



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

July 9, 2015

Mr. Eric A. Larson, Site Vice President
FirstEnergy Nuclear Operating Company
Beaver Valley Power Station
Mail Stop A-BV-SEB1
P.O. Box 4, Route 168
Shippingport, PA 15077

SUBJECT: BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2 – ISSUANCE OF
AMENDMENTS RE: LICENSE AMENDMENT REQUEST TO MODIFY
EMERGENCY PREPAREDNESS PLAN REGARDING THE EMERGENCY
PLANNING ZONE BOUNDARY (TAC NOS. MF4765 AND MF4766)

Dear Mr. Larson:

The Commission has issued the enclosed Amendment No. 294 to Renewed Facility Operating License No. DPR-66 for the Beaver Valley Power Station, Unit No. 1 (BVPS-1), and Amendment No. 182 to Renewed Facility Operating License No. NPF-73 for the Beaver Valley Power Station, Unit No. 2 (BVPS-2). The amendments consist of changes to the Emergency Preparedness Plan in response to your application dated September 4, 2014, as supplemented by letter dated December 1, 2014.

The amendments modify the 10-mile emergency planning zone boundary to align it with the boundary that is used by the emergency management agencies of the three counties that implement public protective actions around BVPS.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Taylor A. Lamb", is written over a large, stylized, light-colored circular mark.

Taylor A. Lamb, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

Enclosures:

1. Amendment No. 294 to DPR-66
2. Amendment No. 182 to NPF-73
3. Safety Evaluation

cc: Listserv



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

FIRSTENERGY NUCLEAR OPERATING COMPANY

FIRSTENERGY NUCLEAR GENERATION, LLC

DOCKET NO. 50-334

BEAVER VALLEY POWER STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 294
Renewed License No. DPR-66

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by FirstEnergy Nuclear Operating Company, (FENOC)* acting on its own behalf and as agent for FirstEnergy Nuclear Generation, LLC (the licensees), dated September 4, 2014, as supplemented by letter dated December 1, 2014, 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.

* FENOC is authorized to act as agent for FirstEnergy Nuclear Generation, LLC, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

2. Accordingly, by Amendment No. 182, Facility Operating License No. NPF-73 is hereby amended to authorize revision to the Emergency Preparedness Plan as set forth in FirstEnergy Nuclear Operating Company's application dated September 4, 2014, as supplemented by letter dated December 1, 2014, and evaluated in the NRC staff's safety evaluation dated July 9, 2015.
3. The license amendment is effective as of its date of issuance and shall be implemented within 90 days.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read 'W. M. Dean', with a long horizontal flourish extending to the right.

William M. Dean, Director
Office of Nuclear Reactor Regulation

Date of Issuance: July 9, 2015



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

FIRSTENERGY NUCLEAR OPERATING COMPANY

FIRSTENERGY NUCLEAR GENERATION LLC

OHIO EDISON COMPANY

THE TOLEDO EDISON COMPANY

DOCKET NO. 50-412

BEAVER VALLEY POWER STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 182
Renewed License No. NPF-73

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by FirstEnergy Nuclear Operating Company (FENOC)* acting on its own behalf and as agent for FirstEnergy Nuclear Generation, LLC, Ohio Edison Company, and The Toledo Edison Company (the licensees), dated September 4, 2014, as supplemented by letter dated December 1, 2014, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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

* FENOC is authorized to act as agent for FirstEnergy Nuclear Generation, LLC, Ohio Edison Company, and The Toledo Edison Company and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

2. Accordingly, by Amendment No. 294, Facility Operating License No. DPR-66 is hereby amended to authorize revision to the Emergency Preparedness Plan as set forth in FirstEnergy Nuclear Operating Company's application dated September 4, 2014, as supplemented by letter dated December 1, 2014, and evaluated in the NRC staff's safety evaluation dated July 9, 2015.
3. The license amendment is effective as of its date of issuance and shall be implemented within 90 days.

