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

June 14, 2022

Ms. Tanya Hamilton
Senior Vice President - Nuclear Corporate
Duke Energy Corporation
526 South Church Street, EC-07H
Charlotte, NC 28202

SUBJECT: CATAWBA NUCLEAR STATION, UNITS 1 AND 2; MCGUIRE NUCLEAR STATION, UNITS 1 AND 2; OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3; AND H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 – ISSUANCE OF AMENDMENTS TO ADOPT TSTF-439, "ELIMINATE SECOND COMPLETION TIMES LIMITING TIME FROM DISCOVERY OF FAILURE TO MEET AN LCO" (EPID L-2021-LLA-0111)

Dear Ms. Hamilton:

The U.S. Nuclear Regulatory Commission (NRC) has issued the following enclosed amendments: Amendment Nos. 312 and 308 to Renewed Facility Operating License (RFOL) Nos. NPF-35 and NPF-52 for the Catawba Nuclear Station, Units 1 and 2, respectively; Amendment Nos. 322 and 301 to RFOL Nos. NPF-9 and NPF-17 for the McGuire Nuclear Station, Units 1 and 2, respectively; Amendment Nos. 423, 425, and 424 to RFOL Nos. DPR-38, DPR-47, and DPR-55 for the Oconee Nuclear Station, Units 1, 2, and 3, respectively; and Amendment No. 270 to RFOL No. DPR-23 for the H. B. Robinson Steam Electric Plant, Unit 2.

These amendments are issued in response to your June 9, 2021 application, which was supplemented on July 16, 2021. They would revise the facilities technical specifications to adopt approved Technical Specifications Task Force Traveler TSTF-439, Revision 2, "Eliminate Second Completion Times Limiting Time from Discovery of Failure to Meet an LCO [Limiting Condition for Operation]."

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

If you have any questions, please contact me at (301) 415-7410 or by e-mail at Natreon.Jordan@nrc.gov.

Sincerely,

/RA/

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

Docket Nos. 50-413, 50-414, 50-369,
50-370, 50-269, 50-270,
50-287, and 50-261

Enclosures:
1. Amendment No. 312 to NPF-35
2. Amendment No. 308 to NPF-52
3. Amendment No. 322 to NPF-9
4. Amendment No. 301 to NPF-17
5. Amendment No. 423 to DPR-38
6. Amendment No. 425 to DPR-47
7. Amendment No. 424 to DPR-55
8. Amendment No. 270 to DPR-23
9. Safety Evaluation

cc: See next page

cc: Mr. Robert T. Simril
Site Vice President
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Duke Energy Carolinas, LLC
4800 Concord Road
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Mr. Thomas Ray
Site Vice President
McGuire Nuclear Station
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Mr. Steven M. Snider
Site Vice President
Oconee Nuclear Station
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Mr. Ernest J. Kapopoulos, Jr.
Site Vice President
H. B. Robinson Steam Electric Plant
Duke Energy Progress, LLC
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Ms. Kim Maza
Site Vice President
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Mr. John A. Krakuszeski
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

DUKE ENERGY CAROLINAS, LLC

DOCKET NO. 50-413

CATAWBA NUCLEAR STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 312
Renewed License No. NPF-35

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

   A. The application for amendment to the Catawba Nuclear Station, Unit 1 (the facility) Renewed Facility Operating License No. NPF-35 filed by the Duke Energy Carolinas, LLC (licensee), dated June 9, 2021, as supplemented by letter dated July 16, 2021, with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as 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 set forth in 10 CFR Chapter I;

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

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

2. Accordingly, the license is amended by changes to the Technical Specifications, as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-35 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 312 which are attached hereto, are hereby incorporated into this renewed operating license. Duke Energy Carolinas, LLC shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

David J. Wrona

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Date: 2022.06.14 10:44:29 -04'00'

David J. Wrona, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-35
and Technical Specifications

Date of Issuance: June 14, 2022

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

DUKE ENERGY CAROLINAS, LLC

DOCKET NO. 50-414

CATAWBA NUCLEAR STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 308
Renewed License No. NPF-52

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

   A. The application for amendment to the Catawba Nuclear Station, Unit 2 (the facility) Renewed Facility Operating License No. NPF-52 filed by the Duke Energy Carolinas, LLC (licensee), dated June 9, 2021, as supplemented by letter dated July 16, 2021, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as 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 set forth in 10 CFR Chapter I;

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

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

2. Accordingly, the license is amended by changes to the Technical Specifications, as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-52 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 308, which are attached hereto, are hereby incorporated into this renewed operating license. Duke Energy Carolinas, LLC shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

David J. Wrona

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Date: 2022.06.14 10:45:00 -04'00'

David J. Wrona, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-52
and the Technical Specifications

Date of Issuance: June 14, 2022

ATTACHMENT TO

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

LICENSE AMENDMENT NO. 312

RENEWED FACILITY OPERATING LICENSE NO. NPF-35

DOCKET NO. 50-413

AND LICENSE AMENDMENT NO. 308

RENEWED FACILITY OPERATING LICENSE NO. NPF-52

DOCKET NO. 50-414

Replace the following pages of the Renewed Facility Operating Licenses and 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	Insert
License	License
NPF-35, Page 4	NPF-35, Page 4
NPF-52, Page 4	NPF-52, Page 4
Technical Specifications	Technical Specifications
1.3-3	1.3-3
1.3-7	1.3-7
1.3-8	1.3-8
3.7.5-1	3.7.5-1
3.8.1-2	3.8.1-2
3.8.1-4	3.8.1-4
3.8.1-7	3.8.1-7
3.8.9-1	3.8.9-1
3.8.9-2	3.8.9-2

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 312 which are attached hereto, are hereby incorporated into this renewed operating license. Duke Energy Carolinas, LLC shall operate the facility in accordance with the Technical Specifications.

(3) Updated Final Safety Analysis Report

The Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on December 16, 2002, describes certain future activities to be completed before the period of extended operation. Duke shall complete these activities no later than December 6, 2024, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement as revised on December 16, 2002, described above, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71 (e)(4), following issuance of this renewed operating license. Until that update is complete, Duke may make changes to the programs described in such supplement without prior Commission approval, provided that Duke evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

(4) Antitrust Conditions

Duke Energy Carolinas, LLC shall comply with the antitrust conditions delineated in Appendix C to this renewed operating license.

(5) Fire Protection Program

Duke Energy Carolinas, LLC shall implement and maintain in effect all provisions of the approved fire protection program that complies with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the licensee amendment request dated September 25, 2013; as supplemented by letters dated January 13, 2015; January 28, 2015; February 27, 2015; March 30, 2015; April 28, 2015; July 15, 2015; August 14, 2015; September 3, 2015; December 11, 2015; January 7, 2016; March 23, 2016; June 15, 2016; August 2, 2016; September 7, 2016; and, January 26, 2017, as approved in the SE dated February 8, 2017. Except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 308 which are attached hereto, are hereby incorporated into this renewed operating license. Duke Energy Carolinas, LLC shall operate the facility in accordance with the Technical Specifications.

(3) Updated Final Safety Analysis Report

The Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on December 16, 2002, describes certain future activities to be completed before the period of extended operation. Duke shall complete these activities no later than December 6, 2024, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement as revised on December 16, 2002, described above, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71 (e)(4), following issuance of this renewed operating license. Until that update is complete, Duke may make changes to the programs described in such supplement without prior Commission approval, provided that Duke evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

(4) Antitrust Conditions

Duke Energy Carolinas, LLC shall comply with the antitrust conditions delineated in Appendix C to this renewed operating license.

(5) Fire Protection Program

Duke Energy Carolinas, LLC shall implement and maintain in effect all provisions of the approved fire protection program that complies with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the licensee amendment request dated September 25, 2013; as supplemented by letters dated January 13, 2015; January 28, 2015; February 27, 2015; March 30, 2015; April 28, 2015; July 15, 2015; August 14, 2015; September 3, 2015; December 11, 2015; January 7, 2016; March 23, 2016; June 15, 2016; August 2, 2016; September 7, 2016; and, January 26, 2017, as approved in the SE dated February 8, 2017. Except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

1.3 Completion Times (continued)

DESCRIPTION
(continued)

The above Completion Time extensions do not apply to those Specifications that have exceptions that allow completely separate re-entry into the Condition (for each train, subsystem, component, or variable expressed in the Condition) and separate tracking of Completion Times based on this re-entry. These exceptions are stated in individual Specifications.

