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November 19, 2015
L-15-341

10 CFR 50.90

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, Unit No. 1
Docket No. 50-346, License No. NPF-3
License Amendment Request to Modify Technical Specification 5.3.1

Pursuant to 10 CFR 50.90, FirstEnergy Nuclear Operating Company (FENOC) is requesting an amendment to both the Beaver Valley Power Station, Units No. 1 and No. 2 (BVPS) and the Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS) Technical Specifications (TS). The proposed amendment would revise TS 5.3.1, "Unit Staff Qualifications," by incorporating an exception to ANSI N18.1-1971, "Selection and Training of Nuclear Power Plant Personnel," that would require licensed operators to comply with the requirements of 10 CFR 55, "Operators' Licenses" in lieu of the ANSI standard.

An evaluation of the proposed amendment is enclosed. FENOC is requesting Nuclear Regulatory Commission (NRC) staff approval by December 1, 2016. Implementation of the amendment by FENOC is planned within 90 days of its approval.

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Davis-Besse Nuclear Power Station, Unit No. 1
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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.

I declare under penalty of perjury that the foregoing is true and correct. Executed on November 19, 2015.

Sincerely,



Paul A. Harden

Enclosure:
Evaluation of a Request for Licensing Action

cc: NRC Region I Administrator
NRC Region III Administrator
NRC BVPS Resident Inspector
NRC DBNPS Resident Inspector
NRC BVPS Project Manager
NRC DBNPS Project Manager
NRC FENOC Project Manager
Director, Pennsylvania Bureau of Radiation Protection, Department of
Environmental Protection
Beaver Valley Power Station Safety Specialist, Division of Nuclear Safety,
Pennsylvania Bureau of Radiation Protection, Department of Environmental
Protection
Executive Director, Ohio Emergency Management Agency,
State of Ohio (NRC Liaison)
Utility Radiological Safety Board (Ohio)

Evaluation of a Request for Licensing Action
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Subject: Request for licensing action to revise Beaver Valley Power Station, Unit Nos. 1 and 2, and Davis-Besse Nuclear Power Station, Unit No. 1 Technical Specification 5.3.1 to change the unit staff qualification education and experience eligibility requirements for licensed operators.

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Attachments:

- 1. Beaver Valley Power Station, Unit Nos. 1 and 2, Proposed Technical Specification Change (Mark up)**
- 2. Beaver Valley Power Station, Unit Nos. 1 and 2, Proposed Technical Specification Change (Re-typed – For Information Only)**
- 3. Davis-Besse Nuclear Power Station, Unit No. 1, Proposed Technical Specification Change (Mark up)**
- 4. Davis-Besse Nuclear Power Station, Unit No. 1, Proposed Technical Specification Change (Re-typed – For Information Only)**

1.0 SUMMARY DESCRIPTION

This evaluation supports a request to amend Operating License Nos. DPR-66 and NPF-73 for Beaver Valley Power Station, Unit Nos. 1 and 2 (BVPS), and NPF-3 for Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS).

The proposed amendment would revise the BVPS and the DBNPS Technical Specifications (TS) 5.3.1, "Unit Staff Qualifications," by incorporating an exception to ANSI N18.1-1971, "Selection and Training of Nuclear Power Plant Personnel," that would only require licensed operators to comply with the requirements of 10 CFR 55, "Operators' Licenses" in lieu of the ANSI standard. 10 CFR 55 permits the use of an accredited training program for licensed operator training. Use of 10 CFR 55 would permit the use of the National Academy for Nuclear Training Document, ACAD 10-001 (also referred to as NANT 2010), February 2010, "Guidelines for Initial Training and Qualification of Licensed Operators" (Reference 1) for the education and experience eligibility requirements for licensed operators.

2.0 DETAILED DESCRIPTION

The proposed amendment revises BVPS TS 5.3.1, "Unit Staff Qualifications," by incorporating an exception to ANSI N18.1-1971, which states: "The licensed operators who shall comply with the requirements of 10 CFR 55."

The proposed amendment revises DBNPS TS 5.3.1, "Unit Staff Qualifications," by incorporating an exception to ANSI N18.1-1971 for licensed operators, and by adding a statement that states: "The licensed operators shall comply with the requirements of 10 CFR 55."

