



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

July 31, 2015

Mr. John W. Pitesa  
Senior Vice President and Chief  
Nuclear Officer, Generation & Transmission  
Duke Energy  
Mail Code: EC3XP  
526 South Church St.  
Charlotte, NC 28202

SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2, AND SHEARON  
HARRIS NUCLEAR POWER PLANT, UNIT 1 - ISSUANCE OF CONFORMING  
AMENDMENTS REGARDING DIRECT TRANSFER OF RENEWED FACILITY  
OPERATING LICENSES TO DUKE ENERGY PROGRESS, INC.  
(TAC NOS. MF5505, MF5506, AND MF5507)

Dear Mr. Pitesa:

By orders dated July 6, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15189A228), the U.S. Nuclear Regulatory Commission (NRC or the Commission) approved direct license transfers from North Carolina Eastern Municipal Power Agency (NCEMPA) to Duke Energy Progress, Inc. (Duke Energy) for Renewed Facility Operating License Nos. DPR-71 and DPR-62, for Brunswick Steam Electric Plant, Units 1 and 2, and Renewed Facility Operating License No. NPF-63 for Shearon Harris Nuclear Power Plant, Unit 1. The Commission approved the respective conforming amendments, pursuant to Title 10 of the *Code of Federal Regulations*, Sections 50.80 and 50.90, to reflect the removal of NCEMPA from the license and keep Duke Energy as the sole owner and licensee. The orders were published in the *Federal Register* on July 14, 2015 (80 FR 41095 and 80 FR 41097). By letter dated July 29, 2015 (ADAMS Accession No. ML15210A049), NCEMPA and Duke Energy notified the NRC of the July 31, 2015, closing date for the license transfers.

Accordingly, the Commission has issued the enclosed Amendment Nos. 267, 295, and 147 to Renewed Facility Operating License Nos. DPR-71, DPR-62, and NPF-63 (Enclosures 1, 2, and 3). These conforming amendments reflect the direct transfer of the licenses of the percent of ownership from NCEMPA to Duke Energy and removal of NCEMPA from the licenses. The safety evaluation supporting the conforming amendments was enclosed with the orders issued on July 6, 2015.

Enclosures 4 and 5 contain signed originals of Amendment No. 14 to Indemnity Agreement No. B-71 and Amendment No. 5 to Indemnity Agreement No. B-103, which are required because of the direct transfer of the licenses. Please sign the copies enclosed and keep one of each of these originals for your records. Please send one original of each to the NRC's document control desk for proof of acceptance.

J. Pitesa

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Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,



Martha Barillas, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-325, 50-324, and 50-400

Enclosures:

1. Amendment No. 267 to  
Renewed License No. DPR-71
2. Amendment No. 295 to  
Renewed License No. DPR-62
3. Amendment No. 147 to  
Renewed License No. NPF-63
4. Amendment No. 14 to Indemnity  
Agreement No. B-71
5. Amendment No. 5 to Indemnity  
Agreement No. B-103

cc w/enclosures:

Mr. William R. Gideon, Vice President  
Brunswick Steam Electric Plant  
Duke Energy Progress, Inc.  
P.O. Box 10429  
Southport, NC 28461

Mr. Benjamin C. Waldrep, Site Vice President  
Shearon Harris Nuclear Power Plant  
Duke Energy  
5413 Shearon Harris Rd.  
New Hill, NC 27562-0165

Additional distribution via ListServ

**ENCLOSURE 1**

**AMENDMENT TO RENEWED FACILITY OPERATING**

**LICENSE NO. DPR-71**



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

DUKE ENERGY PROGRESS INC.

NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY

DOCKET NO. 50-325

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 267  
Renewed License No. DPR-71

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment filed by Duke Energy Progress, Inc. and North Carolina Eastern Municipal Power Agency (the licensee), dated December 22, 2014; as supplemented by letters dated March 4, 2015; June 1, 2015; June 10, 2015; and June 24, 2015; and July 29, 2015; 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, as indicated in the attachment to this license amendment; and paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-71 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 267, are hereby incorporated in the license. Duke Energy Progress, Inc. shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days of issuance.