The above Completion Time extension does not apply to a Completion Time with a modified "time zero." This modified "time zero" may be expressed as a repetitive time (i.e., "once per 8 hours," where the Completion Time is referenced from a previous completion of the Required Action versus the time of Condition entry) or as a time modified by the phrase "from discovery . . ."

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-3

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One Function X train inoperable.	A.1 Restore Function X train to OPERABLE status.	7 days
B. One Function Y train inoperable.	B.1 Restore Function Y train to OPERABLE status.	72 hours
C. One Function X train inoperable. AND One Function Y train inoperable.	C.1 Restore Function X train to OPERABLE status. OR C.2 Restore Function Y train to OPERABLE status.	72 hours 72 hours

(continued)

EXAMPLES

EXAMPLE 1.3-3 (continued)

When one Function X train and one Function Y train are inoperable, Condition A and Condition B are concurrently applicable. The Completion Times for Condition A and Condition B are tracked separately for each train starting from the time each train was declared inoperable and the Condition was entered. A separate Completion Time is established for Condition C and tracked from the time the second train was declared inoperable (i.e., the time the situation described in Condition C was discovered).

If Required Action C.2 is completed within the specified Completion Time, Conditions B and C are exited. If the Completion Time for Required Action A.1 has not expired, operation may continue in accordance with Condition A. The remaining Completion Time in Condition A is measured from the time the affected train was declared inoperable (i.e., initial entry into Condition A).

It is possible to alternate between Conditions A, B, and C in such a manner that operation could continue indefinitely without ever restoring systems to meet the LCO. However, doing so would be inconsistent with the basis of the Completion Times. Therefore, there shall be administrative controls to limit the maximum time allowed for any combination of Conditions that result in a single contiguous occurrence of failing to meet the LCO. These administrative controls shall ensure that the Completion Times for those Conditions are not inappropriately extended.

(continued)

3.7 PLANT SYSTEMS

3.7.5 Auxiliary Feedwater (AFW) System

LCO 3.7.5 Three AFW trains shall be OPERABLE.

----------NOTE----------
Only one AFW train, which includes a motor driven pump, is required to be OPERABLE in MODE 4.

APPLICABILITY: MODES 1, 2, and 3,
MODE 4 when steam generator is relied upon for heat removal.

ACTIONS

----------NOTE----------
LCO 3.0.4.b is not applicable when entering MODE 1.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One steam supply to turbine driven AFW pump inoperable. OR ----------NOTE---------- Only applicable if Mode 2 has not been entered following refueling. ---------- One turbine driven AFW pump inoperable in MODE 3 following refueling.	A.1 Restore affected equipment to OPERABLE status.	7 days
B. One AFW train inoperable in MODE 1, 2 or 3 for reasons other than Condition A.	B.1 Restore AFW train to OPERABLE status.	72 hours

(continued)

ACTIONS

----------NOTE----------
LCO 3.0.4.b is not applicable to DGs.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One LCO 3.8.1.a offsite circuit inoperable.	A.1 Perform SR 3.8.1.1 for required OPERABLE offsite circuit(s).	1 hour AND Once per 8 hours thereafter
	AND	
	A.2 Declare required feature(s) with no offsite power available inoperable when its redundant required feature(s) is inoperable.	24 hours from discovery of no offsite power to one train concurrent with inoperability of redundant required feature(s)
	AND	
	A.3 Restore offsite circuit to OPERABLE status.	72 hours

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.5 Evaluate availability of Emergency Supplemental Power Source (ESPS).	1 hour AND Once per 12 hours thereafter
	AND	
	B.6 Restore DG to OPERABLE status.	72 hours from discovery of unavailable ESPS AND 24 hours from discovery of Condition B entry ≥ 48 hours concurrent with unavailability of ESPS AND 14 days

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. (continued)	D.4.1 Determine OPERABLE DG(s) is not inoperable due to common cause failures. OR D.4.2 Perform SR 3.8.1.2 for OPERABLE DG(s). AND D.5 Evaluate availability of ESPS. AND D.6 Restore LCO 3.8.1.d DG to OPERABLE status.	24 hours 24 hours 1 hour AND Once per 12 hours thereafter 72 hours from discovery of unavailable ESPS AND 24 hours from discovery of Condition D entry ≥ 48 hours concurrent with unavailability of ESPS AND 14 days

3.8 ELECTRICAL POWER SYSTEMS

3.8.9 Distribution Systems—Operating

LCO 3.8.9 Train A and Train B AC, four channels of DC, DC Train A and Train B and four AC vital buses electrical power distribution subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more AC electrical power distribution subsystem(s) inoperable.	A.1 Restore AC electrical power distribution subsystem(s) to OPERABLE status.	8 hours
B. One AC vital bus inoperable.	B.1 Restore AC vital bus subsystem to OPERABLE status.	2 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. One channel of DC electrical power distribution subsystems inoperable.	C.1 Restore channel of DC electrical power distribution subsystems to OPERABLE status.	2 hours
D. One train of DC electrical power distribution subsystems inoperable.	D.1 Restore DC electrical power distribution subsystem to OPERABLE status.	2 hours
E. Required Action and associated Completion Time not met.	E.1 Be in MODE 3. AND E.2 Be in MODE 5.	6 hours 36 hours
F. Two trains with inoperable distribution subsystems that result in a loss of safety function.	F.1 Enter LCO 3.0.3.	Immediately

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WASHINGTON, D.C. 20555-0001

DUKE ENERGY CAROLINAS, LLC

DOCKET NO. 50-369

MCGUIRE NUCLEAR STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 322
Renewed License No. NPF-9

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

   A. The application for amendment to the McGuire Nuclear Station, Unit 1 (the facility), Renewed Facility Operating License No. NPF-9, filed by the Duke Energy Carolinas, LLC (licensee), dated June 9, 2021, as supplemented by letter dated July 16, 2021, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as 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 set forth in 10 CFR Chapter I;

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

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

2. Accordingly, the license is amended by changes to the Technical Specifications, as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-9 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 322, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

David J. Wrona

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Date: 2022.06.14 10:45:58 -04'00'

David J. Wrona, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility Operating License No. NPF-9 and the Technical Specifications

Date of Issuance: June 14, 2022

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

DUKE ENERGY CAROLINAS, LLC

DOCKET NO. 50-370

MCGUIRE NUCLEAR STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 301
Renewed License No. NPF-17

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

   A. The application for amendment to the McGuire Nuclear Station, Unit 2 (the facility), Renewed Facility Operating License No. NPF-17, filed by the Duke Energy Carolinas, LLC (the licensee), dated June 9, 2021, as supplemented by letter dated July 16, 2021,complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as 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 set forth in 10 CFR Chapter I;

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

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

2. Accordingly, the license is amended by changes to the Technical Specifications, as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-17 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 301, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

David J. Wrona

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David J. Wrona, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility Operating License No. NPF-17 and the Technical Specifications

Date of Issuance: June 14, 2022

ATTACHMENT TO

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

LICENSE AMENDMENT NO. 322

RENEWED FACILITY OPERATING LICENSE NO. NPF-9

DOCKET NO. 50-369

AND

LICENSE AMENDMENT NO. 301

RENEWED FACILITY OPERATING LICENSE NO. NPF-17

DOCKET NO. 50-370

Replace the following pages of the Renewed Facility Operating Licenses and 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	Insert
License	License
NPF-9, Page 3	NPF-9, Page 3
NPF-17, Page 3	NPF-17, Page 3
Technical Specifications	Technical Specifications
1.3-3	1.3-3
1.3-7	1.3-7
1.3-8	1.3-8
3.7.5-1	3.7.5-1
3.8.1-2	3.8.1-2
3.8.1-4	3.8.1-4
3.8.9-1	3.8.9-1
3.8.9-2	3.8.9-2

(4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to 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;

(5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproducts and special nuclear materials as may be produced by the operation of McGuire Nuclear Station, Units 1 and 2, and;

(6) Pursuant to the Act and 10 CFR Parts 30 and 40, to receive, possess and process for release or transfer such byproduct material as may be produced by the Duke Training and Technology Center.

