



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

July 20, 2026

Mr. Michael Fiorino
Site Vice President
Brunswick Steam Electric Plant
8470 River Rd. SE (M/C BNP02)
Southport, NC 28461

SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT UNIT NOS. 1 AND 2 - ISSUANCE OF AMENDMENT NOS. 315 AND 343 RE: ADOPTION OF TSTF-585, "REVISE LCO 3.0.3 TO REQUIRE MANAGING RISK" AND TSTF-597, "ELIMINATE LCO 3.0.3 MODE 2 REQUIREMENT" (EPID L-2026-LLA-0030)

Dear Mr. Fiorino:

The U.S. Nuclear Regulatory Commission (NRC, the Commission) has issued the following enclosed Amendment Nos. 315 and 343 to Renewed Facility Operating License Nos. DPR-71 and DPR-62 respectively. The license amendments consist of changes to the technical specifications (TSs) in response to your application dated February 12, 2026.

The amendments adopt TS Task Force (TSTF) Traveler 585 "Revise LCO [Limiting Condition for Operation] 3.0.3 to Require Managing Risk." and TSTF-597 "Eliminate LCO 3.0.3 Mode 2 Requirement".

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

If you have any questions, please contact me at (301) 287-9531 or by e-mail at Tony.Sierra@nrc.gov.

Sincerely,

/RA/

Tony J. Sierra, Project Manager
Operating Reactor Licensing Branch 4
Division of Licensing Projects I
Office of Nuclear Reactor Regulation

Docket Nos.: 50-325 and 50-324

Enclosures:

1. Amendment No. 315 to DRP-71
2. Amendment No. 343 to DRP-62
3. Safety Evaluation

cc: Listserv



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

DUKE ENERGY PROGRESS, LLC

DOCKET NO. 50-325

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 315
Renewed License No. DPR-71

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by Duke Energy Progress, LLC (the licensee), dated February 12, 2026, 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. DPR-71 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 315, are hereby incorporated in the license. Duke Energy Progress, LLC 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 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Ilka Berrios, Chief
Operating Reactor Licensing Branch 3
Division of Licensing Projects I
Office of Nuclear Reactor Regulation

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

Date of Issuance: July 20, 2026

ATTACHMENT TO
DUKE ENERGY PROGRESS, LLC
DOCKET NO. 50-325
BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1
AMENDMENT NO. 315
RENEWED FACILITY OPERATING LICENSE NO. DPR-71

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

Remove
6

Insert
6

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove
3.0-1
3.0-2
3.0-3
3.0-4
3.8-36

Insert
3.0-1
3.0-2
3.0-3
3.0-4
3.8-36

(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 180th 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. 315, are hereby incorporated in the license. Duke Energy Progress, LLC 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

3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

LCO 3.0.1	LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2, LCO 3.0.7, LCO 3.0.8, and 3.0.9.
-----------	--

LCO 3.0.2	Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as provided in LCO 3.0.5 and LCO 3.0.6. If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required, unless otherwise stated.
-----------	---

LCO 3.0.3	When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Within 6 hours perform a risk assessment addressing inoperable systems and components and implement appropriate risk management actions. If the risk assessment determines that continuing operation is acceptable, the appropriate risk management actions are implemented, and entry into LCO 3.0.3 was unplanned, then action shall be initiated within 24 hours to place the unit, as applicable, in: a. MODE 3 within 36 hours, and b. MODE 4 within 60 hours. If the risk assessment determines that continuing operation is not acceptable, the risk assessment was not completed, the appropriate risk management actions were not implemented, or entry into LCO 3.0.3 was planned, then action shall be initiated to place the unit, as applicable, in: a. MODE 3 within 18 hours, and b. MODE 4 within 42 hours. All times are determined from entry into LCO 3.0.3.
-----------	--

(continued)

3.0 LCO APPLICABILITY (continued)

LCO 3.0.3
(continued)

Exceptions to this Specification are stated in the individual Specifications.

If corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, then completion of the actions required by LCO 3.0.3 is not required.

LCO 3.0.3 is only applicable in MODES 1, 2, and 3.

