

NRR-DMPSPeM Resource

From: Vaidya, Bhalchandra
Sent: Friday, February 09, 2018 1:17 PM
To: Lashley, Phil H.; Lentz, Thomas A. (Licensing)
Subject: FENOC--MG0010-MG0011, MG-0012, MG0013-- REQUEST FOR ADDITIONAL INFORMATION (RAI) - EXEMPTION REQUEST RE: SECURITY BARRIER IN PHYSICAL PLANS
Attachments: REQUEST FOR ADDITIONAL INFORMATION.docx

Subject: Request For Additional Information Re: FENOC FLEET-- Exemption Request for a Physical Barrier Requirement for Beaver Valley 1 and 2, Davis-Besse, and Perry, dated July 19, 2017.

EPID- L-2017-LLE-0019 (CAC NOS. 000976/05000334/L-2017-LLE-0019 MG0010, 000976/05000334/L-2017-LLE-0019 MG0011, 000976/05000334/L-2017-LLE-0019 MG0012, AND 000976/05000334/L-2017-LLE-0019 MG0013)

Docket Nos. 50-334, 50-412, 50-346, and 50-440

Tom and Phil,

By submittal dated July 19, 2017 (Agencywide Documents Access and Management System Accession No. ML17200D139), FirstEnergy Nuclear Operating Company (FENOC, or the licensee) submitted an exemption request for Renewed Facility Operating Licenses to the U.S. Nuclear Regulatory Commission (NRC), on behalf of the Beaver Valley Power Station (BVPS), Unit Nos. 1 and 2; Davis-Besse Nuclear Power Station (DBNPS); and Perry Nuclear Power Plant (PNPP), Unit 1, a request for exemption under the provisions of Title 10 of the Code of Federal Regulations, Part 73 "Physical Protection of Plants and Materials," Section 73.5 "Specific Exemptions."

The licensee requested the permanent exemption pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 73.5, "Specific exemptions," from a requirement of 10 CFR 73.2, "Definitions" for "Physical Barrier." The regulation requires, in part, fences topped by three strands or more of barbed wire or similar material on brackets 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.

The NRC staff is reviewing your submittal and has determined that additional information is required to complete the review. The specific information requested is addressed in the attached file to this communication. Subsequent to the discussion with your staff on February 7, 2018, you have provided the confirmed date of response as COB March 30, 2018.

The NRC staff considers that timely responses to requests for additional information help ensure sufficient time is available for staff review and contribute toward the NRC's goal of efficient and effective use of staff resources.

If you have any questions, please contact me at (301) 415-3308.

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Subject: FENOC--MG0010-MG0011, MG-0012, MG0013-- REQUEST FOR
ADDITIONAL INFORMATION (RAI) - EXEMPTION REQUEST RE: SECURITY BARRIER IN
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From: Vaidya, Bhalchandra

Created By: Bhalchandra.Vaidya@nrc.gov

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REQUEST FOR ADDITIONAL INFORMATION
SUBMITTAL FOR 10 CFR 73.5 "SPECIFIC EXEMPTIONS"
FIRSTENERGY NUCLEAR OPERATING COMPANY
BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2
DOCKET NOS. 50-334, 50-412; LICENSE NOS. DPR-66, 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

By letter dated July 19, 2017 (Agencywide Documents Access and Management System Accession No. ML17200D139), FirstEnergy Nuclear Operating Company (FENOC, or the licensee) submitted to the U.S. Nuclear Regulatory Commission (NRC), on behalf of the Beaver Valley Power Station (BVPS), Unit Nos. 1 and 2; Davis-Besse Nuclear Power Station (DBNPS); and Perry Nuclear Power Plant (PNPP), a request for exemption under the provisions of Title 10 of the Code of Federal Regulations, Part 73 "Physical Protection of Plants and Materials," Section 73.5 "Specific Exemptions."

In section 1, "Purpose," of the submittal the licensee states in part, that 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."

Specifically, in section 2, "Background," of the submittal, the licensee states in part, that the barbed wire on the top of physical barrier fencing at BVPS is currently oriented vertically on gates, near gates, near interfaces with buildings, and on corners, and that DBNPS and PNPP have similar configurations, except DBNPS also has vertical barbed wire on top of fences near the intrusion detection system (IDS).