C. This renewed operating 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

The licensee is authorized to operate the facility at a reactor core full steady state power level of 3469 megawatts thermal (100%).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 322, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Updated Final Safety Analysis Report

The Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on December 16, 2002, describes certain future activities to be completed before the period of extended operation. Duke shall complete these activities no later than June 12, 2021, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement as revised on December 16, 2002, described above, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following issuance of this renewed operating license. Until that update is complete, Duke may make changes to the programs described in such supplement without prior Commission approval, provided that Duke evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

(4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to 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;

(5) Pursuant to the Act and 10 CFR Parts, 30, 40 and 70, to possess, but not separate, such byproducts and special nuclear materials as my be produced by the operation of McGuire Nuclear Station, Units 1 and 2; and,

(6) Pursuant to the Act and 10 CFR Parts 30 and 40, to receive, possess and process for release or transfer such by product material as may be produced by the Duke Training and Technology Center.

C. This renewed operating 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 thereafter 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 a reactor core full steady state power level of 3469 megawatts thermal (100%).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 301 are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications. I

(3) Updated Final Safety Analysis Report

The Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on December 16, 2002, describes certain future activities to be completed before the period of extended operation. Duke shall complete these activities no later than March 3, 2023, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement as revised on December 16, 2002, described above, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following issuance of this renewed operating license. Until that update is complete, Duke may make changes to the programs described in such supplement without prior Commission approval, provided that Duke evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59, and otherwise complies with the requirements in that section.

1.3 Completion Times

DESCRIPTION (continued)

The above Completion Time extension does not apply to a Completion Time with a modified "time zero." This modified "time zero" may be expressed as a repetitive time (i.e., "once per 8 hours," where the Completion Time is referenced from a previous completion of the Required Action versus the time of Condition entry) or as a time modified by the phrase "from discovery . . ."

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-3

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One Function X train inoperable.	A.1 Restore Function X train to OPERABLE status.	7 days
B. One Function Y train inoperable.	B.1 Restore Function Y train to OPERABLE status.	72 hours
C. One Function X train inoperable. AND One Function Y train inoperable.	C.1 Restore Function X train to OPERABLE status. OR C.2 Restore Function Y train to OPERABLE status.	72 hours 72 hours

(continued)

EXAMPLES

EXAMPLE 1.3-3 (continued)

When one Function X train and one Function Y train are inoperable, Condition A and Condition B are concurrently applicable. The Completion Times for Condition A and Condition B are tracked separately for each train starting from the time each train was declared inoperable and the Condition was entered. A separate Completion Time is established for Condition C and tracked from the time the second train was declared inoperable (i.e., the time the situation described in Condition C was discovered).

If Required Action C.2 is completed within the specified Completion Time, Conditions B and C are exited. If the Completion Time for Required Action A.1 has not expired, operation may continue in accordance with Condition A. The remaining Completion Time in Condition A is measured from the time the affected train was declared inoperable (i.e., initial entry into Condition A).

It is possible to alternate between Conditions A, B, and C in such a manner that operation could continue indefinitely without ever restoring systems to meet the LCO. However, doing so would be inconsistent with the basis of the Completion Times. Therefore, there shall be administrative controls to limit the maximum time allowed for any combination of Conditions that result in a single contiguous occurrence of failing to meet the LCO. These administrative controls shall ensure that the Completion Times for those Conditions are not inappropriately extended.

(continued)

3.7 PLANT SYSTEMS

3.7.5 Auxiliary Feedwater (AFW) System

LCO 3.7.5 Three AFW trains shall be OPERABLE.

----------NOTE----------
Only one AFW train, which includes a motor driven pump, is required to be OPERABLE in MODE 4.

APPLICABILITY: MODES 1, 2, and 3,
MODE 4 when steam generator is relied upon for heat removal.

ACTIONS

----------NOTE----------
LCO 3.0.4.b is not applicable when entering MODE 1.

CONDITION		REQUIRED ACTION		COMPLETION TIME
A.	One steam supply to turbine driven AFW pump inoperable. OR ----------NOTE---------- Only applicable if MODE 2 has not been entered following refueling. --- One turbine driven AFW pump inoperable in MODE 3 following refueling.	A.1	Restore affected equipment to OPERABLE status.	7 days
B.	One AFW train inoperable in MODE 1, 2 or 3 for reasons other than Condition A.	B.1	Restore AFW train to OPERABLE status.	72 hours

(continued)

ACTIONS

----------NOTE----------
LCO 3.0.4.b is not applicable to DGs.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One LCO 3.8.1.a offsite circuit inoperable.	A.1 Perform SR 3.8.1.1 for required OPERABLE offsite circuit(s).	1 hour AND Once per 8 hours thereafter
	AND A.2 Declare required feature(s) with no offsite power available inoperable when its redundant required feature(s) is inoperable.	24 hours from discovery of no offsite power to one train concurrent with inoperability of redundant required feature(s)
	AND A.3 Restore offsite circuit to OPERABLE status.	72 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.5 Evaluate availability of Emergency Supplemental Power Source (ESPS).	1 hour AND Once per 12 hours thereafter
	AND	
	B.6 Restore DG to OPERABLE status.	72 hours from discovery of unavailable ESPS AND 24 hours from discovery of Condition B entry ≥ 48 hours concurrent with unavailability of ESPS AND 14 days

3.8 ELECTRICAL POWER SYSTEMS

3.8.9 Distribution Systems — Operating

LCO 3.8.9 Train A and Train B AC, four channels of DC, and four AC vital buses electrical power distribution subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more AC electrical power distribution subsystem(s) inoperable.	A.1 Restore AC electrical power distribution subsystem(s) to OPERABLE status.	8 hours
B. One AC vital bus inoperable.	B.1 Restore AC vital bus subsystem to OPERABLE status.	2 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. One channel of DC electrical power distribution subsystem inoperable.	C.1 Restore DC channel of electrical power distribution subsystem to OPERABLE status.	2 hours
D. Required Action and associated Completion Time not met.	D.1 Be in MODE 3. AND D.2 Be in MODE 5.	6 hours 36 hours
E. Two trains with inoperable distribution subsystems that result in a loss of safety function.	E.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.8.9.1	Verify correct breaker alignments and voltage to AC, DC, and AC vital bus electrical power distribution subsystems.	In accordance with the Surveillance Frequency Control Program

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

DUKE ENERGY CAROLINAS, LLC

DOCKET NO. 50-269

OCONEE NUCLEAR STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 423
Renewed License No. DPR-38

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

   A. The application for amendment to the Oconee Nuclear Station, Unit 1 (ONS-1, the facility), Renewed Facility Operating License No. DPR-38, filed by Duke Energy Carolinas, LLC (the licensee), dated June 9, 2021, as supplemented by letter dated July 16, 2021, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as 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 set forth in 10 CFR Chapter I;

   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 hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 3.B of Renewed Facility Operating License No. DPR-38 are hereby amended to read as follows:

   B. Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 423 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

David J. Wrona

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Date: 2022.06.14 10:47:11 -04'00'

David J. Wrona, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed License No. DPR-38
and the Technical Specifications

Date of Issuance: June 14, 2022

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

DUKE ENERGY CAROLINAS, LLC

DOCKET NO. 50-270

OCONEE NUCLEAR STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 425
Renewed License No. DPR-47

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

   A. The application for amendment to the Oconee Nuclear Station, Unit 2 (ONS-2, the facility), Renewed Facility Operating License No. DPR-47, filed by Duke Energy Carolinas, LLC (the licensee), dated June 9, 2021, as supplemented by letter dated July 16, 2021, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as 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 set forth in 10 CFR Chapter I;

   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 hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 3.B of Renewed Facility Operating License No. DPR-47 is hereby amended to read as follows:

   B. Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 425 are hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

David J. Wrona

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David J. Wrona, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed License No. DPR-47
and the Technical Specifications

Date of Issuance: June 14, 2022

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

DUKE ENERGY CAROLINAS, LLC

DOCKET NO. 50-287

OCONEE NUCLEAR STATION, UNIT 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 424
Renewed License No. DPR-55

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

   A. The application for amendment to the Oconee Nuclear Station, Unit 3 (ONS-3, the facility), Renewed Facility Operating License No. DPR-55, filed by Duke Energy Carolinas, LLC (the licensee), dated June 9, 2021, as supplemented by letter dated July 16, 2021, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as 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 set forth in 10 CFR Chapter I;

   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 hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 3.B of Renewed Facility Operating License No. DPR-55 is hereby amended to read as follows:

   B. Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 424 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

David J. Wrona

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Date: 2022.06.14 10:48:24 -04'00'

David J. Wrona, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed License No. DPR-55
and the Technical Specifications

Date of Issuance: June 14, 2022

ATTACHMENT TO

OCONEE NUCLEAR STATION, UNITS 1, 2 AND 3

LICENSE AMENDMENT NO. 423

RENEWED FACILITY OPERATING LICENSE NO. DPR-38

DOCKET NO. 50-269

LICENSE AMENDMENT NO. 425

RENEWED FACILITY OPERATING LICENSE NO. DPR-47

DOCKET NO. 50-270

LICENSE AMENDMENT NO. 424

RENEWED FACILITY OPERATING LICENSE NO. DPR-55

DOCKET NO. 50-287

Replace the following pages of the Renewed Facility Operating Licenses and 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	Insert
License	License
DPR-38, Page 3	DPR-38, Page 3
DPR-47, Page 3	DPR-47, Page 3
DPR-55, Page 3	DPR-55, Page 3
Technical Specifications	Technical Specifications
1.3-3	1.3-3
1.3-6	1.3-6
1.3-7	1.3-7
3.6.5-1	3.6.5-1
3.7.5-1	3.7.5-1
3.8.1-3	3.8.1-3
3.8.1-7	3.8.1-7

A. Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2610 megawatts thermal.