LCO 3.0.4

When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

- a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time;
- b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate (exceptions to this Specification are stated in the individual Specifications); or
- c. When an allowance is stated in the individual value, parameter, or other Specification.

This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

LCO 3.0.5

Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

LCO 3.0.6

When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and Required Actions associated with this supported system are not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception

(continued)

3.0 LCO APPLICABILITY (continued)

LCO 3.0.6
(continued)

to LCO 3.0.2 for the supported system. In this event, additional evaluations and limitations may be required in accordance with Specification 5.5.11, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

LCO 3.0.7

Special Operations LCOs in Section 3.10 allow specified Technical Specifications (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Special Operations LCOs is optional. When a Special Operations LCO is desired to be met but is not met, the ACTIONS of the Special Operations LCO shall be met. When a Special Operations LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with the other applicable Specifications.

LCO 3.0.8

When one or more required snubbers are unable to perform their associated support function(s), any affected supported LCO(s) are not required to be declared not met solely for this reason if risk is assessed and managed, and:

- a. The snubbers not able to perform their associated support function(s) are associated with only one train or subsystem of a multiple train or subsystem supported system or are associated with a single train or subsystem supported system and are able to perform their associated support function within 72 hours; or
- b. The snubbers not able to perform their associated support function(s) are associated with more than one train or subsystem of a multiple train or subsystem supported system and are able to perform their associated support function within 12 hours.

At the end of the specified period the required snubbers must be able to perform their associated support function(s), or the affected supported system LCO(s) shall be declared not met.

(continued)

3.0 LCO APPLICABILITY (continued)

LCO 3.0.9

When one or more required barriers are unable to perform their related support function(s), any supported system LCO(s) are not required to be declared not met solely for this reason for up to 30 days provided that at least one train or subsystem of the supported system is OPERABLE and supported by barriers capable of providing their related support function(s), and risk is assessed and managed. This Specification may be concurrently applied to more than one train or subsystem of a multiple train or subsystem supported system provided at least one train or subsystem of the supported system is OPERABLE and the barriers supporting each of these trains or subsystems provide their related support function(s) for different categories of initiating events.

For the purposes of this Specification, the High Pressure Coolant Injection System, the Reactor Core Isolation Cooling System, and the Automatic Depressurization System are considered independent subsystems of a single system.

If the required OPERABLE train or subsystem becomes inoperable while this Specification is in use, it must be restored to OPERABLE status within 24 hours or the provisions of this Specification cannot be applied to the trains or subsystems supported by the barriers that cannot perform their related support function(s).

At the end of the specified period, the required barriers must be able to perform their related support function(s) or the supported system LCO(s) shall be declared not met.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. One or more DC electrical power distribution subsystems inoperable for reasons other than Condition C.	D.1 Restore DC electrical power distribution subsystems to OPERABLE status.	7 days <u>OR</u> In accordance with the Risk-Informed Completion Time Program
E. Required Action and associated Completion Time of Condition A, B, C, or D not met.	E.1 -----NOTE----- LCO 3.0.4.a is not applicable when entering MODE 3. ----- Be in MODE 3.	12 hours
F. Two or more electrical power distribution subsystems inoperable that result in a loss of function.	F.1 Be in MODE 3.	12 hours
	<u>AND</u> F.2 Be in MODE 4.	36 hours



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

DUKE ENERGY PROGRESS, LLC

DOCKET NO. 50-324

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 343
Renewed License No. DPR-62

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by Duke Energy Progress, LLC (the licensee), dated February 12, 2026, 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. DPR-62 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 343, are hereby incorporated in the license. Duke Energy Progress, LLC 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 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Ilka Berrios, Chief
Operating Reactor Licensing Branch 3
Division of Licensing Projects I
Office of Nuclear Reactor Regulation

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

Date of Issuance: July 20, 2026

ATTACHMENT TO
DUKE ENERGY PROGRESS, LLC
DOCKET NO. 50-324
BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2
AMENDMENT NO. 343
RENEWED FACILITY OPERATING LICENSE NO. DPR-62

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

Remove
6

Insert
6

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove
3.0-1
3.0-2
3.0-3
3.0-4
3.8-36

