



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

June 6, 2016

Mr. Scott Batson
Site Vice President
Oconee Nuclear Station
Duke Energy Corporation
7800 Rochester Highway
Seneca, SC 29672-0752

**SUBJECT: OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3 - ISSUANCE OF
AMENDMENTS TO CORRECT USAGE PROBLEM WITH TECHNICAL
SPECIFICATION 3.8.1 (CAC NOS. MF6627, MF6628, AND MF6629)**

Dear Mr. Batson:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment Nos. 400, 402, and 401 to Renewed Facility Operating License Nos. DPR-38, DPR-47, and DPR-55, for the Oconee Nuclear Station, Units 1, 2, and 3, respectively. The amendments consist of changes to the Technical Specifications (TSs) and Renewed Facility Operating Licenses in response to your application dated July 17, 2015.

The amendments revise TS 3.8.1, "AC Sources – Operating," to correct a usage problem identified within the TS subsequent to the issuance of a previous license amendment that precludes TS 3.8.1, Condition H, from being used as planned.

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

S. Batson

- 2 -

If you have any questions regarding this matter, I may be reached at (301) 415-4090 or by e-mail at Jeffrey.White@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey A. White". The signature is fluid and cursive, with the first name "Jeffrey" being more prominent and the last name "White" following in a similar style.

Jeffrey A. White, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-269, 50-270, and 50-287

Enclosures:

1. Amendment No. 400 to DPR-38
2. Amendment No. 402 to DPR-47
3. Amendment No. 401 to DPR-55
4. Safety Evaluation

cc w/enclosures: Distribution via Listserv



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. 400
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, the facility), Renewed Facility Operating License No. DPR-38, filed by Duke Energy Carolinas, LLC (the licensee), dated July 17, 2015, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations 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.

Enclosure 1

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 is hereby amended to read as follows:


B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 400, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. Implementation Requirements:

- A. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.
- B. Coincident with the implementation of this amendment, the licensee shall revise the ONS Updated Final Safety Analysis Report (UFSAR). The revision shall be implemented in the next periodic update of the UFSAR in accordance with 10 CFR 50.71(e).

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: June 6, 2016



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. 402
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 (the facility), Renewed Facility Operating License No. DPR-47, filed by Duke Energy Carolinas, LLC (the licensee) dated July 17, 2015, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations 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.

Enclosure 2

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:

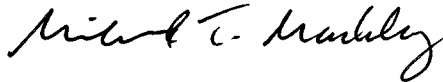
B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 402, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. Implementation Requirements:

- A. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.
- B. Coincident with the implementation of this amendment, the licensee shall revise the ONS Updated Final Safety Analysis Report (UFSAR). The revision shall be implemented in the next periodic update of the UFSAR in accordance with 10 CFR 50.71(e).

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: June 6, 2016



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. 401
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 (the facility), Renewed Facility Operating License No. DPR-55, filed by Duke Energy Carolinas, LLC (the licensee) dated July 17, 2015, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations 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.

Enclosure 3

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:

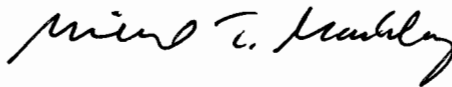
B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 401, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. Implementation Requirements:

- A. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.
- B. Coincident with the implementation of this amendment, the licensee shall revise the ONS Updated Final Safety Analysis Report (UFSAR). The revision shall be implemented in the next periodic update of the UFSAR in accordance with 10 CFR 50.71(e).

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility Operating
License and Technical Specifications

Date of Issuance: June 6, 2016

ATTACHMENT TO
LICENSE AMENDMENT NO. 400
RENEWED FACILITY OPERATING LICENSE NO. DPR-38
DOCKET NO. 50-269
LICENSE AMENDMENT NO. 402
RENEWED FACILITY OPERATING LICENSE NO. DPR-47
DOCKET NO. 50-270
AND
LICENSE AMENDMENT NO. 401
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 (TSs) with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages

Licenses

License No. DPR-38, page 3
License No. DPR-47, page 3
License No. DPR-55, page 3

TSs

3.8.1-12

Insert Pages

Licenses

License No. DPR-38, page 3
License No. DPR-47, page 3
License No. DPR-55, page 3

TSs

3.8.1-12

A. Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2568 megawatts thermal.

