



FirstEnergy Nuclear Operating Company

341 White Pond Drive
Akron, Ohio 44320

Samuel L. Belcher
President & Chief Nuclear Officer

330-436-1393

July 19, 2017
L-17-112

10 CFR 73.5

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT:
Beaver Valley Power Station, Unit Nos. 1 and 2
Docket No. 50-334, License No. DPR-66
Docket No. 50-412, License No. NPF-73

Davis-Besse Nuclear Power Station
Docket No. 50-346, License No. NPF-3

Perry Nuclear Power Plant
Docket No. 50-440, License No. NPF-58
Exemption Request for a Physical Barrier Requirement

Pursuant to 10 CFR 73.5, "Specific exemptions," FirstEnergy Nuclear Operating Company (FENOC) is requesting a permanent exemption from a requirement of 10 CFR 73.2, "Definitions" for Beaver Valley Power Station Unit Nos. 1 and 2, Davis-Besse Nuclear Power Station, and Perry Nuclear Power Plant. The regulation requires, in part, fences topped by three strands or more of barbed wire or similar material on brackets to be angled inward or outward between 30 and 45 degrees from the vertical. An exemption is requested since not all protected area physical barrier fencing sections meet this requirement.

FENOC requests approval of the enclosed exemption request by July 21, 2018.

There are no regulatory commitments contained in this submittal. If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager – Fleet Licensing, at 330-315-6810.

Sincerely,

Samuel L. Belcher

Beaver Valley Power Station, Unit Nos. 1 and 2
Davis-Besse Nuclear Power Station
Perry Nuclear Power Plant
L-17-112
Page 2 of 2

Enclosure: Exemption Request

cc:

NRC Region I Administrator
NRC Region III Administrator
NRC Resident Inspector – Beaver Valley
NRC Resident Inspector – Davis-Besse
NRC Resident Inspector – Perry
NRC Project Manager – FENOC Fleet
Director BRP/DEP
Site BRP/DEP Representative
Utility Radiological Safety Board
Branch Chief, OEMA, State of Ohio

Exemption Request
Page 1 of 6

Subject: Request for exemption from a requirement of 10 CFR 73.2, "Definitions" to allow the use of protected area fencing sections not meeting the physical barriers requirement at Beaver Valley Power Station Unit Nos. 1 and 2, Davis-Besse Nuclear Power Station, and Perry Nuclear Power Plant

1.0 PURPOSE

2.0 BACKGROUND

3.0 PROPOSED EXEMPTION

4.0 JUSTIFICATION OF EXEMPTION

5.0 ENVIRONMENTAL ASSESSMENT

6.0 CONCLUSION

7.0 REFERENCES

1.0 PURPOSE

In accordance with 10 CFR 73.5, "Specific exemptions," FirstEnergy Nuclear Operating Corporation (FENOC) requests a permanent exemption from the provisions of 10 CFR 73.2, "Definitions" for Beaver Valley Power Station (BVPS) Unit Nos. 1 and 2, Davis-Besse Nuclear Power Station (DBNPS), and Perry Nuclear Power Plant (PNPP). The request relates solely to a requirement for fences in the definition of a physical barrier. The regulation requires, in part, fences topped by three strands or more of barbed wire or similar material on brackets to be angled inward or outward between 30 and 45 [degrees] from the vertical. An exemption is requested since not all protected area physical barrier fencing sections meet this requirement.

2.0 BACKGROUND

On May 17, 2016, FENOC received a minor violation during conduct of the NRC evaluated force-on-force inspection at BVPS. The minor violation was due to not all barbed wire on the top of protected area physical barrier fencing sections meeting the angled requirement of 10 CFR 73.2. Specifically, barbed wire on the top of physical barrier fencing is currently oriented vertically on gates, near gates, near interfaces with buildings, and on corners. DBNPS and PNPP have similar configurations, except DBNPS also has vertical barbed wire on top of fences near the intrusion detection system (IDS).

3.0 PROPOSED EXEMPTION

FENOC requests a permanent exemption to 10 CFR 73.2 for BVPS, DBNPS, and PNPP to allow protected area physical barrier fences to be topped by three strands or more of barbed wire or similar material that are vertically oriented on and near gates, near interfaces with buildings, on corners, and, in the case of DBNPS, near the IDS.

4.0 JUSTIFICATION OF EXEMPTION

The basis for this exemption is that the vertical configuration of barbed wire on the top of limited protected area sections (on and near gates, near interfaces with buildings, on corners, and near the IDS) does not have an adverse impact on the site protective strategies and will continue to protect against the design basis threat of radiological sabotage. Because the vertical barbed wire will maintain the plant's physical security, the underlying purpose of the regulation is met.

The limited protected area sections where the configuration does not meet the regulatory requirement is a small portion of the entire protected area perimeter. Consultation of design drawings and protected area site walkdowns estimates this portion to be approximately six percent or less for each of the three sites.

Finally, the NRC staff has partially approved this configuration at each of the three sites. NRC approval of Chapter 6, Section 6.2 of the BVPS, DBNPS, and PNPP Physical Security Plans (References 1, 2, and 3, respectively), acknowledged that the angular requirement for the fence topping may not be met at locations such as gates and buildings.

10 CFR 73.5, "Specific exemptions," states that the Commission may grant exemptions from the requirements of the regulations of this part provided specific criteria are met. The requested exemption satisfies these criteria as described below.

1. This exemption is authorized by law.

The Commission has the authority under 10 CFR 73.5 to grant an exemption from the requirements of Part 73 upon proper justification. Therefore, granting an exemption is explicitly authorized by law.