Insert
3.0-1
3.0-2
3.0-3
3.0-4
3.8-36

(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 180th 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. 343, are hereby incorporated in the license. Duke Energy Progress, LLC 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,

3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

LCO 3.0.1	LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2, LCO 3.0.7, LCO 3.0.8, and LCO 3.0.9.
LCO 3.0.2	Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as provided in LCO 3.0.5 and LCO 3.0.6. If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required, unless otherwise stated.
LCO 3.0.3	When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Within 6 hours perform a risk assessment addressing inoperable systems and components and implement appropriate risk management actions. If the risk assessment determines that continuing operation is acceptable, the appropriate risk management actions are implemented, and entry into LCO 3.0.3 was unplanned, then action shall be initiated within 24 hours to place the unit, as applicable, in: a. MODE 3 within 36 hours, and b. MODE 4 within 60 hours. If the risk assessment determines that continuing operation is not acceptable, the risk assessment was not completed, the appropriate risk management actions were not implemented, or entry into LCO 3.0.3 was planned, then action shall be initiated to place the unit, as applicable, in: a. MODE 3 within 18 hours, and b. MODE 4 within 42 hours. All times are determined from entry into LCO 3.0.3.

(continued)

3.0 LCO APPLICABILITY (continued)

LCO 3.0.3 (continued)

Exceptions to this Specification are stated in the individual Specifications.

If corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, then completion of the actions required by LCO 3.0.3 is not required.

LCO 3.0.3 is only applicable in MODES 1, 2, and 3.

LCO 3.0.4

When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

- a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time;
- b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate (exceptions to this Specification are stated in the individual Specifications); or
- c. When an allowance is stated in the individual value, parameter, or other Specification.

This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

LCO 3.0.5

Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

LCO 3.0.6

When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and Required Actions associated with this supported system are not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception

(continued)

3.0 LCO APPLICABILITY (continued)

LCO 3.0.6
(continued)

to LCO 3.0.2 for the supported system. In this event, additional evaluations and limitations may be required in accordance with Specification 5.5.11, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

LCO 3.0.7

Special Operations LCOs in Section 3.10 allow specified Technical Specifications (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Special Operations LCOs is optional. When a Special Operations LCO is desired to be met but is not met, the ACTIONS of the Special Operations LCO shall be met. When a Special Operations LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with the other applicable Specifications.

LCO 3.0.8

When one or more required snubbers are unable to perform their associated support function(s), any affected supported LCO(s) are not required to be declared not met solely for this reason if risk is assessed and managed, and:

- a. The snubbers not able to perform their associated support function(s) are associated with only one train or subsystem of a multiple train or subsystem supported system or are associated with a single train or subsystem supported system and are able to perform their associated support function within 72 hours; or
- b. The snubbers not able to perform their associated support function(s) are associated with more than one train or subsystem of a multiple train or subsystem supported system and are able to perform their associated support function within 12 hours.

At the end of the specified period the required snubbers must be able to perform their associated support function(s), or the affected supported system LCO(s) shall be declared not met.

(continued)

3.0 LCO APPLICABILITY (continued)

LCO 3.0.9

When one or more required barriers are unable to perform their related support function(s), any supported system LCO(s) are not required to be declared not met solely for this reason for up to 30 days provided that at least one train or subsystem of the supported system is OPERABLE and supported by barriers capable of providing their related support function(s), and risk is assessed and managed. This Specification may be concurrently applied to more than one train or subsystem of a multiple train or subsystem supported system provided at least one train or subsystem of the supported system is OPERABLE and the barriers supporting each of these trains or subsystems provide their related support function(s) for different categories of initiating events.

For the purposes of this Specification, the High Pressure Coolant Injection System, the Reactor Core Isolation Cooling System, and the Automatic Depressurization System are considered independent subsystems of a single system.

If the required OPERABLE train or subsystem becomes inoperable while this Specification is in use, it must be restored to OPERABLE status within 24 hours or the provisions of this Specification cannot be applied to the trains or subsystems supported by the barriers that cannot perform their related support function(s).

