsylvania. The proposed action would grant the licensee a partial exemption from the “Physical barrier” requirements in the NRC’s regulations, to allow FENOC to continue using vertical, rather than angled, barbed wire fence toppings in certain limited protected area sections on-site. The NRC is considering an Exemption to Renewed Facility Operating License No. DPR-66, and Renewed Facility Operating License No. NPF-73, issued on November 5, 2009, and held by FENOC; and FirstEnergy Nuclear Generation, LLC for the operation of BVPS, Units 1 and 2.

**DATES:** The environmental assessment referenced in this document is available on September 4, 2018.

**ADDRESSES:** Please refer to Docket ID **NRC-2018-0193** 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 <http://www.regulations.gov> and search for Docket ID **NRC-2018-0193**. Address questions about NRC dockets to Jennifer Borges; telephone: 301-287-9127; e-mail: [Jennifer.Borges@nrc.gov](mailto: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 <http://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 (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto: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:** Bhalchandra K. Vaidya, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-3308; e-mail: [Bhalchandra.Vaidya@nrc.gov](mailto:Bhalchandra.Vaidya@nrc.gov).

## **SUPPLEMENTARY INFORMATION:**

### **I. Introduction**

The NRC is considering issuance of a partial exemption, pursuant to section 73.5 of title 10 of the *Code of Federal Regulations* (10 CFR), “Specific exemptions,” from the “Physical barrier” requirement of 10 CFR 73.2, specifically with respect to the design criteria specified in 10 CFR 73.2(1) “fences,” as it applies to the angular specification for brackets used to support the required barbed wire (or similar material) topper, to FENOC and FirstEnergy Nuclear Generation, LLC (collectively, the licensee), for BVPS, Units 1 and 2, located in Beaver County, Pennsylvania.

In accordance with 10 CFR 51.21, the NRC has prepared an environmental assessment (EA) that analyzes the environmental effects of the proposed action. Based on the results of the EA, and in accordance with 10 CFR 51.31(a), the NRC has prepared a finding of no significant impact (FONSI) for the proposed exemption.

### **II. Environmental Assessment**

#### *Description of the Proposed Action*

The proposed action would grant the licensee a partial exemption from the “physical barrier” requirements of 10 CFR 73.2, specifically with respect to the design criteria specified in 10 CFR 73.2 (1) “fences,” as it applies to the angular specification for brackets used to support the required barbed wire (or similar material) topper. As stated in 10 CFR 73.2, fences must be constructed of No. 11 American wire gauge, or heavier wire fabric, topped by three strands or more of barbed wire or similar material on

brackets angled inward or outward between 30 and 45 degrees from the vertical, with an overall height of not less than eight feet, including the barbed topping. If approved, the partial exemption would allow the licensee to continue to use, without modification, the current configuration of vertical barbed wire fence toppings in limited protected area sections on-site, as specified on the maps submitted by the licensee in its letter dated March 16, 2018, to meet the regulatory requirements of 10 CFR part 73, "Physical protection of plants and materials." Specifically, barbed wire on top of physical barrier fencing on gates, near gates, near interfaces with buildings, and on corners is oriented vertically.

The proposed action is in accordance with the licensee's application dated July 19, 2017, as supplemented by letters dated March 16, 2018; and May 2, 2018.

#### *Need for the Proposed Action*

Physical protection consists of a variety of measures to protect nuclear facilities and material against sabotage, theft, diversion, and other malicious acts. The NRC and its licensees use a graded approach for physical protection, consistent with the significance of the facilities or material to be protected. In so doing, the NRC establishes the regulatory requirements and assesses compliance, and licensees are responsible for providing the protection.

The proposed action is needed to allow the licensee to continue to use, without modification, the current configuration of vertical barbed wire fence toppings in certain limited protected area sections on-site, as shown on the maps submitted by the licensee in its March 16, 2018, letter. Currently, some of the barbed wire bracketing on top of the protected area physical barrier fencing do not meet certain design criteria specified in

10 CFR 73.2. Specifically, barbed wire on top of physical barrier fencing on gates, near gates, near interfaces with buildings, and on corners is oriented vertically.

Separate from this EA, the NRC staff is evaluating the licensee's proposed action, which will be documented in a safety evaluation report. The staff's review will determine whether there is reasonable assurance that the site maintains adequate protection from the current physical barriers in accordance with the requirements in 10 CFR part 73.

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

The NRC has completed its environmental evaluation of the proposed action. The proposed action would grant the licensee a partial exemption from the "physical barrier" requirements of 10 CFR 73.2, specifically with respect to the design criteria specified in 10 CFR 73.2(1) "fences," as it applies to the angular specification for brackets used to support the required barbed wire (or similar material) topper. This will allow the licensee to continue using vertical, rather than angled, barbed wire fence toppings in certain limited protected area sections on site.

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

The NRC has concluded that the proposed action would not significantly affect plant safety and would not have a significant adverse effect on the probability of an accident occurring. There would be no change to radioactive effluents that affect radiation exposures to plant workers and members of the public. No changes would be made to plant buildings or the site property. Therefore, implementing the proposed action would not result in a change to the radiation exposures to the public or radiation exposure to plant workers.

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

As an alternative to the proposed action, the NRC considered denial of the proposed action (i.e., the “no-action” alternative). Denial of the exemption request would result in the licensee having to replace the vertical barbed wire fence toppings with angled barbed wire that meets the definition of “Physical barrier” in 10 CFR 73.2. This could result in temporary, minor changes in vehicular traffic and associated air pollutant emissions due to any construction-related impacts of performing the necessary modifications, but no significant changes in ambient air quality would be expected.

#### *Alternative Use of Resources*

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

#### *Agencies and Persons Consulted*

The NRC staff did not enter into consultation with any other Federal agency or with the State of Pennsylvania regarding the environmental impact of the proposed action.

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

The licensee has requested an exemption from the “physical barrier” requirements of 10 CFR 73.2, specifically with respect to the design criteria specified in 10 CFR 73.21, “fences,” to allow the licensee to continue using vertical, rather than angled, barbed wire fence toppings in limited protected area sections on site. The NRC is considering issuing the requested exemption. 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 and non-radiological impacts. This FONSI incorporates by reference the EA in Section II of this notice. Therefore, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

The related environmental document is NUREG-1437, “Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Beaver Valley Power Station, Units 1 and 2, Final Report,” which provides the latest environmental review of current operations and a description of environmental conditions at BVPS, Units 1 and 2.

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

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

<b>DOCUMENT</b>	<b>ADAMS ACCESSION NO.</b>
FirstEnergy Nuclear Operating Company  Exemption Request for a Physical Barrier Requirement  Dated July 19, 2017	ML17200D139
FirstEnergy Nuclear Operating Company  Response to Request For Additional Information Regarding Exemption Request for a Physical Barrier Requirement  Dated March 16, 2018	ML18078A033
FirstEnergy Nuclear Operating Company  Response to Request For Additional Information Regarding Exemption Request for a Physical Barrier Requirement  Dated May 2, 2018	ML18122A133
NUREG-1437, Supplement 36  Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Beaver Valley Power Station, Units 1 and 2, Final Report  Dated May 2009	ML091260011

Dated at Rockville, Maryland, this 29<sup>th</sup> day of August, 2018.

For the Nuclear Regulatory Commission.

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