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

Attachment:  
Changes to the Renewed Facility  
Operating License No. DPR-71

Date of Issuance: July 31, 2015

ATTACHMENT TO LICENSE AMENDMENT NO. 267

RENEWED FACILITY OPERATING LICENSE NO. DPR-71

DOCKET NO. 50-325

Replace the following pages of the Renewed Facility Operating License with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

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- F. The licensee is technically and financially qualified to engage in the activities authorized by this renewed operating license in accordance with the rules and regulations of the Commission;
  - G. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
  - H. The issuance of this renewed operating license will not be inimical to the common defense and security or to the health and safety of the public;
  - I. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs, and considering available alternatives, the adverse environmental impacts of license renewal are not so great that preserving the option of license renewal would be unreasonable and the issuance of Renewed Facility Operating License No. DPR-71, subject to the conditions for protection of the environment set forth herein, is in accordance with 10 CFR Part 51 (formerly Appendix D to Part 50), of the Commission's regulations and all applicable requirements have been satisfied; and
  - J. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this renewed license will be in accordance with the Commission's regulations in 10 CFR Part 30, 40, and 70, including 10 CFR Section 30.33, 40.32, 70.23 and 70.31.
2. Renewed Facility Operating License No. DPR-71 is hereby issued to Duke Energy Progress, Inc. to read as follows:
- A. This license applies to the Brunswick Steam Electric Plant, Unit 1, a boiling water reactor and associated equipment (the facility), owned and operated by Duke Energy Progress, Inc. The facility is located on the Cape Fear River, near Southport in Brunswick County, North Carolina, and is described in the "Final Safety Analysis Report" as supplemented and amended (Amendments 1 through 31) and the "Environmental Report" as supplemented and amended.
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Duke Energy Progress, Inc.:
    - (1) Pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility at the designated location in Brunswick County, North Carolina, in accordance with the procedures and limitations set forth in this renewed license;

(c) Transition License Conditions

1. Before achieving full compliance with 10 CFR 50.48(c), as specified by 2. below, risk-informed changes to the licensee's fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in 2. above.
2. The licensee shall implement the modifications to its facility, as described in Table S-1, "Plant Modifications Committed," of Duke letter BSEP 14-0122, dated November 20, 2014, to complete the transition to full compliance with 10 CFR 50.48(c) by the startup of the second refueling outage for each unit after issuance of the safety evaluation. The licensee shall maintain appropriate compensatory measures in place until completion of these modifications.
3. The licensee shall complete all implementation items, except item 9, listed in LAR Attachment S, Table S-2, "Implementation Items," of Duke letter BSEP 14-0122, dated November 20, 2014, within 180 days after NRC approval unless the 180<sup>th</sup> day falls within an outage window; then, in that case, completion of the implementation items, except item 9, shall occur no later than 60 days after startup from that particular outage. The licensee shall complete implementation of LAR Attachment S, Table S-2, Item 9, within 180 days after the startup of the second refueling outage for each unit after issuance of the safety evaluation.

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 hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2923 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No 267 are hereby incorporated in the license. Duke Energy Progress, Inc. shall operate the facility in accordance with the Technical Specifications.

For Surveillance Requirements (SRs) that are new in Amendment 203 to Renewed Facility Operating License DPR-71, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 203. For SRs that existed prior to Amendment 203, including SRs with modified acceptance criteria and SRs whose frequency of



**ENCLOSURE 2**

**AMENDMENT TO RENEWED FACILITY OPERATING**

**LICENSE NO. DPR-62**



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

DUKE ENERGY PROGRESS, INC.  
NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY  
DOCKET NO. 50-324  
BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2  
AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 295  
Renewed License No. DPR-62

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment filed by Duke Energy Progress, Inc. and North Carolina Eastern Municipal Power Agency (the licensee), dated December 22, 2014 as supplemented by letters dated March 4, 2015; June 1, 2015; June 10, 2015; and June 24, 2015; and July 29, 2015; 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 as indicated in the attachment to this license amendment; and paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-62 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 295, are hereby incorporated in the license. Duke Energy Progress, Inc. shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

William M. Dean, Director  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Renewed Facility  
Operating License No. DPR-62

Date of Issuance: July 31, 2015

ATTACHMENT TO LICENSE AMENDMENT NO. 295

FACILITY OPERATING LICENSE NO. DPR-62

DOCKET NO. 50-324

Replace the following pages of the Renewed Facility Operating License with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages

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- F. The licensee is technically and financially qualified to engage in the activities authorized by this renewed operating license in accordance with the rules and regulations of the Commission;
  - G. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
  - H. The issuance of this renewed operating license will not be inimical to the common defense and security or to the health and safety of the public;
  - I. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Renewed Facility Operating License No. DPR-62 subject to the conditions for protection of the environment set forth herein is in accordance with 10 CFR Part 51 (formerly Appendix D to 10 CFR Part 50), of the Commission's regulations and all applicable requirements have been satisfied; and
  - J. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this renewed license will be in accordance with the Commission's regulations in 10 CFR Part 30, 40, and 70, including 10 CFR Section 30.33, 40.32, and 70.23 and 70.31.
2. Renewed Facility Operating License No. DPR-62 is hereby issued to Duke Energy Progress, Inc. to read as follows:
- A. This license applies to Brunswick Steam Electric Plant Unit 2, a boiling water reactor and associated equipment (the facility), owned and operated by Duke Energy Progress, Inc. The facility is located on the Cape Fear River, near Southport in Brunswick County, North Carolina, and is described in the "Final Safety Analysis Report" as supplemented and amended (Amendments 1 through 29) and the "Environmental Report" as supplemented and amended (Supplements 1 through 7).
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Duke Energy Progress, Inc.:
    - (1) Pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility at the designated location in Brunswick County, North Carolina, in accordance with the procedures and limitations set forth in this renewed license;
    - (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;

(c) Transition License Conditions

1. Before achieving full compliance with 10 CFR 50.48(c), as specified by 2. below, risk-informed changes to the licensee's fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in 2. above.
2. The licensee shall implement the modifications to its facility, as described in Table S-1, "Plant Modifications Committed," of Duke letter BSEP 14-0122, dated November 20, 2014, to complete the transition to full compliance with 10 CFR 50.48(c) by the startup of the second refueling outage for each unit after issuance of the safety evaluation. The licensee shall maintain appropriate compensatory measures in place until completion of these modifications.
3. The licensee shall complete all implementation items, except Item 9, listed in LAR Attachment S, Table S-2, "Implementation Items," of Duke letter BSEP 14-0122, dated November 20, 2014, within 180 days after NRC approval unless the 180<sup>th</sup> day falls within an outage window; then, in that case, completion of the implementation items, except item 9, shall occur no later than 60 days after startup from that particular outage. The licensee shall complete implementation of LAR Attachment S, Table S-2, Item 9, within 180 days after the startup of the second refueling outage for each unit after issuance of the safety evaluation.

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; 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

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2923 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 295, are hereby incorporated in the license. Duke Energy Progress, Inc. shall operate the facility in accordance with the Technical Specifications.

For Surveillance Requirements (SRs) that are new in Amendment 233 to Renewed Facility Operating License DPR-62, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 233. For SRs that existed prior to Amendment 233,

**ENCLOSURE 3**

AMENDMENT TO RENEWED FACILITY OPERATING  
LICENSE NO. NPF-63



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

DUKE ENERGY PROGRESS, INC.

NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY

DOCKET NO. 50-400

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 147  
License No. NPF-63

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Duke Energy Progress, Inc. and North Carolina Eastern Municipal Power Agency (the licensee), dated December 22, 2014, as supplemented by letters dated March 4, 2015; June 1, 2015; June 10, 2015; and June 24, 2015; and July 29, 2015; 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, as indicated in the attachment to this license amendment; and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-63 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. 147, are hereby incorporated into this license. Duke Energy Progress, Inc. shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

William Dean, Director  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Renewed Facility  
Operating License No. NPF-63

Date of Issuance: July 31, 2015

ATTACHMENT TO LICENSE AMENDMENT NO. 147

RENEWED FACILITY OPERATING LICENSE NO. NPF-63

DOCKET NO. 50-400

Replace the following pages of the Renewed Facility Operating License with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

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DUKE ENERGY PROGRESS, INC.

DOCKET NO. 50-400

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

RENEWED FACILITY OPERATING LICENSE

Renewed License No. NPF-63

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
  - A. The application for renewal of the license filed by the Carolina Power & Light Company\* (CP&L) for itself 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, and all required notifications to other agencies or bodies have been duly made;
  - B. Construction of the Shearon Harris Nuclear Power Plant, Unit 1, (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-158 and the application, as amended, the provisions of the Act, and the regulations of the Commission;
  - C. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1); and (2) time-limited aging analysis that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by the renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations;
  - D. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D. below);
  - E. There is reasonable assurance: (i) that the activities authorized by this operating license 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 set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D. below);

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\*On April 29, 2013, the name "Carolina Power & Light Company" (CP&L) was changed to "Duke Energy Progress, Inc."