At the end of the specified period, the required barriers must be able to perform their related support function(s) or the supported system LCO(s) shall be declared not met.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. One or more DC electrical power distribution subsystems inoperable for reasons other than Condition C.	D.1 Restore DC electrical power distribution subsystems to OPERABLE status.	7 days <u>OR</u> In accordance with the Risk-Informed Completion Time Program
E. Required Action and associated Completion Time of Condition A, B, C, or D not met.	E.1 -----NOTE----- LCO 3.0.4.a is not applicable when entering MODE 3. ----- Be in MODE 3.	12 hours
F. Two or more electrical power distribution subsystems inoperable that result in a loss of function.	F.1 Be in MODE 3. <u>AND</u> F.2 Be in MODE 4.	12 hours 36 hours



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO TSTF-585, REVISION 5, "REVISE LCO 3.0.3 TO REQUIRE MANAGING
RISK" AND TSTF-597, REVISION 0, "ELIMINATE LCO 3.0.3 MODE 2 REQUIREMENT"
AMENDMENT NO. 315 TO FACILITY OPERATING LICENSE NO. DPR-71
AND AMENDMENT NO. 343 TO FACILITY OPERATING LICENSE NO. DPR-62
DUKE ENERGY PROGRESS, LLC
BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
DOCKET NOS. 50-325 AND 50-324

<u>Application (i.e., initial and supplements)</u> February 12, 2026 (ML26043A039)	<u>Safety Evaluation Date</u> July 20, 2026

1.0 PROPOSED CHANGES

By Letter dated February 12, 2026, Duke Energy Progress, LLC (the licensee) requested changes to the technical specifications (TSs) for Brunswick Steam Electric Plant, Units 1 and 2 (Brunswick) by license amendment request (LAR, application). In its application, the licensee requested that the U.S. Nuclear Regulatory Commission (NRC, the Commission) process the proposed amendment under the Consolidated Line Item Improvement Process (CLIIP). The proposed changes would revise the TS based on Technical Specifications Task Force (TSTF) Travelers TSTF-585, Revision 5, "Revise LCO [Limiting Condition for Operation] 3.0.3 to Require Managing Risk" (TSTF-585) (Agencywide Documents Access and Management System Accession No. ML25260A487) and the associated NRC staff safety evaluation (SE) of Traveler TSTF-585 (ML26005A205).

The proposed changes would revise the shutdown requirements in LCO 3.0.3 by requiring the assessment and management of plant risk whenever LCO 3.0.3 is entered. The licensee proposed that the risk assessment and implementation of any appropriate risk management actions (RMAs) must be completed within 6 hours. The proposed changes also revise or add TS Required Actions to require a plant shutdown instead of entry into LCO 3.0.3.

The LAR also requested the Brunswick TSs be modified to adopt TSTF-597, Revision 0, "Eliminate LCO 3.0.3 Mode 2 Requirement" (TSTF 597, ML24075A080), correction letter (ML24260A221), and the associated NRC staff final SE of Traveler TSTF-597 (ML24358A228).

The proposed change to adopt TSTF-597 would revise the shutdown requirements in TS LCO 3.0.3 by removing the requirement to place the unit in MODE 2 prior to entering MODE 3.

A notice of consideration of proposed issuance of amendments with proposed no significant hazards consideration determination was published in the *Federal Register* on April 14, 2026 (91 FR 19210), that the amendments involve no significant hazards consideration, and there has been no public comment on such finding.

Description of the Current LCO 3.0.3

The current TS LCO 3.0.3 requires the unit to be in Mode 2 within 7 hours, Mode 3 within 13 hours, and Mode 4 within 37 hours when:

- 1) an LCO is not met and the associated actions are not met,
- 2) an associated action is not provided, or
- 3) if directed to enter LCO 3.0.3 by the associated actions.

LCO 3.0.3 is applicable in Modes 1, 2, and 3.

1.1 Proposed TS Changes to Adopt TSTF-597

In accordance with the NRC staff-approved TSTF-597, the licensee proposed changes that would revise LCO 3.0.3. Specifically, the licensee proposed to delete the requirement to be in Mode 2 within 7 hours and renumber the subsequent requirements.