FOR THE NUCLEAR REGULATORY COMMISSION

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William M. Dean, Director
Office of Nuclear Reactor Regulation

Date of Issuance: July 9, 2015



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NOS. 294 AND 182 TO RENEWED FACILITY OPERATING
LICENSE NOS. DPR-66 AND NPF-73
FIRSTENERGY NUCLEAR OPERATING COMPANY
FIRSTENERGY NUCLEAR GENERATION, LLC
OHIO EDISON COMPANY
THE TOLEDO EDISON COMPANY
BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2
DOCKET NOS. 50-334 AND 50-412

1.0 INTRODUCTION

By application dated September 4, 2014 (Reference (Ref.) 1), as supplemented by letter dated December 1, 2014 (Ref. 2), the FirstEnergy Nuclear Operating Company, et al. (the licensees), requested changes to the Emergency Preparedness Plan for Beaver Valley Power Station, Unit Nos. 1 and 2 (BVPS-1 and 2). The proposed changes would revise the 10-mile emergency planning zone boundary to align it with the boundary that is used by the emergency management agencies of the three counties that implement public protective actions around BVPS.

The supplement dated December 1, 2014, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on October 28, 2014 (79 FR 64224).

2.0 REGULATORY EVALUATION

The licensee requested a change to the BVPS Emergency Preparedness Plan (EPP), Section 2, "Scope and Applicability," Figure 2.1, "Map of BVPS Emergency Planning Zone (EPZ) 0-10 Miles," that would revise the boundary of the 10-mile EPZ. Specifically, the change would align the BVPS EPZ boundary with the boundary that is currently in use by the emergency management agencies of the three counties that implement public protective actions around BVPS.

Section 50.47(b)(10) of Title 10 of the *Code of Federal Regulations* (10 CFR) states:

A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. Evacuation time estimates have been developed by applicants and licensees. Licensees shall update the evacuation time estimates on a periodic basis. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

Section 50.47(c)(2) of 10 CFR states, in part:

Generally, the plume exposure pathway EPZ for nuclear power reactors shall consist of an area about 10 miles (16 km) in radius. . . . The exact size and configuration of the EPZs surrounding a particular nuclear power reactor shall be determined in relation to the local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries.

Given the above, Section 50.54(q)(1)(iv) of 10 CFR states:

Reduction in effectiveness means a change in an emergency plan that results in reducing the licensee's capability to perform an emergency planning function in the event of a radiological emergency.

Additionally, 10 CFR 50.54(q)(4) states, in part:

The changes to a licensee's emergency plan that reduce the effectiveness of the plan as defined in paragraph (q)(1)(iv) of this section may not be implemented without prior approval by the NRC. A licensee desiring to make such a change after February 21, 2012 shall submit an application for an amendment to its license.

The licensee's application stated that the proposed changes to the BVPS EPP are considered a reduction in effectiveness, as defined in 10 CFR 50.54(q)(1)(iv). Therefore, the licensee requested prior NRC approval in accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit."

2.1 Guidance

Revision 2 of Regulatory Guide 1.101, "Emergency Response Planning and Preparedness for Nuclear Power Reactors" (Ref. 3), provides guidance on methods acceptable to the NRC staff for implementing specific parts of the NRC's regulations, in this case 10 CFR 50.47(b) and Appendix E to Part 50, by endorsing Revision 1 of NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," (Ref. 4) which provides a planning basis and specific acceptance criteria, including those addressing the plume exposure pathway EPZ.

Section I.D.2 and Table 1 of Ref. 4, state, in part:

EPZs are defined as the areas for which planning is needed to assure that prompt and effective corrective actions can be taken to protect the public in the event of an accident. The criteria in NUREG-0396 are to be applied by the response organizations in these zones as applicable. . . . The choice of the size of the Emergency Planning Zones represents a judgment on the extent of detailed planning which must be performed to assure an adequate response base. . . . Although the radius for the EPZ implies a circular area, the actual shape should depend upon the characteristics of a particular site. . . . Judgment should be used in adopting this distance based upon considerations of local conditions such as demography, topography, land characteristics, access routes, and local jurisdictional boundaries.

Section III, "Recommended Planning Basis," of NUREG-0396, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear power Plants," (Ref. 5) states, in part, that:

It is expected that judgment of the planner will be used in determining the precise size and shape of the EPZs considering local conditions such as demography, topography and land use characteristics, access routes, jurisdictional boundaries, and arrangements with the nuclear facility operator for notification and response assistance.

In addition, NUREG-0396 provided criteria for an EPZ, as summarized below:

1. The choice of the size of the EPZ represents a judgment on the extent of detailed planning which must be performed to assure an adequate response base.
2. The task force selected a radius of about 10 miles for the plume exposure pathway and a radius of 50 miles for the ingestion exposure pathway.
3. Although the radius implies a circular area, the actual shape would depend upon the characteristics of the particular site.
4. Detailed planning within the 10 miles would provide a substantial base for expansion of response efforts in the event that this proved necessary.

