UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 11, 2017

Mr. Brian D. Boles
Site Vice President
FirstEnergy Nuclear Operating Company
Mail Stop A-DB-3080
5501 North State Route 2
Oak Harbor, OH 43449-9760

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1 - ISSUANCE OF AMENDMENT REVISING TECHNICAL SPECIFICATION REQUIREMENTS FOR THE RADIOACTIVE EFFLUENT CONTROLS PROGRAM (CAC NO. MF7351)

Dear Mr. Boles:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 293 to Renewed Facility Operating License No. NPF-3 for the Davis-Besse Nuclear Power Station, Unit No. 1. The amendment is in response to your application dated February 9, 2016 (Agencywide Documents Access and Management System Accession No. ML16041A115).

The amendment revises the technical specification requirements for limitations on the radioactive material released in liquid and gaseous effluents and the references for the radioactive material effluent requirements.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

Blake Purnell, Project Manager
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosures:
1. Amendment No. 293 to NPF-3
2. Safety Evaluation

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

FIRSTENERGY NUCLEAR OPERATING COMPANY

AND

FIRSTENERGY NUCLEAR GENERATION, LLC

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

DOCKET NO. 50-346

Amendment No. 293
Renewed License No. NPF-3

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment filed by FirstEnergy Nuclear Operating Company (FENOC, the licensee) dated February 9, 2016, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-3 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 293, are hereby incorporated in the renewed license. FENOC shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

David J. Wrona, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications and Renewed Facility Operating License

Date of Issuance: January 11, 2017

ATTACHMENT TO LICENSE AMENDMENT NO. 293

RENEWED FACILITY OPERATING LICENSE NO. NPF-3

DOCKET NO. 50-346

Replace the following pages of the Renewed Facility Operating License and Appendix A, Technical Specifications (TS), with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove	Insert
Renewed License NPF-3	Renewed License NPF-3
L-5	L-5
TS pages	TS pages
5.5-2	5.5-2
5.5-3	5.5-3

2.C. This renewed license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

FENOC is authorized to operate the facility at steady state reactor core power levels not in excess of 2817 megawatts (thermal). Prior to attaining the power level, Toledo Edison Company shall comply with the conditions identified in Paragraph (3) (o) below and complete the preoperational tests, startup tests and other items identified in Attachment 2 to this license in the sequence specified. Attachment 2 is an integral part of this renewed license.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 293, are hereby incorporated in the renewed license. FENOC shall operate the facility in accordance with the Technical Specifications.

(3) Additional Conditions

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the renewed license or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the renewed license supported by a favorable evaluation by the Commission:

(a) FENOC shall not operate the reactor in operational Modes 1 and 2 with less than three reactor coolant pumps in operation.

(b) Deleted per Amendment 6

(c) Deleted per Amendment 5

5.5 Programs and Manuals

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include makeup, letdown, seal injection, seal return, low pressure injection, containment spray, high pressure injection, waste gas, primary sampling, and reactor coolant drain systems. The program shall include the following:

a. Preventive maintenance and periodic visual inspection requirements; and

b. Integrated leak test requirements for each system at least once per 24 months.

The provisions of SR 3.0.2 are applicable.

5.5.3 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to ten times the concentration values in Appendix B, Table 2, Column 2 to 10 CFR 20.1001 – 20.2402;

c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM;

d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10 CFR 50, Appendix I;

e. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days. Determination of projected dose contributions from radioactive effluents in accordance with the methodology in the ODCM at least every 31 days;

5.5 Programs and Manuals

5.5.3 Radioactive Effluent Controls Program (continued)

f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50, Appendix I;

g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the site boundary shall be in accordance with the following:

1. For noble gases: a dose rate ≤ 500 mrem/yr to the whole body and a dose rate ≤ 3000 mrem/yr to the skin, and

2. For iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives > 8 days: a dose rate ≤ 1500 mrem/yr to any organ;

h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;

i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and

j. Limitations on the annual dose or dose commitment to any member of the public, beyond the site boundary, due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Radioactive Effluent Controls Program Surveillance Frequencies.