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 423 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

C. This license is subject to the following antitrust conditions:

Applicant makes the commitments contained herein, recognizing that bulk power supply arrangements between neighboring entities normally tend to serve the public interest. In addition, where there are net benefits to all participants, such arrangements also serve the best interests of each of the participants. Among the benefits of such transactions are increased electric system reliability, a reduction in the cost of electric power, and minimization of the environmental effects of the production and sale of electricity.

Any particular bulk power supply transaction may afford greater benefits to one participant than to another. The benefits realized by a small system may be proportionately greater than those realized by a larger system. The relative benefits to be derived by the parties from a proposed transaction, however, should not be controlling upon a decision with respect to the desirability of participating in the transaction. Accordingly, applicant will enter into proposed bulk power transactions of the types hereinafter described which, on balance, provide net benefits to applicant. There are net benefits in a transaction if applicant recovers the cost of the transaction (as defined in ¶1 (d) hereof) and there is no demonstrable net detriment to applicant arising from that transaction.

1. As used herein:

(a) "Bulk Power" means electric power and any attendant energy, supplied or made available at transmission or sub-transmission voltage by one electric system to another.

(b) "Neighboring Entity" means a private or public corporation, a governmental agency or authority, a municipality, a cooperative, or a lawful association of any of the foregoing owning or operating, or proposing to own or operate, facilities for the generation and transmission of electricity which meets each of

A. Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2610 megawatts thermal.

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 425 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

C. This license is subject to the following antitrust conditions:

Applicant makes the commitments contained herein, recognizing that bulk power supply arrangements between neighboring entities normally tend to serve the public interest. In addition, where there are net benefits to all participants, such arrangements also serve the best interests of each of the participants. Among the benefits of such transactions are increased electric system reliability, a reduction in the cost of electric power, and minimization of the environmental effects of the production and sale of electricity.

Any particular bulk power supply transaction may afford greater benefits to one participant than to another. The benefits realized by a small system may be proportionately greater than those realized by a larger system. The relative benefits to be derived by the parties from a proposed transaction, however, should not be controlling upon a decision with respect to the desirability of participating in the transaction. Accordingly, applicant will enter into proposed bulk power transactions of the types hereinafter described which, on balance, provide net benefits to applicant. There are net benefits in a transaction if applicant recovers the cost of the transaction (as defined in ¶1 (d) hereof) and there is no demonstrable net detriment to applicant arising from that transaction.

1. As used herein:

(a) "Bulk Power" means electric power and any attendant energy, supplied or made available at transmission or sub-transmission voltage by one electric system to another.

(b) "Neighboring Entity" means a private or public corporation, a governmental agency or authority, a municipality, a cooperative, or a lawful association of any of the foregoing owning or operating, or proposing to own or operate, facilities for the generation and transmission of electricity which meets each of

A. Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2610 megawatts thermal.

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 424 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

C. This license is subject to the following antitrust conditions:

Applicant makes the commitments contained herein, recognizing that bulk power supply arrangements between neighboring entities normally tend to serve the public interest. In addition, where there are net benefits to all participants, such arrangements also serve the best interests of each of the participants. Among the benefits of such transactions are increased electric system reliability, a reduction in the cost of electric power, and minimization of the environmental effects of the production and sale of electricity.

Any particular bulk power supply transaction may afford greater benefits to one participant than to another. The benefits realized by a small system may be proportionately greater than those realized by a larger system. The relative benefits to be derived by the parties from a proposed transaction, however, should not be controlling upon a decision with respect to the desirability of participating in the transaction. Accordingly, applicant will enter into proposed bulk power transactions of the types hereinafter described which, on balance, provide net benefits to applicant. There are net benefits in a transaction if applicant recovers the cost of the transaction (as defined in ¶1 (d) hereof) and there is no demonstrable net detriment to applicant arising from that transaction.

1. As used herein:

(a) "Bulk Power" means electric power and any attendant energy, supplied or made available at transmission or sub-transmission voltage by one electric system to another.

(b) "Neighboring Entity" means a private or public corporation, a governmental agency or authority, a municipality, a cooperative, or a lawful association of any of the foregoing owning or operating, or proposing to own or operate, facilities for the generation and transmission of electricity which meets each of

1.3 Completion Times

DESCRIPTION (continued)

The above Completion Time extension does not apply to a Completion Time with a modified "time zero." This modified "time zero" may be expressed as a repetitive time (i.e., "once per 8 hours," where the Completion Time is referenced from a previous completion of the Required Action versus the time of Condition entry) or as a time modified by the phrase "from discovery . . ."

EXAMPLES

The following examples illustrate the use of Completion Times with different types of Conditions and changing Conditions.

EXAMPLE 1.3-1

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 5.	6 hours 36 hours

Condition B has two Required Actions. Each Required Action has its own separate Completion Time. Each Completion Time is referenced to the time that Condition B is entered.

The Required Actions of Condition B are to be in MODE 3 within 6 hours AND in MODE 5 within 36 hours. A total of 6 hours is allowed for reaching MODE 3 and a total of 36 hours (not 42 hours) is allowed for reaching MODE 5 from the time that Condition B was entered. If MODE 3 is reached within 3 hours, the time allowed for reaching MODE 5 is the next 33 hours because the total time allowed for reaching MODE 5 is 36 hours.

If Condition B is entered while in MODE 3, the time allowed for reaching MODE 5 is the next 36 hours.

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-3

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One Function X train inoperable.	A.1 Restore Function X train to OPERABLE status.	7 days
B. One Function Y train inoperable.	B.1 Restore Function Y train to OPERABLE status.	72 hours
C. One Function X train inoperable. AND One Function Y train inoperable.	C.1 Restore Function X train to OPERABLE status. OR C.2 Restore Function Y train to OPERABLE status.	72 hours 72 hours

EXAMPLES

EXAMPLE 1.3-3 (continued)

When one Function X train and one Function Y train are inoperable, Condition A and Condition B are concurrently applicable. The Completion Times for Condition A and Condition B are tracked separately for each train starting from the time each train was declared inoperable and the Condition was entered. A separate Completion Time is established for Condition C and tracked from the time the second train was declared inoperable (i.e., the time the situation described in Condition C was discovered).

If Required Action C.2 is completed within the specified Completion Time, Conditions B and C are exited. If the Completion Time for Required Action A.1 has not expired, operation may continue in accordance with Condition A. The remaining Completion Time in Condition A is measured from the time the affected train was declared inoperable (i.e., initial entry into Condition A).

It is possible to alternate between Conditions A, B, and C in such a manner that operation could continue indefinitely without ever restoring systems to meet the LCO. However, doing so would be inconsistent with the basis of the Completion Times. Therefore, there shall be administrative controls to limit the maximum time allowed for any combination of Conditions that result in a single contiguous occurrence of failing to meet the LCO. These administrative controls shall ensure that the Completion Times for those Conditions are not inappropriately extended.

3.6 CONTAINMENT SYSTEMS

3.6.5 Reactor Building Spray and Cooling Systems

LCO 3.6.5 Two reactor building spray trains and three reactor building cooling trains shall be OPERABLE.