A copy of BVPS TS 5.3.1 marked up with the proposed change is provided as Attachment 1. An information only copy of BVPS TS 5.3.1, re-typed with the proposed change incorporated, is provided as Attachment 2. A copy of DBNPS TS 5.3.1 marked up with the proposed changes is provided as Attachment 3. An information only copy of DBNPS TS 5.3.1, re-typed with the proposed changes incorporated, is provided as Attachment 4.

3.0 TECHNICAL EVALUATION

The BVPS and DBNPS unit staff qualification and training programs, including the licensed operator training programs are based, in part, on ANSI N18.1-1971. Use of the Nuclear Regulatory Commission (NRC)-endorsed standard ensured that the licensee's staff was appropriately qualified and trained. The initial BVPS staff training programs were NRC approved in 1986, while the DBNPS staff training programs were NRC approved in 1976.

On March 20, 1985, the NRC issued the Commission Policy Statement on training and qualification of nuclear power plant personnel that endorsed the training accreditation program developed by the Institute of Nuclear Power Operations (INPO), in association with its National Academy for Nuclear Training (NANT).

On March 19, 1987, the NRC issued Generic Letter (GL) 87-07, "Information Transmittal of Final Rulemaking for Revisions to Operator Licensing - 10 CFR Part 55 and Conforming Amendments," which informed licensees that they had the option of substituting an accredited, systems approach to training (SAT) based program for their operator training program previously approved by the NRC. The GL indicated that this option may be implemented upon written notification to the NRC and that it did not require any staff review. The GL also noted the NRC's expectation that facility licensees would update their licensing basis documents, as necessary, to conform to their accredited program status. The BVPS training programs were accredited in 1985, while the DBNPS training programs were accredited in 1986. The Updated Final Safety Analysis Reports for both BVPS and DBNPS were revised to reflect the accreditation of the various training programs, including the license operator training program. By letters dated September 11, 1989 (BVPS) and March 29, 1988 (DBNPS), the NRC was notified that the licensed operator training program at each site was accredited and based upon SAT.

On March 25, 1987, the NRC published a revision to 10 CFR 55, "Operators' Licenses," that incorporated the use of an accredited licensed operator training program into the regulation.

In 2001, the NRC issued Regulatory Issue Summary (RIS) 2001-01, "Eligibility of Operator License Applicants." The RIS indicated that a licensee's training program would be considered approved by the NRC when it is accredited by the National Nuclear Accrediting Board (NNAB). Additionally, the RIS stated that the NANT 2000 guidelines for education and experience outline acceptable methods for implementing NRC regulations in this area with regard to eligibility for licensed operators.

In a 2009 INPO/NRC meeting (Reference 2), participants discussed changes to the guidelines for initial training and qualification of licensed operators and that the changes would eventually be incorporated into ACAD 10-00X (which later became ACAD 10-001). The NRC supported the INPO initiative and did not provide any significant comments to the proposed eligibility requirement changes for reactor operators and senior reactor operators.

At a 2010 Industry Focus Group (FG) meeting (Reference 3), the group discussed the license eligibility requirements being revised in ACAD 09-001 (which evolved into ACAD 10-001). The NRC provided the following guidance:

NRC staff emphasized that eligibility should not be determined by the selective use of parts of the current version of ACAD 09-001 and parts of the revision to

ACAD 09-001, but instead eligibility should be determined by the use of either the current version of ACAD 09-001 in its entirety or the revision to ACAD 09-001 in its entirety.

In the Operator Licensing Program Feedback (Reference 4), the NRC considers the eligibility guidelines for education and experience at existing nuclear power plants promulgated by NANT including those that were issued in ACAD 10-001 as acceptable methods for meeting 10 CFR 55.31(a)(4) with the exception of the Direct SRO for SRO-Certified Instructor.

The proposed license amendment will revise the BVPS and DBNPS TS unit staff requirements for licensed operators from those identified in ANSI N18.1-1971 to those identified in 10 CFR 55. Use of an accredited, SAT-based training program can be used to satisfy the regulatory requirements. Since ACAD 10-001 provides guidance for accredited licensed operator training programs, which includes licensed operator education and experience eligibility requirements, ACAD 10-001 can be used to satisfy the regulatory requirements for licensed operators except for the Direct SRO for SRO-Certified Instructors.