- F. Duke Energy Progress, Inc. is technically qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
  - G. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
  - H. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
  - I. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Renewed Facility Operating License No. NPF-63, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied;
  - J. The receipt, possession and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70.
2. Based on the foregoing findings and the Partial Initial Decisions issued by the Atomic Safety and Licensing Board dated February 20, 1985, August 20, 1985, December 11, 1985, and April 28, 1986, regarding this facility and pursuant to approval by the Nuclear Regulatory Commission at a meeting on January 8, 1987, Facility Operating License No. NPF-63, which supersedes the license for fuel loading and low power testing, License No. NPF-53 issued on October 24, 1986, is hereby issued to Duke Energy Progress, Inc. (the licensee) as follows:
- A. This license applies to the Shearon Harris Nuclear Power Plant, Unit 1, a pressurized water reactor and associated equipment (the facility) owned and operated by Duke Energy Progress, Inc. The facility is located on the licensee's site in Wake and Chatham Counties, North Carolina, approximately 16 miles southwest of the nearest boundary of Raleigh, and is described in its Final Safety Analysis Report, as supplemented and amended, and in its Environmental Report, as supplemented and amended;

\*Duke Energy Progress, Inc. has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

Renewed License No. NPF-63  
Amendment No. 147

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:

- (1) Pursuant to Section 103 of the Act and 10 CFR Part 50, Duke Energy Progress, Inc. to possess, use, and operate the facility at the designated location in Wake and Chatham Counties, North Carolina, in accordance with the procedures and limitations set forth in this license;
- (2) Deleted.
- (3) Pursuant to the Act and 10 CFR Part 70, Duke Energy Progress, Inc. to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, Duke Energy Progress, Inc. to receive, possess, and use at any time any byproduct, source and special nuclear material such as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, Duke Energy Progress, Inc. receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;
- (6) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, Duke Energy Progress, Inc. to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility authorized herein;
- (7) Pursuant to the Act and 10 CFR Parts 30 and 40, Duke Energy Progress, Inc. to receive, possess and process for release or transfer to the Shearon Harris site such byproduct material as may be produced by the Shearon Harris Energy and Environmental Center;
- (8) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, Duke Energy Progress, Inc. to receive and possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the Brunswick Steam Electric Plant, Units 1 and 2, and H. B. Robinson Steam Electric Plant, Unit 2.

- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I 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

Duke Energy Progress, Inc. is authorized to operate the facility at reactor core power levels not in excess of 2948 megawatts thermal (100 percent rated core power) in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. 147, are hereby incorporated into this license. Duke Energy Progress, Inc. shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Antitrust Conditions

Duke Energy Progress, Inc. shall comply with the antitrust conditions delineated in Appendix C to this license.

(4) Initial Startup Test Program (Section 14)<sup>1</sup>

Any changes to the Initial Test Program described in Section 14 of the FSAR made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

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<sup>1</sup> The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

- (c) The licensee shall maintain appropriate compensatory measures in place until completion of the modifications delineated above.

G. Reporting to the Commission

Except as otherwise provided in the Technical Specifications or Environmental Protection Plan, Duke Energy Progress, Inc. shall report any violations of the requirements contained in Section 2.C of this license in the following manner: initial notification shall be made within twenty-four (24) hours to the NRC Operations Center via the Emergency Notification System with written follow-up within 30 days in accordance with the procedures described in 10 CFR 50.73 (b), (c) and (e).

- H. The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- I. The Updated Safety Analysis Report supplement, as revised, submitted pursuant to 10 CFR 54.21(d), shall be included in the next scheduled update to the Updated Safety Analysis Report required by 10 CFR 50.71(e)(4) following the issuance of this renewed operating license. Until that update is complete, CP&L may make changes to the programs and activities described in the supplement without prior Commission approval, provided that CP&L evaluates such changes pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.
- J. The Updated Safety Analysis Report supplement, as revised, describes certain future activities to be completed prior to the period of extended operation. Duke Energy Progress, Inc. shall complete these activities no later than October 24, 2026, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.
- K. All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future inspection. Any changes to storage requirements must be approved by the NRC, as required by 10 CFR Part 50, Appendix H.

<sup>1</sup>On April 29, 2013, the name "Carolina Power & Light Company" (CP&L) was changed to "Duke Energy Progress, Inc."