1.2 Proposed TS Changes to Adopt TSTF-585

In accordance with the NRC staff-approved traveler TSTF-585, the requirements to be in MODE 3 within 13 hours and MODE 4 within 37 hours are changed with the restructuring of LCO 3.0.3 by replacing the 1-hour shutdown preparation time with a requirement to assess the risk and implement appropriate RMAs within 6 hours. In addition, if risk is assessed and managed, and is subsequently determined to be acceptable, operation may continue for a total of 24 hours after unplanned entry into LCO 3.0.3 (i.e., an additional 18 hours beyond the initial 6 hours for the risk assessment and implementation of RMAs). If the plant is still in LCO 3.0.3 at the end of the 24-hour period, the initiation of a shutdown is required. In addition, a shutdown is required to be initiated at the end of the 6-hour period “[i]f the risk assessment determines that continuing operation is not acceptable, the risk assessment was not completed, the appropriate RMAs were not implemented, or entry into LCO 3.0.3 was planned.”

The licensee also proposes to change this sentence in LCO 3.0.3:

Where corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required.

to read:

If corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, then completion of the actions required by LCO 3.0.3 is not required.

Each of the specified Mode change completion times (CTs) in the current LCO 3.0.3 (b and c, which are renumbered as a and b) are adjusted in the proposed LCO 3.0.3 to reflect the replacement of the existing 1-hour shutdown preparation time with the proposed increased time for initiating a shutdown of either 6 or 24 hours, as appropriate. The change in CTs does not change the amount of time allowed for the process of shutting down the plant. It reflects a change in when the shutdown is required to begin based on the time of entry into LCO 3.0.3.

Table 1 shows the current LCO 3.0.3 compared to the proposed changes to LCO 3.0.3. Text deletions are shown in ~~strikeout font~~, and additions are shown in ***bold italicized font***.

Table 1
Comparison of Existing LCO 3.0.3 to the Proposed LCO 3.0.3

Current LCO 3.0.3	Proposed LCO 3.0.3
When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated within 1 hour to place the unit, as applicable, in: a. MODE 2 within 10 hours; b. MODE 3 within 13 hours; and c. MODE 4 within 37 hours. Exceptions to this Specification are stated in the individual Specifications. Where corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required. ...	When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. <i>Within 6 hours perform a risk assessment addressing inoperable systems and components and implement appropriate risk management actions. If the risk assessment determines that continuing operation is acceptable, the appropriate risk management actions are implemented, and entry into LCO 3.0.3 was unplanned, then action</i> Action shall be initiated within 24 hours 1 hour to place the unit, as applicable, in: a. MODE 2 within 10 hours; b. a. MODE 3 within 1336 hours, and c. b. MODE 4 within 3760 hours. <i>If the risk assessment determines that continuing operation is not acceptable, the risk assessment was not completed, the appropriate risk management actions were not implemented, or entry into LCO 3.0.3 was planned, then action shall be initiated to place the unit, as applicable, in:</i> a. MODE 3 within 18 hours, and b. MODE 4 within 42 hours. <i>All times are determined from entry into LCO 3.0.3.</i> Exceptions to this Specification are stated in the individual Specifications. IfWhere corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, <i>then</i> completion of the actions required by LCO 3.0.3 is not required. ...

Implicit entries into LCO 3.0.3 can occur when an LCO is not met, and there is no associated Action provided for that condition. There are also several places in the TS where entries into LCO 3.0.3 are explicitly required by the TS Actions. In some cases, the application of the revised LCO 3.0.3 would not be appropriate. Accordingly, TSTF-585 modified the standard technical specifications (STS) to replace these implicit and explicit entries into LCO 3.0.3 with explicit requirements to immediately shut down. The TSTF-585 change that is applicable to Brunswick is:

- NUREG-1433, STS 3.8.9, "Distribution Systems - Operating," would be modified to require a shutdown when two or more electrical power distribution subsystems are inoperable resulting in a loss of safety function.

1.3 Additional Proposed TS Changes

In addition to the changes proposed that are consistent with the travelers discussed in sections 1.1 and 1.2, the licensee proposed the variation below.

1.3.1 Editorial Variations

The licensee noted that Brunswick TSs have different numbering than STS.