4.0 REGULATORY EVALUATION

FirstEnergy Nuclear Operating Company (FENOC) proposes to amend the Beaver Valley Power Station, Unit Nos. 1 and 2 (BVPS), and the Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS) Technical Specifications (TS). The proposed amendment would modify both BVPS TS 5.3.1, "Unit Staff Qualifications," and DBNPS TS 5.3.1, "Unit Staff Qualifications," by incorporating changes that include an exception to ANSI N18.1-1971 stating that licensed operators will comply with the requirements of 10 CFR 55 in lieu of the ANSI standard.

4.1 Significant Hazards Consideration

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

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed license amendment is a change to the administrative section of the BVPS and DBNPS TS. The NRC has determined that accredited training programs based upon the systems approach to training (SAT) are acceptable for satisfying regulatory

requirements contained in 10 CFR 55. The BVPS and DBNPS licensed operator training programs are Institute of Nuclear Power Operations (INPO) National Academy for Nuclear Training (NANT) accredited programs based on the SAT. Hence, the BVPS and DBNPS licensed operator training programs satisfy NRC requirements contained in 10 CFR 55. The ability of licensed operators to respond to and mitigate accidents is unchanged by the proposed TS changes. The proposed changes do not impact the design, operation, or maintenance of any plant system, structure, or component at either BVPS or DBNPS.

Based on the above, FENOC concludes that the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No.

The proposed amendment involves changes to the BVPS and DBNPS TS that aligns the TS with 10 CFR 55. 10 CFR 55 permits the use of INPO accredited licensed operator training programs to meet regulatory requirements. The BVPS and DBNPS licensed operator training programs are accredited, therefore, the NRC requirements are satisfied. The ability of licensed operators to respond to and mitigate accidents is unchanged by the proposed TS changes. The proposed changes do not impact the design, operation, or maintenance of any plant system, structure, or component at either BVPS or DBNPS.

Based on the above discussion, FENOC concludes that the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

Response: No.

The proposed TS changes are administrative in nature. The proposed changes do not impact the design, operation, or maintenance of any plant system, structure, or component at either BVPS or DBNPS. The ability of licensed operators to respond to and mitigate accidents is unchanged by the proposed TS changes.

Based on the above, FENOC concludes that the proposed amendment 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.

4.2 Applicable Regulatory Requirements/Criteria

10 CFR 50.120

10 CFR 50.120, "Training and qualification of nuclear power plant personnel," requires each nuclear power plant licensee to establish, implement, and maintain training and qualification programs that are derived from a systems approach to training as defined in 10 CFR 55.4. Both BVPS and DBNPS have accredited licensed operator training programs based upon the systems approach to training. The proposed amendment does not adversely impact the BVPS or DBNPS accredited licensed operator training programs. Therefore, the 10 CFR 50.120 requirements are satisfied.

10 CFR 55

10 CFR 55, "Operators' Licenses," Subpart D, "Applications," requires that operator license applications include a certification that provides the applicant's qualifications, and details on courses taken, training received, and startup and shutdown experience. The regulation states that in lieu of these details, the NRC may accept certification that the applicant has completed an NRC-approved training program based on a systems approach to training. Both BVPS and DBNPS have accredited licensed operator training programs based upon the systems approach to training. The proposed amendment does not adversely impact the BVPS or DBNPS licensed operator training programs. Therefore, the 10 CFR 55 requirements are satisfied.

NUREG-1021

NUREG-1021, "Operator Licensing Examination Standards For Power Reactors," Revision 10, Section ES-202, "Preparing and Reviewing Operator Licensing Applications," states, in part, that:

Nonetheless, the fact that every facility licensee has voluntarily obtained and periodically renewed the accreditation of its licensed operator training program suggests that every facility licensee is implementing the education and experience guidelines endorsed by the NNAB. Specifically, the NRC staff understands that the current version of those guidelines is outlined in the NANT "Guidelines for Initial Training and Qualification of Licensed Operators," which were issued in February 2010 (NANT 2010 guidelines). Unless otherwise

informed by a facility licensee, the NRC staff believes that the education and experience guidelines described in the "Guidelines for Initial Training and Qualification of Licensed Operators", NANT 2010, constitute the facility licensee's education and experience requirements to be licensed as an RO or SRO.

Since the BVPS and DBNPS licensed operator training programs are accredited, the proposed license amendment will enable the two programs to align with the aforementioned NUREG-1021 requirements, which accepts the use of NANT 2010 (also referred to as ACAD 10-001) guidelines.