----------NOTE----------
Only one train of reactor building spray and two trains of reactor building cooling are required to be OPERABLE during MODES 3 and 4.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

----------NOTE----------
LCO 3.0.4 is not applicable for Unit 2.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One reactor building spray train inoperable in MODE 1 or 2.	A.1 Restore reactor building spray train to OPERABLE status.	7 days
B. One reactor building cooling train inoperable in MODE 1 or 2.	B.1 Restore reactor building cooling train to OPERABLE status.	7 days

(continued)

3.7 PLANT SYSTEMS

3.7.5 Emergency Feedwater (EFW) System

LCO 3.7.5 The EFW System shall be OPERABLE as follows:

a. Three EFW pumps shall be OPERABLE, and

b. Two EFW flow paths shall be OPERABLE.

----------NOTE----------
Only one motor driven emergency feedwater (MDEFW) pump and one EFW flow path are required to be OPERABLE in MODE 4.

APPLICABILITY: MODES 1, 2, and 3,
MODE 4 when steam generator is relied upon for heat removal.

ACTIONS

----------NOTE----------
LCO 3.0.4.b is not applicable when entering MODE 1.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One MDEFW pump inoperable in MODE 1, 2, or 3.	A.1 Restore MDEFW pump to OPERABLE status.	7 days
B. Turbine driven EFW pump inoperable in MODE 1, 2, or 3. OR One EFW flow path inoperable in MODE 1, 2, or 3.	B.1 Restore turbine driven EFW pump and EFW flow path to OPERABLE status.	72 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
C. KHU or its required overhead emergency power path inoperable due to reasons other than Condition A.	C.1	Perform SR 3.8.1.3 for OPERABLE KHU.	1 hour if not performed in previous 12 hours AND Once per 7 days thereafter
	AND		
	C.2.1	Restore the KHU and its required overhead emergency power path to OPERABLE status.	72 hours
	OR		
	C.2.2.1	Energize both standby buses from LCT via isolated power path.	72 hours AND 1 hour from subsequent discovery of deenergized standby bus
	AND		
	C.2.2.2	Suspend KHU generation to grid except for testing.	72 hours
	AND		

(continued)

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
D. (continued)	AND		
	D.3	Restore KHU and its required underground emergency power path to OPERABLE status.	72 hours
E. Required Action and associated Completion Time not met for Required Action D.2.	E.1	Be in MODE 3.	12 hours for one unit AND 24 hours for other unit(s)
	AND		
	E.2	Be in MODE 5.	84 hours
F. Zone overlap protection circuitry inoperable when overhead electrical disconnects for KHU associated with the underground power path are closed.	F.1	Restore zone overlap protection circuitry to OPERABLE status.	72 hours
	OR		
	F.2	Open overhead electrical disconnects for KHU associated with the underground power path.	72 hours
G. Both emergency power paths inoperable due to one inoperable E breaker and one inoperable S breaker on the same main feeder bus.	G.1	Restore one breaker to OPERABLE status.	24 hours

(continued)

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

DUKE ENERGY PROGRESS, LLC

DOCKET NO. 50-261

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 270
Renewed License No. DPR-23

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

   A. The application for amendment by Duke Energy Progress, LLC (the licensee), dated June 9, 2021, as supplemented by letter dated July 16, 2021, 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. Paragraph 3.B. of Renewed Facility Operating License No. DPR-23 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 270 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

David J. Wrona

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Date: 2022.06.14 10:48:58 -04'00'

David J. Wrona, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Renewed License No. DPR-23
and Technical Specifications

Date of Issuance: June 14, 2022

ATTACHMENT TO

H.B ROBINSON STEAM ELECTRIC PLANT, UNIT 2

LICENSE AMENDMENT NO. 270

RENEWED FACILITY OPERATING LICENSE NO. DPR-23

DOCKET NO. 50-261

Remove	Insert
License	License
Page 3	Page 3
Technical Specifications	Technical Specifications
1.3-2	1.3-2
1.3-6	1.3-6
1.3-7	1.3-7
3.6-15	3.6-15
3.7-10	3.7-10
3.8-2	3.8-2
3.8-3	3.8-3
3.8-32	3.8-32

D. Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to 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 and equipment calibration or associated with radioactive apparatus or components;

E. Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by operation of the facility.

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

A. Maximum Power Level

The licensee is authorized to operate the facility at a steady state reactor core power level not in excess of 2339 megawatts thermal.

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 270 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(1) For Surveillance Requirements (SRs) that are new in Amendment 176 to Final Operating License DPR-23, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 176. For SRs that existed prior to Amendment 176, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment 176.

DESCRIPTION (continued)

However, when a subsequent train, subsystem, component, or variable expressed in the Condition is discovered to be inoperable or not within limits, the Completion Time(s) may be extended. To apply this Completion Time extension, two criteria must first be met. The subsequent inoperability:

a. Must exist concurrent with the first inoperability; and

b. Must remain inoperable or not within limits after the first inoperability is resolved.

The total Completion Time allowed for completing a Required Action to address the subsequent inoperability shall be limited to the more restrictive of either:

a. The stated Completion Time, as measured from the initial entry into the Condition, plus an additional 24 hours; or

b. The stated Completion Time as measured from discovery of the subsequent inoperability.

The above Completion Time extensions do not apply to those Specifications that have exceptions that allow completely separate re-entry into the Condition (for each train, subsystem, component, or variable expressed in the Condition) and separate tracking of Completion Times based on this re-entry. These exceptions are stated in individual Specifications.

The above Completion Time extension does not apply to a Completion Time with a modified "time zero." This modified "time zero" may be expressed as a repetitive time (i.e., "once per 8 hours," where the Completion Time is referenced from a previous completion of the Required Action versus the time of Condition entry) or as a time modified by the phrase "from discovery . . ."

(continued)

EXAMPLES (continued)

EXAMPLE 1.3-3

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One Function X train inoperable.	A.1 Restore Function X train to OPERABLE status.	7 days
B. One Function Y train inoperable.	B.1 Restore Function Y train to OPERABLE status.	72 hours
C. One Function X train inoperable. AND One Function Y train inoperable.	C.1 Restore Function X train to OPERABLE status. OR C.2 Restore Function Y train to OPERABLE status	72 hours 72 hours

(continued)

EXAMPLES

EXAMPLE 1.3-3 (continued)

When one Function X train and one Function Y train are inoperable, Condition A and Condition B are concurrently applicable. The Completion Times for Condition A and Condition B are tracked separately for each train starting from the time each train was declared inoperable and the Condition was entered. A separate Completion Time is established for Condition C and tracked from the time the second train was declared inoperable (i.e., the time the situation described in Condition C was discovered).

If Required Action C.2 is completed within the specified Completion Time, Conditions B and C are exited. If the Completion Time for Required Action A.1 has not expired, operation may continue in accordance with Condition A. The remaining Completion Time in Condition A is measured from the time the affected train was declared inoperable (i.e., initial entry into Condition A).

It is possible to alternate between Conditions A, B, and C in such a manner that operation could continue indefinitely without ever restoring systems to meet the LCO. However, doing so would be inconsistent with the basis of the Completion Times. Therefore, there shall be administrative controls to limit the maximum time allowed for any combination of Conditions that result in a single contiguous occurrence of failing to meet the LCO. These administrative controls shall ensure that the Completion Times for those Conditions are not inappropriately extended.

(continued)

3.6 CONTAINMENT SYSTEMS

3.6.6 Containment Spray and Cooling Systems

LCO 3.6.6 Two containment spray trains and two containment cooling trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One containment spray train inoperable.	A.1	Restore containment spray train to OPERABLE status.	72 hours
B. Required Action and associated Completion Time of Condition A not met.	B.1	Be in MODE 3.	6 hours
	AND		
	B.2	Be in MODE 5.	84 hours
C. One containment cooling train inoperable.	C.1	Restore containment cooling train to OPERABLE status.	7 days

(continued)

3.7 PLANT SYSTEMS

3.7.4 Auxiliary Feedwater (AFW) System

LCO 3.7.4 Four AFW flow paths and three AFW pumps shall be OPERABLE.

----------NOTE----------
Only one AFW flow path with one motor driven pump is required to be OPERABLE in MODE 4.

APPLICABILITY: MODES 1, 2, and 3,
MODE 4 when steam generator is being used for heat removal.