2.0 REGULATORY EVALUATION

2.1 Applicable Regulatory Requirements and Guidance

The regulation under Title 10 of the *Code of Federal Regulations* (10 CFR) 50.36(b) requires that:

Each license authorizing operation of a ... utilization facility ... will include technical specifications. The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to [10 CFR] 50.34 ["Contents of applications; technical information"]. The Commission may include such additional technical specifications as the Commission finds appropriate.

The categories of items required to be in the TS are listed in 10 CFR 50.36(c). The regulation at 10 CFR 50.36(c)(2) requires that TS include LCOs. Per 10 CFR 50.36(c)(2)(i), LCOs "are the lowest functional capability or performance levels of equipment required for safe operation of the facility." The regulation also requires that when an LCO of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the TS until the condition can be met.

LCO 3.0.3 implements 10 CFR 50.36(c)(2)(i) in that it requires a plant to shut down when an LCO is not met and: 1) there are no remedial actions provided in the TS, or 2) the remedial actions provided in the TS are not completed in the time allowed by the TS.

Paragraph (a)(4) of 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants," (the Maintenance Rule) requires, in part, that:

[b]efore performing maintenance activities (including but not limited to surveillance, post-maintenance testing, and corrective and preventive maintenance), the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities. The scope of the assessment may be limited to structures, systems, and components that a risk-informed evaluation process has shown to be significant to public health and safety.

NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Section 11.0, "Assessment of Risk Resulting from Maintenance Activities," provides a methodology that is an acceptable approach to manage and assess risk associated with maintenance activities. This methodology has been endorsed by the NRC in RG 1.160, Revision 4, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." TSTF-585 revised STS LCO 3.0.3 to require the assessment and management of risk using this NRC-endorsed methodology.

The NRC staff's guidance for the review of TS is in NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition" (SRP), Chapter 16, Section 16.0, "Technical Specifications," March 2010 (ML100351425). The NRC staff's review includes consideration of whether the proposed changes are consistent with NUREG-1433, "Standard Technical Specifications, General Electric BWR/4 Plants" Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21272A357 and ML21272A358, respectively).

3.0 TECHNICAL EVALUATION

The regulatory framework the NRC staff used to determine the acceptability of the licensee's proposed changes consisted of the requirements and guidance listed in section 2.1 of this SE. The NRC staff compared the licensee's proposed TS changes summarized in sections 1.1 and 1.2 of this SE against the changes approved in Travelers TSTF-597 and TSTF-585, respectively. In accordance with SRP Chapter 16.0, the NRC staff determined that the STS changes approved in TSTF-585 are applicable to Brunswick TSs because Brunswick is a General Electric boiling water reactor type 4 (BWR/4) and the NRC staff approved the TSTF-585 and TSTF-597 changes for that plant design. The NRC staff confirmed that there are no plant-specific design features that would affect the applicability of the proposed TSTF-585 and TSTF-597 changes to Brunswick.

3.1 Proposed TS Changes to Adopt TSTF-585

TSTF-585 proposed a restructured STS LCO 3.0.3 by replacing the one-hour shutdown preparation time with a requirement to assess the risk and implement appropriate RMAs within 6 hours. Additionally, TSTF-585 revised or added some TS Required Actions to require a plant shutdown instead of entry into STS LCO 3.0.3, based on whether the TS directs entry into LCO 3.0.3 or could result from an implicit entry into LCO 3.0.3. These changes were made in cases where immediate shutdown was more appropriate than the delayed shutdown allowed by the revised STS LCO 3.0.3. The NRC staff finds that the licensee's proposed changes to Brunswick TS in section 1.2 of this SE are consistent with those found acceptable in TSTF-585.

The licensee also confirmed that they will use NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Section 11.0, "Assessment of Risk Resulting from Maintenance Activities," as their methodology to assess and manage risk when entering LCO 3.0.3. This methodology was endorsed by the NRC in RG 1.160, Revision 4, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants" and was found acceptable by the staff in the SE of TSTF-585 for assessing and managing risk when entering LCO 3.0.3.