Issued in July 1996 and updated in November 2011, Supplement 3 to NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, Guidance for Protective Action Strategies," (Ref. 6) updated the previous guidance for protective action recommendation decision-making contained in

Appendix 1 to Ref. 4. NUREG-0654 denotes evacuation of a 2-mile radius and 5-miles downwind the preferred initial protective action recommendation for a severe reactor accident involving actual or projected severe core damage or loss of control of facility. Affected individuals in the remainder of the EPZ would be advised to remain indoors and to monitor the Emergency Broadcast System for further instructions.

The U.S. Environmental Protection Agency's (EPA's) guidance document, entitled EPA 400-R-92-001, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," (Ref. 7) provides radiation protection guidance to public officials in establishing emergency response plans and for making decisions during a nuclear incident. This guidance provides, in part:

The decision to advise members of the public to take an action to protect themselves from radiation from a nuclear incident involves a complex judgment in which the risk avoided by the protective action must be weighed in the context of the risks involved in taking the action During the planning process it is possible to make some value judgments and to determine which responses are not required, which decisions can be made on the basis of prior judgments, and which judgments must be made during an actual emergency it is then possible to devise operational plans which can be used to respond to the spectrum of hazardous situations which may develop.

3.0 TECHNICAL EVALUATION

The NRC staff has reviewed the licensee's technical analysis in support of the proposed BVPS EPP change. The staff's technical evaluation is detailed below.

3.1 Background

The licensee states that the coordination and liaison with offsite emergency organizations include formal agreements that state individual organizations will perform their respective emergency functions in response to requests from BVPS.

The proposed changes will affect seven re-alignments of the EPZ boundary that follow geopolitical lines as follows:

- Three re-alignments in Columbiana County, Ohio,
- Two re-alignments in Hancock County, West Virginia, and
- Two re-alignments in Beaver County, Pennsylvania.

Furthermore, the licensee states that BVPS provides protective action recommendations (PARs) during emergency events, which are typically based upon dose projections at the site boundary, a 2-mile straight line radius, at a 5-mile straight line radius, and at a 10-mile straight line radius from BVPS. The BVPS dose projection methodology contains the ability to provide dose assessment at any straight line distance from BVPS up to a distance of 50 miles. Although the BVPS 10-mile EPZ boundary will follow geopolitical borders near the 10-mile straight line radius, a minor variation on the edge of the 10-mile EPZ boundary does not alter

how BVPS performs dose projections or how BVPS determines PARs. Thus, the BVPS dose projections and PARs do not directly consider the geopolitical boundaries as defined for the BVPS 10-mile EPZ.

3.2 Evaluation

In considering the safety impact of the proposed changes to the BVPS EPP, the NRC staff considered the impact on the ability of the licensee to perform the protective actions functions required by 10 CFR 50.47(b)(10). The staff evaluated the proposed change against the capability to perform the protective action functions to determine whether the capability to perform these functions is lost and/or degraded.

3.2.1 Evaluation of Changes

3.2.1.1 Change 1 – Columbiana County, Ohio

The license amendment request proposes three changes that slightly reduce the BVPS 10-mile EPZ boundary within Columbiana County, Ohio:

- Area north of Ohio sub-area O-4
- Area northwest of Ohio sub-area O-3
- Area west of Ohio sub-areas O-2 and O-3

In 2003, the Evacuation Time Estimate (ETE) evaluation for the 2000 Census was completed, and changes were incorporated into Revision 27 of the BVPS EPP. The Ohio EPZ boundaries in the EPP involve slight reductions in the EPZ area. Columbiana County revised their emergency plan in the early-2000s to coincide with the 10-mile EPZ boundary in the BVPS EPP.

The proposed changes are consistent with current guidance that states that the decision to implement a protective action should be based on the projected radiation dose that would be incurred by the public if the protective action were not implemented, that is, the dose that would be avoided by taking the action. Radiation doses that occurred prior to implementing the protective action are not considered. Another key principle is that the risk to health from a protective action should not exceed the risk to health from the dose that would be avoided.

In addition, the proposed changes are consistent with the EPA's "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," (Ref. 7) which recognizes that it is possible during the planning process to make value judgments as to which decisions are not required, which can be made based on prior judgments, and which must be made during an actual emergency. Such pre-planning can reduce, to a manageable level, the complexity of decisions required to effectively protect the public at the time of an incident. Nonetheless, the key principle of protective actions, namely that the risk to health from a protective action should not exceed the risk to health from the dose that would be avoided, must be satisfied.