**ENCLOSURE 4**

AMENDMENT NO. 14 TO  
INDEMNITY AGREEMENT NO. B-71





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

Docket No. 50-324, 50-325

AMENDMENT TO INDEMNITY AGREEMENT NO. B-71  
AMENDMENT NO. 14

Effective [licensee signed date], Indemnity Agreement No. B-71, between Duke Energy Progress, Inc., and the United States Nuclear Regulatory Commission, dated January 14, 1974, as amended, is hereby further amended as follows:

The name "North Carolina Eastern Municipal Power Agency" is deleted wherever it appears in the agreement and substituted in lieu thereof by the name:

"Duke Energy Progress, Inc."

Item 1 of the Attachment to the indemnity agreement is modified by deleting the name "North Carolina Eastern Municipal Power Agency" wherever it appears in the agreement and substituted in lieu thereof by the name:

Item 1 – Licensee      Duke Energy Progress, Inc.

Address      526 South Church St.  
Charlotte, NC 28202  
Mail Code: EC3XP

In light of the above amendments, Indemnity Agreement No. B-71 is between Duke Energy Progress, Inc., and the United States Nuclear Regulatory Commission.

Historical licensee name changes to the original indemnity agreement and attachments thereof were not previously recorded. Therefore, the following name changes are listed here as a matter of record:

- 1) Carolina Power and Light changed to Duke Energy Progress, Inc. on October 21, 2013.

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read 'Anthony Bowers', is written over a horizontal line.

Anthony Bowers, Chief  
Financial Analysis and International Projects Branch  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation

Accepted \_\_\_\_\_ 20\_\_

By \_\_\_\_\_  
Duke Energy Progress, Inc.

**ENCLOSURE 5**

**AMENDMENT NO. 5 TO**

**INDEMNITY AGREEMENT NO. B-103**



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

Docket No. 50-400

AMENDMENT TO INDEMNITY AGREEMENT NO. B-103  
AMENDMENT NO. 5

Effective [licensee signed date], Indemnity Agreement No. B-71, between Duke Energy Progress, Inc., and the United States Nuclear Regulatory Commission, dated October 28, 1985, as amended, is hereby further amended as follows:

The name "North Carolina Eastern Municipal Power Agency" is deleted wherever it appears in the agreement and substituted in lieu thereof by the name:

"Duke Energy Progress, Inc."

Item 1 of the Attachment to the indemnity agreement is modified by deleting the name "North Carolina Eastern Municipal Power Agency" wherever it appears in the agreement and substituted in lieu thereof by the name:

Item 1 – Licensee	Duke Energy Progress, Inc.
Address	526 South Church St. Charlotte, NC 28202 Mail Code: EC3XP

In light of the above amendments, Indemnity Agreement No. B-71 is between Duke Energy Progress, Inc., and the United States Nuclear Regulatory Commission.

Historical licensee name changes to the original indemnity agreement and attachments thereof were not previously recorded. Therefore, the following name changes are listed here as a matter of record:

- 1) Carolina Power and Light changed to Duke Energy Progress, Inc. on October 21, 2013.

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION



Anthony Bowers, Chief  
Financial Analysis and International Projects Branch  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation

Accepted \_\_\_\_\_ 20\_\_

By \_\_\_\_\_  
Duke Energy Progress, Inc.

Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

/RA/

Martha Barillas, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-325, 50-324, and 50-400

Enclosures:

4. Amendment No. 267 to  
Renewed License No. DPR-71
5. Amendment No. 295 to  
Renewed License No. DPR-62
6. Amendment No. 147 to  
Renewed License No. NPF-63
4. Amendment No. 14 to Indemnity  
Agreement No. B-71
5. Amendment No. 5 to Indemnity  
Agreement No. B-103

cc w/enclosures:

Mr. William R. Gideon, Vice President  
Brunswick Steam Electric Plant  
Duke Energy Progress, Inc.  
P.O. Box 10429  
Southport, NC 28461

Mr. Benjamin C. Waldrep, Site Vice President  
Shearon Harris Nuclear Power Plant  
Duke Energy  
5413 Shearon Harris Rd.  
New Hill, NC 27562-0165

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DATE	06/11/15	06/17/15	06/17/15	07/31/15	06/15/15
OFFICE	DORL/LPL2-2/BC	NRRDORL/D(A)	NRR/D	DORL/LPL2-2/PM	
NAME	SHelton (FSaba for)	LLund	WDean	MBarillas	
DATE	06/16/15	06/17/15	07/29/15	07/31/15	

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