In the NRC SE of TSTF-585, the NRC staff concluded that the proposed changes were acceptable because the proposed LCO 3.0.3 provides appropriate remedial actions in lieu of requiring an immediate shutdown. The proposed LCO 3.0.3 ensures that appropriate remedial actions are provided for the requested CT of up to 24 hours and the appropriate time for remedial actions are provided based on the risk assessment result. If the required systems are not restored to operable status within the specified CT, a shutdown is required. Therefore, the NRC staff found that the proposed changes to LCO 3.0.3 were acceptable because they continued to meet the requirements of 10 CFR 50.36(c)(2)(i) as discussed in section 3.0 of the NRC staff's SE of TSTF-585.

For these same reasons, the NRC staff concludes that the corresponding proposed changes to the Brunswick TS in section 1.2 of this SE continue to meet the requirements of 10 CFR 50.36(c)(2)(i).

3.2 Proposed TS Changes to Adopt TSTF-597

TSTF-597 revised LCO 3.0.3 to remove the MODE 2 requirement. The NRC staff finds that the licensee's proposed changes to Brunswick TSs summarized in section 1.1 of this SE are consistent with those found acceptable in TSTF-597.

In the NRC SE of TSTF-597, the NRC staff evaluated the BWR modes of operation, typical startup and shutdown operating procedures, and any potential impacts to safety that the removal of the MODE 2 requirement in STS LCO 3.0.3 would have. Additionally, the NRC staff evaluated other LCOs to verify the proposed change would not cause conflicts, including LCOs only applicable in MODE 1. As a result, the NRC staff concluded that the proposed changes to STS LCO 3.0.3 were acceptable because the requirement to enter MODE 2 in LCO 3.0.3 does not align with typical BWR shutdown procedures, and places unnecessary time pressure on licensees without a commensurate gain in safety.

Therefore, the NRC staff found that the proposed changes to STS LCO 3.0.3 were acceptable because they continue to meet 10 CFR 50.36(c)(2)(i) since the LCO 3.0.3 requirements align with all other LCOs on the times to reach MODE 3 and MODE 4 (after accounting for the above-discussed 1-hour preparation period built into LCO 3.0.3) and in not requiring entry into MODE 2 while shutting down.

For these same reasons, the NRC staff concludes that the corresponding proposed changes to the Brunswick TS summarized in section 1.1 of this SE are acceptable and continue to meet the requirements of 10 CFR 50.36(c)(2)(i).

3.3 Additional Proposed Changes

In addition to the changes proposed that are consistent with the traveler discussed in sections 1.1 and 1.2, the licensee proposed the variation below.

3.3.1 Editorial Variations

The LAR noted that the Brunswick TSs have different numbering than STS. The NRC staff finds that the different TS numbering in the LAR is acceptable because it does not substantively alter TS requirements.

3.4 TS Change Consistency

The NRC staff reviewed the proposed TS changes for technical clarity and consistency with the existing requirements for customary terminology and formatting. The NRC staff finds that the proposed changes are consistent with chapter 16.0 of the SRP and are therefore acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the North Carolina State official was notified of the proposed issuance of the amendment on June 3, 2026. The State officials had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to the installation or use of facility components located within the restricted areas as defined in 10 CFR Part 20 and [and changes surveillance requirements.] The NRC staff has determined that the amendments involve no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT UNIT NOS. 1 AND 2 - ISSUANCE OF
AMENDMENT NOS. 315 AND 343 RE: ADOPTION OF TSTF-585, "REVISE
LCO 3.0.3 TO REQUIRE MANAGING RISK" AND TSTF-597, "ELIMINATE LCO
3.0.3 MODE 2 REQUIREMENT" (EPID L-2026-LLA-0030)
DATED JULY 20, 2026

DISTRIBUTION:

PUBLIC

PM File Copy

RidsNrrDpl1Orlb3Resource

RidsNrrDpl1Orlb2 Resource

RidsNrrLASLent Resource

RidsNrrPMBrunswick Resource

RidsRgn2MailCenter Resource

RidsNrrDssTspsb Resource

RidsACRS_MailCTR Resource

KWest, NRR

ADAMS Accession Nos.:

Package: ML26190A210

Letter: ML26190A206

e-Concurrence Case: 20260713-01242