2. This exemption will not endanger life or property or the common defense and security.

This exemption to allow vertical barbed wire fence toppings in limited protected area sections (on and near gates, near interfaces with buildings, on corners, and near the IDS) does not degrade the purpose of physical deterrent for which the barbed topping is intended. Therefore, this exemption will not endanger life or property or the common defense and security.

3. This exemption is otherwise in the public interest.

This exemption to allow vertical barbed wire fence toppings in limited protected area sections (on and near gates, near interfaces with buildings, on corners, and near the IDS) maintains the physical security of the sites and does not have an adverse effect on public interest.

5.0 ENVIRONMENTAL ASSESSMENT

FENOC has determined the proposed exemption meets the eligibility criteria for categorical exclusion of an environmental review in 10 CFR 51.22(c)(25), as there are: (i) no significant hazards consideration; (ii) no significant change in the types or significant increase in the amounts of any effluents that may be released offsite; (iii) no significant increase in individual or cumulative public or occupational radiation exposure; (iv) no significant construction impact; (v) no significant increase in the potential for or consequences from radiological accidents; and (vi) the requirements from which the exemption is sought involves safeguards plans or other requirements of an administrative, managerial or organizational nature. The information provided below supports the basis for determination.

(i) No significant hazards consideration.

FENOC has evaluated the proposed exemption to determine whether or not a significant hazards consideration is involved by focusing on three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed exemption involve a significant increase in the probability or consequence of an accident previously-evaluated?

Response: No

The proposed exemption would allow the existing limited protected area physical barrier fences at BVPS, DBNPS, and PNPP to remain topped by three strands or more of barbed wire or similar material that are vertically oriented on and near gates, near interfaces with buildings, on corners, and, in the case of DBNPS, near the IDS.

Orientation of barbed wire on the top of limited protected area physical barrier fencing sections does not alter any assumptions or methodologies associated with previously-evaluated accidents. Therefore, there is no increase in the probability or consequence of any previously-evaluated accident.

2. Does the proposed exemption create the possibility of a new or different kind of accident from any accident previously-evaluated?

Response: No

The proposed exemption to allow the existing orientation of barbed wire on top of limited protected area physical barrier fencing sections does not involve a physical alteration of the plant. No new or different type of equipment will be installed, and there are no physical modifications to existing equipment associated with the proposed exemption. There are no changes to operating procedures, and therefore, personnel failures.

Therefore, the proposed exemption does not create the possibility of a new or different kind of accident from any accident previously-evaluated.

3. Does the proposed exemption involve a significant reduction in a margin of safety?

Response: No

The proposed exemption to allow the existing orientation of barbed wire on top of limited protected area physical barrier fencing sections does not alter the design basis or any safety limits for the plants. The proposed exemption does not impact station operations or any plant systems, structures, or components that are relied upon for accident mitigation.

Therefore, the proposed exemption does not involve a significant reduction in a margin of safety.

Based on the above, FENOC concludes that the proposed exemption does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of “no significant hazards consideration” is justified.

- (ii) There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

The proposed exemption for limited protected area physical barrier fencing sections will not result in changes to the systems, structures, or components that function to limit or monitor the release of effluents. Therefore, there is no expected change in the type or amount of effluents that may be released offsite with the proposed exemption.

- (iii) There is no significant increase in individual or cumulative public or occupational radiation exposure.

The proposed exemption for limited protected area physical barrier fencing sections is not expected to increase individual or cumulative public or occupational radiation exposure. There are no expected changes in normal occupational doses.

- (iv) There is no significant construction impact.

No construction activities are associated with the proposed exemption.

- (v) There is no significant increase in the potential for or consequences from radiological accidents.

As discussed in the no significant hazards consideration analysis in Item (i) above, the proposed exemption for limited protected area physical barrier fencing sections is not expected to increase the potential for or consequences from radiological accidents.

- (vi) The requirement from which an exemption is sought involves safeguard plans or other requirements of an administrative, managerial, or organizational nature.

The proposed exemption to 10 CFR 73.2 would allow the existing limited protected area physical barrier fences at BVPS, DBNPS, and PNPP to remain topped by three strands or more of barbed wire or similar material that are vertically oriented on and near gates, near interfaces with buildings, on corners, and, in the case of DBNPS, near the IDS. This exemption involves safeguard plans.

6.0 CONCLUSION

Pursuant to 10 CFR 73.5, the requested exemption is authorized by law, will not endanger life or property or the common defense and security, and does not have an adverse effect on public interest. Approval of this exemption request does not violate the underlying purpose of the regulation.

7.0. REFERENCES

1. Safety Evaluation by the Office of Nuclear Reactor Regulation and the Office of Nuclear Security and Incident Response Related to Order EA-03-086 to Facility Operating License Nos. DPR-66 and NPF-73, FirstEnergy Nuclear Operating Company (FENOC) Beaver Valley Power Station (BVPS, Units 1 and 2), Docketed Nos. 50-334 and 50-412, dated 10/28/04.
2. Safety Evaluation by the Office of Nuclear Reactor Regulation and the Office of Nuclear Security and Incident Response Related to Order EA-03-086 to Facility Operating License No. NPF-3, FirstEnergy Nuclear Operating Company, Davis-Besse Nuclear Power Station, Docket No. 50-346, dated 10/28/04.
3. Safety Evaluation by the Office of Nuclear Reactor Regulation and the Office of Nuclear Security and Incident Response Related to Order EA-03-086 to Facility Operating License No. NPF-58, FirstEnergy Nuclear Operating Company (FENOC), Perry Nuclear Power Plant, Unit 1, Docket No. 50-440, dated 10/28/04.