The guidance provided in NUREG-0654 (Ref. 6) makes evacuation of a 2-mile radius and 5-mile radius downwind the preferred initial protective action recommendation for a severe reactor accident involving actual or projected severe core damage or loss of control of facility. Based

on the distance of the proposed excluded areas from BVPS in excess of 5 miles, the licensee's assertion that the BVPS dose projections and PARs do not directly consider the geopolitical boundaries as defined for the BVPS 10-mile EPZ, and the current use of the implementing governmental authority (Columbiana County) of the proposed EPZ boundary, the staff finds the licensee's proposed changes to the EPZ boundary in Columbiana County acceptable.

3.2.1.2 Change 2 – Hancock County, West Virginia

The license amendment request proposes two changes that slightly reduce the BVPS 10-mile EPZ within Hancock County, West Virginia:

- Area west of West Virginia sub-areas W-1 and W-2
- Area west of West Virginia sub-areas W-2 and W-3

When the BVPS EPZ was originally established in the early 1980s, it was difficult to establish the Hancock County portion of the BVPS EPZ due to a lack of road names for the county road system. Due to the limited roads with names, the EPZ was made larger than necessary in order to establish an identifiable boundary. Since that time, Hancock County initiated and completed a rural addressing program. The purpose of the program was to name roads within the county, so emergency responders (e.g., police, medical and fire) could more easily identify and find locations.

Change 2 would align the EPZ boundaries to be more consistent with the approved guidance of NUREG-0396, (Ref. 5) which states that judgment should be used in adopting the EPZ boundaries upon considerations of local conditions such as demography, topography, land characteristics, access routes, and local jurisdictional boundaries. Additionally, the new boundaries described in Change 2 would potentially reduce the unnecessary evacuation risk for the proposed excluded population, all of who reside outside of a 10-mile straight line radius from the BVPS.

The guidance provided in NUREG-0654 (Ref. 6) makes evacuation of a 2-mile radius and 5-miles downwind the preferred initial protective action recommendation for a severe reactor accident involving actual or projected severe core damage or loss of control of facility. Based on the distance of the proposed excluded areas from BVPS (in excess of 5 miles), the licensee's assertion that the BVPS dose projections and PARs do not directly consider the geopolitical boundaries as defined for the BVPS 10-mile EPZ, and the improved identification of the County Road system resulting from the Hancock County rural addressing program, the staff finds the licensee's proposed changes to the EPZ boundary in Hancock County acceptable.

3.2.1.3 Change 3 – Beaver County, Pennsylvania

The license amendment request proposes two changes that slightly reduce the BVPS 10-mile EPZ boundary within Beaver County, Pennsylvania:

- Area northeast of Pennsylvania sub-area P-8
- Area north of Pennsylvania sub-area P-8 and northeast of sub-area P-7

The area northeast of Pennsylvania sub-area P-8, as indicated in the BVPS 10-mile EPZ boundary map, contains an error in which it incorrectly follows a geographical border (the Beaver River) when it should have followed a political border (the edge of the city of Beaver Falls). The sketch incorrectly showed that the city of Beaver Falls, Pennsylvania, is within the BVPS 10-mile EPZ boundary. There is no known basis or reference document used in the licensing of the initial combined BVPS EPP (dated 1985) that showed this area as included within the EPZ. Additionally, there are no Beaver County or Pennsylvania basis documents that show Beaver Falls as within the BVPS EPZ. The current Beaver County EPZ boundary (dated November 2014) excludes this area from the 10-mile EPZ.

The second Pennsylvania EPZ boundary change involves an area on the northern EPZ boundary (area north of Pennsylvania sub-area P-8 and northeast of Pennsylvania sub-area P-7) located outside of a 10-mile straight line radius from the BVPS plant. The 2012 version of the BVPS ETE, prepared by KLD Engineering, P. C. (Ref. 8), which incorporated changes based on the 2010 Census, excludes this area from the BVPS 10-mile EPZ. Subsequently, Beaver County has excluded this area from the BVPS 10-mile EPZ, and revised their emergency plan to reflect the 10-mile EPZ boundary as shown in Ref. 8 (excluding the area as proposed in this license amendment request) as documented in the licensee's supplement dated December 1, 2014 (Ref. 2).