ACTIONS

----------NOTE----------
LCO 3.0.4.b is not applicable.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One AFW pump inoperable in MODE 1, 2, or 3. OR One or two AFW flow paths inoperable in MODE 1, 2, or 3.	A.1 Restore AFW pump or flow path(s) to OPERABLE status.	7 days
B. Two motor driven AFW pumps inoperable in MODE 1, 2, or 3. OR Three motor driven AFW flow paths inoperable in MODE 1, 2, or 3.	B.1 Restore one motor driven AFW pump or one flow path to OPERABLE status.	24 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. (continued)	A.3	Restore offsite circuit to OPERABLE status	72 hours
B. One DG inoperable.	B.1	Perform SR 3.8.1.1 for the offsite circuit.	1 hour AND Once per 12 hours thereafter
	AND		
	B.2	Declare required feature(s) supported by the inoperable DG inoperable when its required redundant feature(s) is inoperable.	4 hours from discovery of Condition B concurrent with inoperability of redundant required feature(s)
	AND		
	B.3.1	Perform SR 3.8.1.2 for OPERABLE DG	24 hours
	OR		
	B.3.2.1	Determine OPERABLE DG is not inoperable due to common cause failure. AND	24 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
B. (continued)	----------NOTE---------- Not required to be performed when the cause of the inoperable DG is pre-planned maintenance and testing. ----------		
	B.3.2.2	Perform SR 3.8.1.2 for OPERABLE DG.	96 hours
	AND		
	B.4	Restore DG to OPERABLE status.	7 days
C. Two offsite circuits inoperable.	C.1	Declare required feature(s) inoperable when its redundant required feature(s) is inoperable.	12 hours from discovery of Condition C concurrent with inoperability of redundant required features
	AND		
	C.2	Restore one offsite circuit to OPERABLE status.	24 hours

(continued)

3.8 ELECTRICAL POWER SYSTEMS

3.8.9 Distribution Systems-Operating

LCO 3.8.9 Train A and Train B AC, DC, and AC instrument bus electrical power distribution subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One AC electrical power distribution subsystem inoperable.	A.1 Restore AC electrical power distribution subsystem to OPERABLE status.	8 hours
B. One AC instrument bus subsystem inoperable.	B.1 Restore AC instrument bus subsystem to OPERABLE status.	2 hours
C. One DC electrical power distribution subsystem inoperable.	C.1 Restore DC electrical power distribution subsystem to OPERABLE status.	2 hours

(continued)

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

DUKE ENERGY CAROLINAS, LLC AND DUKE ENERGY PROGRESS, LLC

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-413, 50-414

AMENDMENT NOS. 312 AND 308 TO RENEWED FACILITY OPERATING

LICENSE NOS. NPF-35 AND NPF-52

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-369, 50-370

AMENDMENT NOS. 322 AND 301 TO RENEWED FACILITY OPERATING

LICENSE NOS. NPF-9 AND NPF-17

OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3

DOCKET NOS. 50-269, 50-270, 50-287

AMENDMENT NOS. 423, 425, AND 424 TO RENEWED FACILITY OPERATING

LICENSE NOS. DPR-38, DPR-47, AND DPR-55

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

DOCKET NO. 50-261

AMENDMENT NO. 270 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-23

1.0 INTRODUCTION

By application dated June 9, 2021,[1] as supplemented by letter dated July 16, 2021,[2] the licensee Duke Energy Progress, LLC, and Duke Energy Carolinas, LLC, collectively referred to henceforth as “Duke Energy,” requested changes to the Technical Specifications (TSs) for Catawba Nuclear Station (CNS), Units 1 and 2; McGuire Nuclear Station (MNS), Units 1 and 2; Oconee Nuclear Station (ONS), Units 1, 2 and 3; and H. B. Robinson Steam Electric Plant (RNP), Unit 2, (collectively, the facilities).

[1] Agencywide Documents Access and Management System (ADAMS) Accession No ML21160A008.
[2] ADAMS Accession No ML21197A046.

The amendment would revise the facilities TSs to adopt with certain variances Technical Specifications Task Force (TSTF) Traveler TSTF-439, Revision 2, "Eliminate Second Completion Times Limiting Time from Discovery of Failure to Meet an LCO [Limiting Condition for Operation]," dated June 20, 2005.[3] The U.S. Nuclear Regulatory Commission (NRC or the Commission) approved the traveler on January 11, 2006[4] generically for plants to adopt through license amendment requests. Specifically, the amendment would delete second completion times (CTs) from the affected required actions contained in the TSs, would remove the example contained in TS 1.3, "Completion Times," and would add a discussion about alternating between TS conditions.

The supplement letter dated July 16, 2021, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the *Federal Register* (FR) on August 10, 2021, (86 FR 43686).

2.0 REGULATORY EVALUATION

2.1 System Description

2.1.1 Completion Times

The CT is the amount of time allowed for completing a required action. It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an action condition unless otherwise specified, provided the unit is in a mode or specified condition stated in the applicability of the LCO. Required actions must be completed prior to the expiration of the specified CT. An action condition remains in effect, and the required actions apply until the condition no longer exists or the unit is not within the LCO applicability.

The Description section of the facilities TS 1.3, Completion Times, states, in part, that:

> Once a condition has been entered, subsequent trains, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the condition, unless specifically stated. The Required Actions of the Condition continue to apply to each additional failure, with Completion Time based on initial entry into the Condition, unless otherwise specified.

Certain required actions included a second CT to establish a limit on the maximum time allowed for any combination of CTs that result in a single, continuous failure to meet the LCO. The intent of these second CTs, such as limits on the period of time from discovery of the failure to meet the LCOs discussed below, was to prevent repeated entry and exit from alternating TS required actions.

2.1.2 Containment/Reactor Building Spray and Cooling Systems

The facilities' containment/Reactor Building spray and containment cooling systems provide containment atmosphere cooling to limit post-accident pressure and temperature in containment to less than the design values. In the event of a design basis accident (DBA),

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[3] ADAMS Accession No. ML051860296.

[4] ADAMS Accession No. ML060120272.

reduction of containment/Reactor Building pressure and the iodine removal capability of the spray reduces the release of fission product radioactivity from containment to the environment to within limits. Oconee TS LCO 3.6.5, “Reactor Building Spray and Cooling Systems,” required actions A.1 and B.1, and Robinson TS LCO 3.6.6, “Containment Spray and Cooling Systems,” Required Actions A.1 and C.1 have a second CT of 14 days and 10 days respectively from discovery of failure to meet the LCO. The Catawba and McGuire TSs do not have a second CT for the analogous LCO for its containment spray system.

2.1.3 Alternating Current (AC) Sources – Operating

The facilities’ Class 1E AC sources consist of the offsite power sources and the onsite standby power sources (diesel generators (DGs)). Catawba, McGuire, Oconee, and Robinson TS LCO 3.8.1, “AC Sources - Operating,” required actions ((A.3 and B.6 for Catawba and McGuire), (C.2.1 and D.3 for Oconee) and (A.3 and B.4 for Robinson)) have a second CT of 17 days from discovery of failure to meet LCO 3.8.1.a or b for Catawba and McGuire, 72 hours from discovery of inoperable KHU [Keowee Hydro Units] for Oconee, and 10 days from discovery of failure to meet LCO for Robinson.

2.1.4 Distribution Systems – Operating

The facilities’ onsite Class 1E AC and DC electrical power distribution systems are divided into redundant and independent electrical power distribution subsystems. Catawba, McGuire, and Robinson TS LCO 3.8.9, “Distribution Systems-Operating,” required actions A.1, B.1, C.1, and D.1 for Catawba and A.1, B.1, and C.1 for McGuire and Robinson have a second CT of 16 hours from discovery of failure to meet the LCO. The Oconee TSs do not have a second CT for TS LCO 3.8.9.

2.1.5 Auxiliary/Emergency Feedwater (A/E FW) System

The facilities’ AFW/Emergency System automatically supplies feedwater to the steam generators to remove decay heat from the Reactor Coolant System upon the loss of normal feedwater supply. Catawba, McGuire, and Oconee TS LCO 3.7.5 (3.7.4 for Robinson), “Auxiliary/Emergency Feedwater System,” required actions A.1 and B.1 have a second CT of 10 days (8 days for Robinson) from discovery of failure to meet the LCO.

2.2 Proposed TS Changes

The licensee proposed to delete the following statement from the facilities’ TS 1.3:

> Example 1.3-3 illustrates one use of this type of Completion Time. The 10-day Completion Time specified for Condition A and B in Example 1.3-3 may not be extended.

In addition, in Example 1.3-3, for all facilities, the licensee proposed to delete the “AND 10 days from discovery of failure to meet the LCO” from the CT of Condition A and Condition B.