5.5.4 Reactor Vessel Internals Vent Valves Program

A program shall be established to implement the testing of the reactor vessel internals vent valves every 24 months as follows:

a. Verify by visual inspection that the valve body and valve disc exhibit no abnormal degradation;

b. Verify the valve is not stuck in an open position; and

c. Verify by manual actuation that the valve is fully open when a force of ≤ 400 lbs is applied vertically upward.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Reactor Vessel Internals Vent Valves Program test Frequencies.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. 293 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-3

FIRSTENERGY NUCLEAR OPERATING COMPANY

FIRSTENERGY NUCLEAR GENERATION, LLC

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

DOCKET NO. 50-346

1.0 INTRODUCTION

By application dated February 9, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16041A115), FirstEnergy Nuclear Operating Company (FENOC, the licensee) submitted a license amendment request (LAR) for the Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS). The proposed amendment would revise the Technical Specification (TS) 5.5.3, "Radioactive Effluent Controls Program," limitations on radioactive material released in liquid and gaseous effluents.

The U.S. Nuclear Regulatory Commission (NRC or Commission) staff published a proposed no significant hazards consideration determination for the proposed amendment in the *Federal Register* on March 29, 2016 (81 FR 17506).

2.0 REGULATORY EVALUATION

2.1 Background

In 1991 (56 FR 23360), the NRC issued a complete revision of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20, "Standards for Protection Against Radiation." Licensees were initially required to comply with the revised rule by January 1, 1993, but the NRC later extended the implementation period to January 1, 1994 (57 FR 38588). The LAR states that the proposed change is intended to maintain the same overall level of effluent control while regaining operational flexibility that existed in the TS before 10 CFR Part 20 was revised.

2.2 Regulatory Review

The NRC staff considered the following licensing and regulatory requirements and guidance in its review of the application.

The regulations in 10 CFR 20.1101, "Radiation protection programs," require, in part, that licensees use, to the extent practical, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are "as low as is reasonably achievable" (ALARA).

The regulations in 10 CFR 20.1301, "Dose limits for individual members of the public," require, in part, that licensees conduct operations such that: (1) the total effective dose equivalent to individual members of the public from the licensed operation does not exceed 100 millirem (mrem) in a year, and (2) the dose in any unrestricted area from external sources does not exceed 2 mrem in any 1 hour. In addition, 10 CFR 20.1301(e) requires that licensees comply with the Environmental Protection Agency's generally applicable environmental radiation standards in 40 CFR Part 190, "Environmental Radiation Protection Standards for Nuclear Power Operations," which establish limits on total annual doses from all sources of radioactivity contained in liquid and gaseous effluent discharges and external radiation from site buildings and facilities. The 40 CFR Part 190 total annual dose limits to a member of the public are 25 mrem to the whole body, 75 mrem to the thyroid, and 25 mrem to any other organ.

Appendix B to 10 CFR Part 20, "Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage," contains a tabulated listing of effluent concentrations in air and in water (Table 2, columns 1 and 2, respectively) that correspond to concentrations which would result in a total effective dose equivalent of 50 mrem to a member of the public in an unrestricted area if continuously inhaled or ingested over the course of 1 year. For gaseous effluents where submersion (external dose) is limiting, the air concentration limits correspond to a whole body dose of 100 mrem.

The regulations in 10 CFR 50.36a, "Technical specifications on effluents from nuclear power reactors," provide requirements for the content of TSs to keep releases of radioactive materials to unrestricted areas during normal conditions, including expected occurrences, ALARA. The TSs shall require that the licensee: (1) comply with the applicable provisions of 10 CFR 20.1301, and (2) develop and follow operating procedures for the control of effluents. In implementing the operating procedures, 10 CFR 50.36a(b) indicates that compliance with these TSs will keep average annual releases of radioactive material in effluents and their resultant committed effective dose equivalents at small percentages of the dose limits specified in 10 CFR 20.1301. In addition, 10 CFR 50.36a(b) permits licensees operational flexibility which may temporarily result in releases higher than such small percentages, but still within the limits specified in 10 CFR 20.1301, and expects that the licensee will exert its best efforts to keep levels of radioactive material in effluents ALARA.