In section 3, "Proposed Exemption" of the submittal, the licensee states that FENOC requests a permanent exemption to § 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.

The NRC staff notes that the citation to § 73.2, "Definitions" as specified in the submittal, is technically inaccurate. For the purpose of this request, the correct citation is § 73.55(e)(8)(i) which states in part that the protected area perimeter must be protected by physical barriers. Physical barriers are defined in § 73.2, under the "Physical Barrier" paragraph.

Specifically, the licensee has requested exemption from the "physical barrier" requirement of § 73.55(e)(8)(i) with respect to the design criteria specified in § 73.2, sub-paragraph (1) "fences," as it applies only to the angular specification for brackets used to support the required barbed wire (or similar material) topper. As stated in § 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.

In section 4, "Justification of Exemption" of the submittal, the licensee states in part, that 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.”

Additionally, the NRC staff notes that the licensee stated in the submittal that “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.” As required by § 73.55(e)(1)(ii), the licensee must describe in the security plan, physical barriers, barrier systems, and their functions within the physical protection program.

In responding to this statement, it is important to note that in the Final 2009 Part 73 Rulemaking (13936 Federal Register, Vol. 74, No. 58, Friday, March 27, 2009, Rules and Regulations) the Commission stated that “One commenter asked the NRC to clarify its position with respect to the “legally-controlling document” once it approves a licensee security plan.” The Commission responded as follows:

Once a licensee has an approved security plan, both the licensee’s security plan and the Commission’s regulations are legally controlling. Regulations are legally controlling to the extent that they set forth the regulatory framework and general performance objectives of a licensee’s security plan. The NRC-approved security plan, in contrast, describes a licensee’s method of complying with those regulations including exemptions and approved alternatives. However, that the NRC specifically approved a licensee’s security plan does not relieve the licensee from compliance with regulations. To the extent that there are differences in a licensee’s security plan and the regulatory requirements, the Commission expects that those differences would be specifically approved by the NRC, either in the form of an NRC-granted exemption, or an NRC-approved “alternative measure” as set forth in § 73.55(r).

The Commission goes on to state that:

In the rare situation in which a licensee’s security plan conflicts with NRC regulations and the NRC has not reviewed and approved the conflicting measures, the Commission expects that the staff would work with the licensee to ensure that the security plan is revised to comply with the regulatory requirement. That the security plan may have been approved with a deficiency does not excuse the licensee from compliance with the Commission’s regulations.

In this case, the NRC staff acknowledges the fact that the licensee’s NRC-approved security plans for BVPS, DBNPS, and PNPP contain a description of the vertical bracket configuration. However, consistent with the Commission’s statement in the 2009 Part 73 Rulemaking, “To the extent that there are differences in a licensee’s security plan and the regulatory requirements, the Commission expects that those differences would be specifically approved by the NRC, either in the form of an NRC-granted exemption, or an NRC-approved “alternative measure” as set forth in § 73.55(r).” In reviewing this request, the NRC staff cannot find, nor has the licensee provided, any supporting documentation that demonstrates an explicit or knowledgeable NRC-approval of this configuration as a “conflicting measure” to the definition of physical barrier in § 73.2, either in the form of an NRC-granted exemption, or an NRC-approved “alternative measure” as set forth in § 73.55(r).

Therefore, consistent with the Commission's position stated in the 2009 Part 73 Final Rulemaking, the NRC staff has determined that simply because "the security plan may have been approved with a deficiency does not excuse the licensee from compliance with the Commission's regulations." As such, "In the rare situation in which a licensee's security plan conflicts with NRC regulations and the NRC has not reviewed and approved the conflicting measures, the Commission expects that the staff would work with the licensee to ensure that the security plan is revised to comply with the regulatory requirement."

To this end, and based on the above review of the licensee's submittal, the NRC staff has determined that a request for additional information (RAI) is necessary to complete this review and support an NRC staff determination regarding the requested exemption. Specifically, the statement in section 4 of the submittal that the affected configuration "does not have an adverse impact on the site protective strategies and will continue to protect against the design basis threat of radiological sabotage" does not provide sufficient technical basis to process this request. Therefore, the NRC staff requests additional information addressing the requirements in §§ 73.55(e), 73.55(e)(1), 73.55(e)(2), and 73.55(e)(3).