Also, the licensee proposed to delete the following statement from the facilities’ TS 1.3:

> The Completion Times of Conditions A and B are modified by a logical connector, with a separate 10-day Completion measured from the time it was

> discovered the LCO was not met. In this example, without the separate Completion Time, it would be possible to alternate between Conditions A, B, and C in such a manner that operation could continue indefinitely without ever restoring systems to meet the LCO. The separate Completion Time modified by the phrase “from discovery of failure to meet the LCO” is designed to prevent indefinite continued operation while not meeting the LCO. This Completion Time allows for an exception to the normal “time zero” for beginning the Completion Time "clock." In this instance, the Completion Time “time zero” is specified as commencing at the time the LCO was initially not met, instead of at the time the associated Condition was entered.

For all facilities, the licensee proposed to replace the paragraph above with the following:

> It is possible to alternate between Conditions A, B, and C in such a manner that operation could continue indefinitely without ever restoring systems to meet the LCO. However, doing so would be inconsistent with the basis of the Completion Times. Therefore, there shall be administrative controls to limit the maximum time allowed for any combination of Conditions that result in a single contiguous occurrence of failing to meet the LCO. These administrative controls shall ensure that the Completion Times for those Conditions are not inappropriately extended.

The licensee also proposed to delete the second CTs associated with the following TS LCOs required actions:

- Proposed changes to Catawba TSs:
  - TS 3.7.5, “Auxiliary Feedwater (AFW) System,” Required Actions A.1 and B.1
  - TS 3.8.1, “AC Sources - Operating,” Required Actions A.3, B.6, and D.6
  - TS 3.8.9, “Distribution Systems-Operating,” Required Actions A.1, B.1, C.1, and D.1
- Proposed changes to McGuire TSs:
  - TS 3.7.5, “Auxiliary Feedwater (AFW) System,” Required Actions A.1 and B.1
  - TS 3.8.1, “AC Sources - Operating,” Required Actions A.3 and B.6
  - TS 3.8.9, “Distribution Systems-Operating,” Required Actions A.1, B.1, and C.1
- Proposed changes to Oconee TSs:
  - TS 3.6.5, “Reactor Building Spray and Cooling Systems,” Required Actions A.1 and B.1
  - TS 3.7.5, “Emergency Feedwater (EFW) System,” Required Actions A.1 and B.1
  - TS 3.8.1, “AC Sources - Operating,” Required Actions C.2.1 and D.3
- Proposed changes to Robinson TSs:
  - TS 3.6.6, “Containment Spray and Cooling Systems,” Required Actions A.1 and C.1
  - TS 3.7.4, “Auxiliary Feedwater (AFW) System,” Required Actions A.1 and B.1
  - TS 3.8.1, “AC Sources - Operating,” Required Actions A.3 and B.4

- TS 3.8.9, “Distribution Systems-Operating,” Required Actions A.1, B.1, and C.1

The licensee proposed various variations from TSTF-439, Revision 2, which do not affect its applicability. Specifically, the variations include numbering and format differences as well as plant specific configurations as evaluated in Section 3.2 of this SE.

2.3 Regulatory Requirements and Guidance Documents

The NRC staff reviewed the proposed changes to eliminate TS second CTs against the criteria in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36 and the precedent established in NUREG-1430, "Standard Technical Specifications [STS], Babcock & Wilcox (B&W) Plants," Revision 5[5] and NUREG-1431, "Standard Technical Specifications [STS], Westinghouse Plants," Revision 5.[6] The ONS site has three Babcock & Wilcox pressurized water reactors, whereas, CNS, MNS, and RNP have Westinghouse pressurized water reactors. Section 50.36 requires applicants for nuclear power plant operating licenses to include TS as part of the license.

These TS are derived from the plant safety analyses. In 10 CFR 50.36, the NRC established its regulatory requirements related to the content of the TS, which include (1) safety limits, limiting safety systems settings and control settings, (2) LCOs, (3) surveillance requirements, (4) design features, and (5) administrative controls.

In NUREG-1430 and NUREG-1431, a second CT was included in the STS for certain required actions to establish a limit on the maximum time allowed for any combination of conditions that would result in a single continuous failure to meet the LCO. These CTs (henceforth referred to as “second CT”) are joined by an “AND” logical connector to the condition-specific CT and state “X days from discovery of failure to meet the LCO” (where “X” varies by specification). The intent of the second CT was to preclude entry into and out of the actions for an indefinite period of time without meeting the LCO. The second CT provides a limit on the amount of time the LCO would not be met for various combinations of conditions. TSTF-439, Revision 2, deletes these second CTs from the affected STS required actions.

Section 50.65, “Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants” and specifically, 10 CFR 50.65(a)(1), the Maintenance Rule, requires each licensee to monitor the performance or condition of structures, systems, and components (SSCs) against licensee-established goals in a manner sufficient to provide reasonable assurance that the SSCs are capable of fulfilling their intended functions. These goals must be established commensurate with safety and, where practical, take into account industrywide operating experience. When the performance or condition of a structure, system, or component does not meet established goals, appropriate corrective action must be taken. Under 10 CFR 50.65(a)(3), the effectiveness of these performance and condition monitoring activities, and associated goals and preventive maintenance activities, must be evaluated at least every refueling cycle, not to exceed 24 months. The goals must be established commensurate with safety and, where practical, take into account industry-wide operating experience.

[5] ADAMS Accession No. ML21272A363.

[6] ADAMS Accession No. ML21259A155.

On January 11, 2006, the NRC staff approved TSTF-439 Revision 2, submitted by the TSTF on June 20, 2005, to revise the improved STS for individual plants to voluntarily adopt.

3.0 TECHNICAL EVALUATION

3.1 Evaluation of Proposed Changes to Technical Specifications

The licensee's license amendment request (LAR) stated the following regarding the 10 CFR 50.65 Maintenance Rule (MR):

> Under 10 CFR 50.65(a)(4), the risk impact of all inoperable risk-significant equipment is assessed and managed when performing preventative or corrective maintenance. The risk assessments are conducted using the procedures and guidance endorsed by Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." (Reference 5) Regulatory Guide 1.160 endorses the Revision 4A of NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," (Reference 6). These documents address general guidance for conduct of the risk assessment, quantitative and qualitative guidelines for establishing risk management actions, and example risk management actions. These include actions to:
>
> - plan and conduct other activities in a manner that controls overall risk,
> - increased risk awareness by shift and management personnel,
> - reduce the duration of the condition,
> - minimize the magnitude of risk increases through the establishment of backup success paths or compensatory measures,
> - and determination that the proposed maintenance is acceptable.
> - This comprehensive program provides much greater assurance of safe plant operation than the second Completion Times in the TS.

In addition, the licensee's LAR stated the following regarding performance indicators:

> Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," describes the tracking and reporting of performance indicators to support the NRC's Reactor Oversight Process (ROP) (Reference 7). The NEI document is endorsed by Regulatory Issue Summary (RIS) 2001-11, "Voluntary Submission of Performance Indicator Data" (Reference 8). NEI 99-02, Section 2.2, describes the Mitigating Systems Cornerstone. NEI 99-02 specifically addresses Emergency AC Sources, which encompasses the AC Sources and Distribution System LCOs, and the Auxiliary Feedwater System. Extended unavailability of these systems due to multiple entries into the ACTIONS would affect the NRC's evaluation of the licensee's performance under the ROP.

The licensee's LAR stated the following regarding administrative controls:

> In addition to these programs, a requirement is added to Section 1.3 of the TS to require licensees to have administrative controls to limit the maximum time allowed for any combination of Conditions that result in a single contiguous occurrence of failing to meet the LCO. These administrative controls should consider plant risk and shall limit the maximum contiguous time of failing to meet the LCO. This TS requirement, when considered with the regulatory processes discussed above, provide an equivalent or superior level of plant safety without the unnecessary complication of the TS by second Completion Times on some Specifications.
>
> As part of the implementation process for this TS change, Duke Energy plans to add a statement similar to the following to the appropriate fleet procedure for CNS, MNS, ONS, and RNP.
>
> > It is possible to alternate between TS Conditions in such a manner that operation could continue indefinitely without ever restoring systems to meet the LCO. However, doing so is inconsistent with the basis of the Completion Times. Therefore, the maximum time allowed for any combination of Conditions that result in a single contiguous occurrence of failing to meet the LCO shall be limited.