For power reactors, Appendix I to 10 CFR Part 50, "Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion 'As Low as is Reasonably Achievable' for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents," contains numerical guides to meet the 10 CFR 50.36a ALARA requirements. Appendix I specifies that the calculated annual total quantity of all radioactive material released from a site in liquid effluents will not result in an estimated annual dose or dose commitment of more than 3 mrem to the total body or 10 mrem to any organ to an individual in an unrestricted area. Appendix I specifies that the calculated annual total quantity of all radioactive material released from a site to the atmosphere will not result in an estimated annual air dose from gaseous

effluents, at any location near ground level that could be occupied by individuals in an unrestricted area, in excess of 10 millirads for gamma radiation or 20 millirads for beta radiation. Appendix I specifies that the calculated annual total quantity of all radioactive iodine and radioactive material in particulate form released from a site to the atmosphere will not result in an estimated annual dose or dose commitment to any individual in the unrestricted area, from all pathways of exposure, in excess of 15 mrem to any organ. Thus, Appendix I contains more stringent radiological criteria than the regulatory limits specified in 10 CFR Part 20.

NUREG-1430, "Standard Technical Specifications, Babcock and Wilcox Plants," Revision 4.0, published April 2012 (ADAMS Accession No. ML12100A177), contains guidance on the standard format and content of the TSs applicable to DBNPS. TS 5.5.4, "Radioactive Effluent Controls Program," in NUREG-1430 provides standard TS wording for the implementation of certain 10 CFR 50.36a requirements. The licensee proposes to revise DBNPS TS 5.5.3.b and TS 5.5.3.g to be consistent with TS 5.5.4.b and TS 5.5.4.g, respectively, in NUREG-1430, Revision 4.0. In June 1999, the NRC approved Technical Specification Task Force (TSTF) Traveler TSTF-258, "Changes to Section 5.0, Administrative Controls," Revision 4 (ADAMS Accession No. ML040620102), which included changes to the radioactive effluents control program similar to what the licensee has proposed. The changes in TSTF-258, Revision 4, were subsequently incorporated into NUREG-1430.

2.3 Description of Proposed TS Changes

Currently, DBNPS TS 5.5.3.b states that the radioactive effluent controls program shall include:

> Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to the concentration values in Appendix B, Table 2, Column 2 to 10 CFR 20;

The licensee proposes to revise TS 5.5.3.b to state that the program shall include:

> Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to ten times the concentration values in Appendix B, Table 2, Column 2 to 10 CFR 20.1001 – 20.2402;

Currently, DBNPS TS 5.5.3.g states that the program shall include:

> Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas beyond the site boundary shall be in accordance with Appendix B, Table 2, Column 1 to 10 CFR 20;

The licensee proposes to revise TS 5.5.3.g to explicitly specify the dose rate limits for gaseous effluents in mrem per year (mrem/yr). The licensee proposes to revise TS 5.5.3.g to state that the program shall include:

> Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the site boundary shall be in accordance with the following:

1. For noble gases: a dose rate ≤ 500 mrem/yr to the whole body and a dose rate ≤ 3000 mrem/yr to the skin, and

2. For iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives > 8 days: a dose rate ≤ 1500 mrem/yr to any organ;

3.0 TECHNICAL EVALUATION

FENOC cited amendments issued to Limerick Generating Station, Units 1 and 2 (ADAMS Accession No. ML071760167), on June 29, 2007, as precedent for its LAR. The NRC staff considered this precedent insofar as it relates to FENOC's proposed changes to DBNPS TS 5.5.3.b and TS 5.5.3.g.

3.1 Liquid Radioactive Effluent Releases

DBNPS TS 5.5.3.b provides limitations on the concentrations of radioactive material in liquid effluents released to unrestricted areas. The concentration limits in DBNPS TS 5.5.3.b are for instantaneous releases, whereas the concentrations in 10 CFR Part 20, Appendix B, Table 2, are annual average concentrations. Currently, the licensee may release liquid effluents with instantaneous radioactive material concentrations less than or equal to the concentration values in 10 CFR Part 20, Appendix B, Table 2, Column 2. The proposed change would allow the licensee to release liquid effluents with instantaneous radioactive material concentrations up to ten times the concentration values in 10 CFR Part 20, Appendix B, Table 2, Column 2. These revised limits are equivalent to a dose rate limit of 500 mrem/yr (approximately 0.057 mrem/hour).

DBNPS TS 5.5.3.c requires the licensee to monitor, sample, and analyze liquid effluents in accordance with 10 CFR 20.1302. DBNPS TS 5.5.3.d requires the licensee to establish limitations on the quarterly and annual doses to members of the public from radioactive liquid effluents released to unrestricted areas to levels conforming to 10 CFR Part 50, Appendix I. DBNPS TS 5.5.3.e requires the licensee to determine the cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year at least every 31 days. DBNPS TS 5.5.3.j requires the licensee to establish limitations on the annual dose to any member of the public due to releases of radioactivity conforming to 40 CFR Part 190. The licensee has not proposed any changes to DBNPS TS 5.5.3.c, TS 5.5.3.d, TS 5.5.3.e, or TS 5.5.3.j.