§ 73.55(e) Physical barriers. Each licensee shall identify and analyze site-specific conditions to determine the specific use, type, function, and placement of physical barriers needed to satisfy the physical protection program design requirements of § 73.55(b).

1. The licensee shall:
 - a. Design, construct, install, and maintain physical barriers as necessary to control access into facility areas for which access must be controlled or denied to satisfy the physical protection program design requirements of paragraph (b) of this section.
 - b. Describe in the security plan, physical barriers, barrier systems, and their functions within the physical protection program.
2. The licensee shall retain, in accordance with § 73.70, all analyses and descriptions of the physical barriers and barrier systems used to satisfy the requirements of this section, and shall protect these records in accordance with the requirements of § 73.21.
3. Physical barriers must:
 - a. Be designed and constructed to:
 - i. Protect against the design basis threat of radiological sabotage;
 - ii. Account for site-specific conditions; and
 - iii. Perform their required function in support of the licensee physical protection program.
 - b. Provide deterrence, delay, or support access control.
 - c. Support effective implementation of the licensee's protective strategy.

RAI #1: As required by §§ 73.55(e) and 73.55(e)(3)(i)(B), describe the site-specific conditions and locations, in relation to site layout, that were identified and analyzed to determine the specific use, type, function, and placement of the affected physical barriers (fences) and the need for the vertical bracket configuration at each location. Specifically, clarify the locations of fence sections described in the submittal (i.e., the vertical configuration of barbed wire on the top of limited protected area sections (on gates, near gates, near interfaces with buildings, and on corners at BVPS, and similar configurations at DBNPS and PNPP, to include near the IDS at

DBNPS), and clarify the technical basis/need for the vertical bracket configuration at each location to which it is applied.

RAI #2: As required by § 73.55(e)(1), describe the technical basis for the vertical bracket design, construction, installation, and maintenance relative to the capability to control access into facility areas for which access must be controlled or denied, and how the vertical bracket configuration satisfies the physical protection program design requirements of § 73.55(b).

Specifically, describe how the vertical bracket configuration ensures that the requirements of §§ 73.55(e)(3) and 73.55(e)(8) are effectively met relative to: (1) protection against the design basis threat; (2) performance of the intended function (limit access, channeling to access portals, deterrence, delay, and/or support to access controls); (3) the level of deterrence, delay, and/or support to access controls relied upon by the physical protection program; and (4) the function that the fence performs in support of the protective strategy (to include any impact to adversary or responder timelines that are dependent upon the delay assigned to the fence and/or confirm that delay time provided by the vertical bracket configuration has been accounted for in the licensee's protective strategy for both adversary and responder timelines).

§ 73.55(e)(3) states that physical barriers must:

- (1) Be designed and constructed to
 - a. Protect against the design basis threat of radiological sabotage;
 - b. Account for site-specific conditions; and
 - c. Perform their required function in support of the licensee physical protection program.
- (2) Provide deterrence, delay, or support access control.
- (3) Support effective implementation of the licensee's protective strategy.

§ 73.55(e)(8)(i) states in part that the "protected area perimeter must be protected by physical barriers that are designed and constructed to:

- (A) Limit access into the protected area to only those personnel, vehicles, and materials required to perform official duties;
- (B) Channel personnel, vehicles, and materials to designated access control portals";

RAI #3: Provide any analyses performed to establish or confirm the technical basis for the affected configuration and/or information supporting the capability of the affected configuration to satisfy applicable Commission requirements and ensure the effectiveness of the protective strategy, to include any impact to adversary or responder timelines that are dependent upon the delay assigned to the fence and/or confirm that delay time provided by the vertical bracket configuration has been accounted for in the licensee's protective strategy for both adversary and responder timelines. As required by § 73.55(e)(2), the licensee shall retain, in accordance with § 73.70, all analyses and descriptions of the physical barriers and barrier systems used to satisfy the requirements of this section, and shall protect these records in accordance with the requirements of § 73.21.