The proposed changes contained in Change 3 are consistent with current guidance. The current guidance states that the decision to implement a protective action should be based on the projected radiation dose that would be incurred by the public if the protective action were not implemented, or, the dose that would be avoided by taking the action. Radiation doses that occurred prior to implementing the protective action are not considered. Another key principle is that the risk to health from a protective action should not exceed the risk to health from the dose that would be avoided.

In addition, the proposed changes are consistent with the EPA's "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," (Ref. 7) which recognizes that it is possible during the planning process to make value judgments as to which decisions are not required, which can be made based on prior judgments, and which must be made during an actual emergency. Such preplanning can reduce the complexity of decisions required to effectively protect the public at the time of an incident. Nonetheless, the key principle of protective actions, namely that the risk to health from a protective action should not exceed the risk to health from the dose that would be avoided, must be satisfied.

The guidance provided in NUREG-0654 (Ref. 6) makes evacuation of a 2-mile radius and 5-miles downwind the preferred initial protective action recommendation for a severe reactor accident involving actual or projected severe core damage or loss of control of facility. Based on the distance of the proposed excluded areas from BVPS (in excess of 5 miles and outside of a 10-mile straight line radius), the licensee's assertion that the BVPS dose projections and PARs do not directly consider the geopolitical boundaries as defined for the BVPS 10-mile EPZ, and the current use of the implementing governmental authority (Beaver County) of the proposed EPZ boundary, the staff finds the licensee's proposed changes to the EPZ boundary in Beaver County acceptable.

3.3 Technical Evaluation Conclusion

The NRC staff finds that the proposed emergency plan changes meet the applicable standards in 10 CFR 50.47(b) and provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. Therefore, the NRC staff concludes that the licensee's proposed changes to the BVPS EPP in its application dated September 4, 2014, as supplemented by the letter dated December 1, 2014, are acceptable.

4.0 STATE CONSULTATION

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

5.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 50.21, 51.32, and 51.35, an environmental assessment and finding no significant impact was published in the *Federal Register* on June 10, 2015 (80 FR 32989). 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.

7.0 REFERENCES

1. FirstEnergy Nuclear Operating Company, "License Amendment Request to Modify Emergency Preparedness Plan Regarding the Emergency Planning Zone Boundary," September 4, 2014, Agencywide Documents Access and Management System (ADAMS) Accession No. ML14247A512.
2. FirstEnergy Nuclear Operating Company, "License Amendment Request to Modify Emergency Preparedness Plan Regarding the Emergency Planning Zone Boundary (TAC NOS. MF4765 and MF4766)," December 1, 2014, ADAMS Accession No. ML14336A520.
3. U.S. Nuclear Regulatory Commission, Regulatory Guide 1.101, Revision 2, "Emergency Planning and Preparedness for Nuclear Power Reactors," October 31, 1981, ADAMS Accession No. ML090440294.

4. U.S. Nuclear Regulatory Commission, NUREG-0654/FEMA REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 30, 1980, ADAMS Accession No. ML040420012.
5. U.S. Nuclear Regulatory Commission, NUREG-0396, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants," December 1978, ADAMS Accession No. ML051390356.
6. U.S. Nuclear Regulatory Commission, NUREG-0654, Supplement 3, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, Guidance for Protective Action Strategies," November 2011, ADAMS Accession No. ML113010596.
7. U.S. Environmental Protection Agency, EPA 400-R-92-001, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," May 1992, Legacy ADAMS Accession No. 8111130209.
8. Beaver Valley Power Station, Unit Nos. 1 and 2, Davis-Besse Nuclear Power Station, Unit No. 1, and Perry Nuclear Power Plant, Unit No. 1, "Submittal of Evacuation Time Estimates," December 2012, ADAMS Package No. ML130070160.

Principal Contributor: Oscar Aragon, NSIR/DPR

Date: July 9, 2015

July 9, 2015

Mr. Eric A. Larson, Site Vice President
FirstEnergy Nuclear Operating Company
Beaver Valley Power Station
Mail Stop A-BV-SEB1
P.O. Box 4, Route 168
Shippingport, PA 15077

SUBJECT: BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2 - ISSUANCE OF
AMENDMENTS RE: LICENSE AMENDMENT REQUEST TO MODIFY
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A copy of the related safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

Taylor A. Lamb, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

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cc: Listserv

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ADAMS Accession No.: ML15131A006

*via memo 3/2/15

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NAME	LLund (GWilson for)	WDean	TLamb		
DATE	6/29/15	7/6/15	7/9/15		

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