Thus, the licensee must continue to meet the ALARA criteria in 10 CFR Part 50, Appendix I, which limit the annual public dose from liquid effluents to 3 mrem to the total body and 10 mrem to any organ. The licensee also must continue to meet the annual dose limits to members of the public of 100 mrem total effective dose equivalent in 10 CFR 20.1301 and 25 mrem whole body, 75 mrem thyroid, and 25 mrem to any other organ in 40 CFR Part 190. There are no regulatory limitations on the instantaneous dose rate for effluent releases. The 10 CFR 20.1301 dose limit of 2 mrem in any 1 hour from external sources is not applicable to liquid effluent releases, since the dose associated with liquid effluents comes from an internal source (i.e., through ingestion), not from external exposure. The NRC staff determined that the proposed change to DBNPS TS 5.5.3.b would not impact the licensee's ability to meet these regulatory

requirements since the monitoring, sampling, and analysis requirements, and the quarterly and annual dose limits to members of the public are unchanged.

Based on the above, the NRC staff finds the proposed increase in the instantaneous concentration limits for radioactive material in liquid effluent released to unrestricted areas to be acceptable. Specifically, with the proposed change to DBNPS TS 5.5.3.b the licensee will continue to meet the 10 CFR 50.36a requirement to keep average annual releases of radioactive material in effluents and the resulting committed effective dose equivalents at small percentages of the dose limits specified in 10 CFR 20.1301. In addition, the proposed change provides the licensee with operational flexibility to temporarily increase the radioactive concentrations in liquid effluents, as allowed by 10 CFR 50.36a, while still complying with the ALARA criteria of 10 CFR Part 50, Appendix I.

3.2 Gaseous Radioactive Effluent Releases

DBNPS TS 5.5.3.g provides limitations on the instantaneous dose rate—not annual average dose rates—resulting from radioactive material released in gaseous effluents from the site. The licensee proposes to change the instantaneous dose rate limits in TS 5.5.3.g such that they are no longer based on the annual average effluent concentrations in air that are tabulated in 10 CFR Part 20, Appendix B, Table 2, Column 1.

The proposed change also clarifies that the limitations apply *at or* beyond the site boundary; not just beyond the site boundary. The NRC staff determined that this change is acceptable since it correctly states where the limitations apply.

For noble gases, the proposed TS 5.5.3.g would allow an increase in the instantaneous whole body external dose rate limit to 500 mrem/yr (approximately 0.057 mrem/hour) and an increase in the instantaneous skin dose rate limit to 3000 mrem/yr (approximately 0.34 mrem/hour). If an individual were exposed to these maximum instantaneous dose rates for 1 hour, then the resulting dose would be less than the 10 CFR 20.1301 dose limit for external exposure of 2 mrem in any 1 hour.

For iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days, the proposed TS 5.5.3.g would establish an instantaneous organ dose rate limit of 1500 mrem/yr (approximately 0.17 mrem/hour). The 10 CFR 20.1301 dose limit of 2 mrem in any 1 hour from external sources is not applicable to iodines, tritium, and particulates because these radionuclides do not produce external exposures.

DBNPS TS 5.5.3.c requires the licensee to monitor, sample, and analyze gaseous effluents in accordance with 10 CFR 20.1302. DBNPS TS 5.5.3.e requires the licensee to determine the cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year at least every 31 days. DBNPS TS 5.5.3.h and TS 5.5.3.i require the licensee to establish limitations on the quarterly and annual doses to members of the public from noble gases, iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents to levels conforming to 10 CFR Part 50, Appendix I. DBNPS TS 5.5.3.j requires the licensee to establish limitations on the annual dose to any member of the public due to releases of radioactivity conforming to 40 CFR Part 190.

The licensee has not proposed any changes to DBNPS TS 5.5.3.c, TS 5.5.3.e, TS 5.5.3.h, TS 5.5.3.i, or TS 5.5.3.j.