4.3 Precedent

A similar license amendment for various EXELON nuclear power plants was approved for the elimination of a specific TS reference to an EXELON letter that contained the education and experience requirements for licensed operator applicants, and the inclusion of a requirement for licensed operators to comply with 10 CFR 55. The license amendment was approved on June 20, 2013 (Accession No. ML13079A372).

4.4 Conclusions

The proposed license amendment will change the BVPS and DBNPS TS, for licensed operators, to reflect compliance with 10 CFR 55. One of the methods that can be used to comply with 10 CFR 55 is to have an accredited licensed operator training program. Since BVPS and DBNPS both have accredited licensed operator training programs, 10 CFR 55 is satisfied.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the NRC's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

5.0 ENVIRONMENTAL CONSIDERATION

The proposed amendment is confined to changes to administrative procedures or requirements. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6.0 REFERENCES

1. National Academy for Nuclear Training (NANT) Document, ACAD 10-001, Revision 0, "Guidelines for Initial Training and Qualification of Licensed Operators," dated February 2010.
2. NRC Memorandum: Frederick D. Brown to John McHale, "Summary of the November 23, 2009, Public Meeting with the Institute of Nuclear Power Operations to Discuss Guidelines for Initial Training and Qualification of Licensed Operators," dated December 4, 2009 (ML093290023).
3. NRC Memorandum: Frederick D. Brown to John McHale, "Summary of January 13, 2010, Meeting with Industry Focus Group on Operator Licensing Issues," dated February 12, 2010 (ML100330995).
4. Operator Licensing Program Feedback, NRC Website (<http://www.nrc.gov/reactors/operator-licensing/op-licensing-files/ol-feedback.pdf>), Question 202.20 involving the use of NANT ACAD 10-001.

Attachment 1

**Beaver Valley Power Station, Unit Nos. 1 and 2, Proposed Technical
Specification Change (Mark up)
(One page follows)**

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

5.3.1 Each member of the unit and radiation protection staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for the following:

- The operations manager as specified in Specification 5.2.2.e,
- The radiation protection manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, and
- The technical advisory engineering representative who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design and response analysis of the plant for transients and accidents.

5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Reactor Operator (SRO) and a licensed Reactor Operator (RO) are those individuals who, in addition to meeting the requirements of Specification 5.3.1, perform the functions described in 10 CFR 50.54(m).

INSERT:

- The licensed operators who shall comply with the requirements of 10 CFR 55.

Attachment 2

**Beaver Valley Power Station, Unit Nos. 1 and 2, Proposed Technical
Specification Change (Re-typed – For Information Only)
(One page follows)**

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

5.3.1 Each member of the unit and radiation protection staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for the following:

- The operations manager as specified in Specification 5.2.2.e,
- The radiation protection manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, and
- The technical advisory engineering representative who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design and response analysis of the plant for transients and accidents.
- The licensed operators who shall comply with the requirements of 10 CFR 55.

5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Reactor Operator (SRO) and a licensed Reactor Operator (RO) are those individuals who, in addition to meeting the requirements of Specification 5.3.1, perform the functions described in 10 CFR 50.54(m).

Attachment 3

**Davis-Besse Nuclear Power Station, Unit No. 1, Proposed Technical
Specification Change (Mark up)
(One page follows)**

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N16.1-1971 for comparable positions, except for the radiation protection manager, and the operations manager. The radiation protection manager shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975. The operations manager shall be qualified as required by Specification 5.2.2.e. ←

5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Operator and a licensed Operator are those individuals who, in addition to meeting the requirements of Specification 5.3.1, perform the functions described in 10 CFR 50.54(m).

INSERT:
, and licensed operators.

INSERT:
The licensed operators shall comply
with the requirements of 10 CFR 55.

Attachment 4

**Davis-Besse Nuclear Power Station, Unit No. 1, Proposed Technical
Specification Change (Re-typed – For Information Only)
(One page follows)**

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for the radiation protection manager, the operations manager, and licensed operators. The radiation protection manager shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975. The operations manager shall be qualified as required by Specification 5.2.2.e. The licensed operators shall comply with the requirements of 10 CFR 55.

5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Operator and a licensed Operator are those individuals who, in addition to meeting the requirements of Specification 5.3.1, perform the functions described in 10 CFR 50.54(m).