Prior to the promulgation of 10 CFR 50.65, TS were the primary rules governing operations, including what equipment must normally be in service, how long equipment can be out of service, compensatory actions, and surveillance testing to demonstrate equipment readiness. One goal of TS is to provide adequate assurance of the availability and reliability of equipment needed to prevent and, if necessary, mitigate, accidents and transients. The MR supports this goal by requiring a comprehensive process for performance and condition monitoring activities. As required by 10 CFR 50.65 (b)(1)(2), the licensee assesses and manages inoperable risk-significant equipment. Under the TS, the CT for one system within an LCO is not generally affected by inoperable equipment in another LCO. However, the second CT influenced the CT for one system based on the condition of another system, but only if the two systems were required by the same LCO. Plant-specific MR programs implement risk-based configuration management programs that augment the deterministic CTs in the TS. The performance and condition monitoring activities required by 10 CFR 50.65 identify poor maintenance practices that would result from multiple entries into the actions of the TS which would contribute to unacceptable unavailability of these SSCs.

The NRC staff finds the proposed changes to all facilities' TS 1.3 acceptable because administrative control requirements were added in Example 1.3-3 of all facilities' TS to limit the maximum time allowed for any combination of conditions that result in a single continuous occurrence of failing to meet the LCO and ensuring CTs are not inappropriately extended. In addition, the licensee's MR program requires the facilities to monitor the performance or conditions of SSCs in a manner sufficient to provide reasonable assurances that SSCs can fulfill their specified safety functions and thus preventing indefinite operation without restoration of the systems.

The licensee also proposes to delete the second CT associated with the TS LCOs required actions described in Section 2.2 of this SE. These additional secondary CTs were specified for these instances to prevent repeated entry and exit from alternating TS required actions.

Administrative controls will replace second CTs as described in the licensee's LAR. The NRC staff finds the proposed deletion of second CTs acceptable since multiple, continuous entries into TS conditions, without meeting the LCO, will be adequately controlled by: (1) the licensee's administrative controls, (2) the configuration risk management programs as implemented to meet the requirements of the MR to assess and manage risk and performance indicators, and (3) the requirements of Section 1.3 of the TS, "Completion Times." In addition, the NRC staff finds the MR provides adequate assurance against inappropriate use of combinations of TS conditions that result in a single continuous occurrence of failing to meet the LCO. Accordingly, consistent with TSTF-439, Revision 2, the NRC staff finds the proposed changes to all facilities' TS to delete the secondary CTs described in Section 2.2 of this SE to be acceptable.

3.2 Evaluation of Variations

The LAR identified variations from TSTF-439 associated with numbering differences and site-specific features as discussed below:

3.2.1 Catawba Nuclear Station's variations from TSTF-439

For CNS, Units 1 and 2, the licensee proposed to make changes to delete the second CT associated with the following TS LCO Required Actions and bases: TS 3.8.1, A.3, B.6, and D.6; and TS 3.8.9, A.1, B.1, C.1, and D.1. In its supplement dated July 16, 2021, the licensee discusses the variations from TSTF-439, that "LCO 3.8.1.a" and "LCO 3.8.1.b" were added for clarification by Amendment Nos. 304 and 300. The variation from TSTF-439 to delete a maximum CT (i.e., "second CT") that has the clarifiers of LCO "3.8.1.a" and "3.8.1.b" instead of "LCO" is administrative and does not affect the applicability of TSTF-439 to the 17-day CT of CNS TS 3.8.1, Required Action A.3 and B.6. Similarly, the "LCO 3.8.1.c" and "LCO 3.8.1.d" were added to clarify opposite unit AC sources by Amendment Nos. 304 and 300 and is therefore administrative and does not affect the applicability of TSTF-439 to the 17-day CT of CNS TS 3.8.1, Required Action D.6. Based on the information in the supplement, the NRC staff concludes that the variations are administrative and do not affect the applicability of TSTF-439, and thus, the NRC staff finds the variations acceptable.

3.2.2 McGuire Nuclear Station's variations from TSTF-439

For MNS, Units 1 and 2, the licensee proposed to make changes to delete the second CT associated with the following TS LCO Required Actions and bases: TS 3.8.1, A.3 and B.6; TS 3.8.9, A.1, B.1, and C.1. In its supplement dated July 16, 2021, the licensee discusses the variations from TSTF-439, that "LCO 3.8.1.a" and "LCO 3.8.1.b" were added for clarification by Amendment Nos. 314 and 293. The variation from TSTF-439 to delete a maximum CT (i.e., "second CT") that has the clarifiers of LCO "3.8.1.a" and "3.8.1.b" instead of "LCO" is administrative and does not affect the applicability of TSTF-439 to the 17-day CT of MNS TS 3.8.1, Required Action A.3 and B.6. Based on the information in the supplement, the NRC staff concludes that the variations are administrative and do not affect the applicability of TSTF-439, and thus, the NRC staff finds the variations acceptable.

3.2.3 Oconee Nuclear Station variations from TSTF-439

For ONS, Units 1, 2 and 3, the licensee proposed to make changes to delete the second CT associated with the following TS LCO Required Actions and bases: TS 3.8.1, C.2.1 and D.3. In

its supplement dated July 16, 2021, the licensee discusses the variations from TSTF-439, that discovery of an inoperable KHU is a failure to meet ONS LCO 3.8.1 because the LCO requires two KHUs to be OPERABLE. Therefore, stating “from discovery of inoperable KHU” instead of “from discovery of failure to meet the LCO” does not affect the applicability of TSTF- 439 to the second CTs of ONS TS 3.8.1, Required Actions C.2.1 and D.3. Based on the information in the supplement, the NRC staff concludes that the variations do not affect the applicability of TSTF-439, and thus, the NRC staff finds the variations acceptable.

3.2.4 H. B. Robinson Steam Electric Plant variations from TSTF-439

For RNP, Unit 2, the licensee proposed to make changes to delete the second CT associated with the following TS LCO Required Actions and bases: TS 3.8.1, A.3 and B.4; and TS 3.8.9, A.1, B.1, and C.1. The NRC staff evaluated the deletion of the second CTs listed above and determined that the licensee’s administrative controls would adequately limit the maximum time allowed for any combination of Conditions that result in a single continuous occurrence of failing to meet the LCO. The NRC staff noted that these changes are consistent with NRC-approved Traveler TSTF-439, Revision 2. Additionally, the NRC staff finds that the proposed change to TS 1.3 that requires administrative controls to ensure that the CTs are not inappropriately extended and the ROP coupled with the maintenance rule provide adequate assurance against inappropriate use of combinations of TS conditions that result in a single continuous occurrence of failing to meet the LCO. Accordingly, the NRC staff finds the that the proposed variations are acceptable.

3.3 Technical Evaluation Conclusion

The NRC staff reviewed the proposed changes to the TSs and found they are consistent with the approved TSTF-439, Revision 2 and meet the standards for TSs in 10 CFR 50.36. As required by 10 CFR 50.36(c)(2), the LCOs specify the lowest functional capability or performance levels of equipment required for safe operation of the facility. The proposed changes assure that 1) the necessary quality of systems and components is maintained, 2) facility operation will be within safety limits, and 3) the LCOs will be met. Specifically, the NRC staff evaluated the deletion of the second CTs listed above and determined that the licensee’s administrative controls would adequately limit the maximum time allowed for any combination of Conditions that result in a single continuous occurrence of failing to meet the LCO. Additionally, the NRC staff finds that the ROP, coupled with the maintenance rule, provide adequate assurance against inappropriate use of combinations of TS conditions that result in a single continuous occurrence of failing to meet the LCO. Accordingly, the NRC staff finds the proposed TS changes acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission’s regulations, officials of the States of North Carolina and South Carolina were notified of the proposed issuance of the amendments on February 23, 2022. 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 area as defined in 10 CFR Part 20. 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 or public radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, published in the *Federal Register* on August 10, 2021, (86 FR 43686) and there has been no public comment on such finding. 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 these 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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: R. Grover, NRR
N. Khan, NRR

Date: June 14, 2022

SUBJECT: CATAWBA NUCLEAR STATION, UNITS 1 AND 2; MCGUIRE NUCLEAR STATION, UNITS 1 AND 2; OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3; AND H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 – ISSUANCE OF AMENDMENTS TO ADOPT TSTF-439, "ELIMINATE SECOND COMPLETION TIMES LIMITING TIME FROM DISCOVERY OF FAILURE TO MEET AN LCO" (EPID L-2021-LLA-0111) DATED JUNE 14, 2022

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