Thus, the licensee must continue to meet the ALARA criteria in 10 CFR Part 50, Appendix I, which limit the annual air dose due to gaseous effluents to 10 millirad for gamma radiation and 20 millirad for beta radiation, and limit annual organ doses to members of the public to 15 mrem for iodines and particulates. The licensee also must continue to meet the annual dose limits to members of the public of 100 mrem total effective dose equivalent in 10 CFR 20.1301 and 25 mrem whole body, 75 mrem thyroid, and 25 mrem to any other organ in 40 CFR Part 190. The licensee must also comply with the 10 CFR 20.1301 dose limit of 2 mrem in any 1 hour from external sources, which is applicable to the release of noble gases. There are no regulatory limitations on the instantaneous dose rate for effluent releases. The NRC staff determined that the proposed change to DBNPS TS 5.5.3.g would not impact the licensee's ability to meet these regulatory requirements since the monitoring, sampling, and analysis requirements, the 1-hour limitation on dose from external sources, and the quarterly and annual dose limits to members of the public are unchanged.

Based on the above, the NRC staff finds the proposed change to DBNPS TS 5.5.3.g to be acceptable. Specifically, with the proposed change to DBNPS TS 5.5.3.g the licensee will continue to meet the 10 CFR 50.36a requirement to keep average annual releases of radioactive material in effluents and the resulting committed effective dose equivalents at small percentages of the dose limits specified in 10 CFR 20.1301. In addition, the proposed change provides the licensee with operational flexibility to temporarily increase the radioactive concentrations in gaseous effluents, as allowed by 10 CFR 50.36a, while still complying with the ALARA criteria of 10 CFR Part 50, Appendix I.

3.3 Technical Specification Format and Content

The NRC staff compared the format and content of the licensee's proposed TS changes with the equivalent standard TS wording in NUREG-1430, Revision 4.0. Specifically, the staff reviewed the proposed changes against TS 5.5.4.b and TS 5.5.4.g in NUREG-1430, Revision 4.0.

Currently, DBNPS TS 5.5.3.b refers to "10 CFR 20," which is understood to be the current version of the rule and not the version of the rule that existed prior to the 1991 rulemaking. The licensee proposes to change this reference to "10 CFR 20.1001 – 20.2402," which is consistent with the current section numbering in 10 CFR Part 20 and the wording in NUREG-1430, Revision 4.0. The current section numbering of 10 CFR Part 20 is different than the numbering used in the version of the rule that existed prior to the 1991 rulemaking. The NRC staff finds this change to be acceptable since it clarifies that the TS refers to the current version of the rule and does not change the intent of the TS.

The NRC staff determined that the format and content of the proposed changes to DBNPS TS 5.5.3.b and TS 5.5.3.g is acceptable since it is consistent with the standard format and content in NUREG-1430, Revision 4.0.

3.4 Technical Conclusion

The NRC staff concludes that, with the proposed changes to DBNPS TS 5.5.3, the licensee will continue to meet the 10 CFR 50.36a requirement to keep average annual releases of radioactive material in effluents and the resulting committed effective dose equivalents at small percentages of the dose limits specified in 10 CFR 20.1301. The staff has reasonable assurance that the licensee will continue to meet the ALARA criteria in 10 CFR Part 50, Appendix I, and the regulatory dose limits to individual members of the public in 10 CFR 20.1301. In addition, the proposed change provides the licensee with operational flexibility to temporarily increase the radioactive concentrations in gaseous and liquid effluents as allowed by 10 CFR 50.36a.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Ohio State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32, and 51.35, an environmental assessment and finding of no significant impact was published in the *Federal Register* on January 10, 2017 (82 FR 3028). Accordingly, based upon the environmental assessment, the Commission has determined that issuance of this amendment will not have a significant effect on the quality of the human environment.

6.0 CONCLUSION

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

Principal Contributors: S. Garry, NRR/DRA/ARCB
B. Purnell, NRR/DORL/LPL3

Date of issuance: January 11, 2017

January 11, 2017

Mr. Brian D. Boles
Site Vice President
FirstEnergy Nuclear Operating Company
Mail Stop A-DB-3080
5501 North State Route 2
Oak Harbor, OH 43449-9760

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1 - ISSUANCE OF AMENDMENT REVISING TECHNICAL SPECIFICATION REQUIREMENTS FOR THE RADIOACTIVE EFFLUENT CONTROLS PROGRAM (CAC NO. MF7351)

Dear Mr. Boles:

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Sincerely,
/RA/

Blake Purnell, Project Manager
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-346

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ADAMS Accession No: ML16298A349 *by memo

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