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 400 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 2568 megawatts thermal.

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 402 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.

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A. Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2568 megawatts thermal.

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 401 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.

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ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>L. -----NOTE----- Separate Condition entry is permitted for each inoperable AC Source, and LCO or SR not met.</p> <p>-----</p> <p>AC Source inoperable or LCO not met, as stated in Note for Condition H entry.</p> <p><u>OR</u></p> <p>AC Source inoperable or LCO not met, as stated in Required Action C.2.2.3 when in Condition C for > 72 hours.</p> <p><u>OR</u></p> <p>AC Source inoperable or LCO not met, as stated in Required Actions I.2 or J.2 when in Conditions I or J for > 1 hour.</p> <p><u>OR</u></p> <p>SR 3.8.1.16 not met.</p>	<p>-----NOTE----- Not required when a KHU or its required emergency power path are made inoperable for the purpose of restoring the other KHU to OPERABLE status.</p> <p>-----</p> <p>L.1 Restore inoperable AC Source to OPERABLE status.</p> <p><u>AND</u></p> <p>L.2 Restore compliance with LCO.</p> <p><u>AND</u></p> <p>L.3 Restore compliance with SR 3.8.1.16.</p>	<p>4 hours</p> <p>4 hours</p> <p>4 hours</p>

(continued)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. 400 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-38

AMENDMENT NO. 402 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-47

AND

AMENDMENT NO. 401 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-55

DUKE ENERGY CAROLINAS, LLC

OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3

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

1.0 INTRODUCTION

By letter dated July 17, 2015,¹ Duke Energy Carolinas, LLC (the licensee) requested an amendment to Technical Specification (TS) 3.8.1, "AC Sources – Operating," for the Oconee Nuclear Station, Units 1, 2, and 3 (Oconee). The proposed TS change would correct a usage problem identified subsequent to the issuance of amendments by letter dated August 23, 2013,² which precludes Oconee TS 3.8.1, Condition H, from being used as planned.

Specifically, in its license amendment request (LAR), the licensee requested to revise a NOTE in TS 3.8.1, Condition L, Required Actions (RAs) L.1, L.2, and L.3, by deleting the 12-hour limit when a second Keowee Hydroelectric Unit (KHU) is required to be made INOPERABLE for the purpose of restoring the other KHU returning from maintenance to OPERABLE status, which requires both KHUs to be INOPERABLE for a limited time.

1.1 Background

As described in the enclosure to the LAR, and in Chapter 8 of the Oconee Updated Final Safety Analysis Report (UFSAR), an offsite power system (preferred power) and an onsite power system are provided for each Oconee unit to supply the unit auxiliaries during normal operation and the Reactor Protection System and Engineered Safeguards (ES) Protection Systems during abnormal and accident conditions. The Oconee Alternating Current (AC) Electrical Power System consists of the 230 kilovolt (kV) transmission system and/or the 525 kV transmission

¹ Agencywide Documents Access and Management System (ADAMS) Accession No. ML15232A017

² ADAMS Accession No. ML13231A013

system and the two KHUs at the Keowee Hydro Station. The KHUs are rated at 87,500 kVA each, generating at 13.8 kV, and are designed to supply the required ES loads of one unit and safe shutdown loads of the other two units. Upon loss of power from the Oconee generating unit and the 230 kV switchyard, power is supplied from both KHUs through two separate and independent routes: an underground feeder line through the transformer CT-4 with connections to the standby and safety-related buses, and an overhead emergency power line through the startup transformers with connections to the standby and safety-related buses.

The safety-related buses can also receive power from either one of two combustion turbine generators at the Lee Steam Station through a dedicated 100 kV transmission line, and transformer CT-5 with connections to the standby, and safety-related buses.

The two KHUs are served by a common intake (tunnel-penstock) with water taken from Lake Keowee. To isolate one KHU from the common intake for major maintenance activities, both KHUs must be removed from service. The common penstock must be dewatered to allow the unit designated for maintenance to be sealed and/or a shaft locking device to be installed. After sealing and/or installing the shaft locking device on the unit designated for maintenance, the common penstock is then re-watered, allowing the designated operating unit to be returned to service. When restoring the inoperable KHU to service from the maintenance outage, it is necessary to perform the same dewatering evolution again to remove the intake seal.

2.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act of 1954, as amended, requires applicants for nuclear power plant operating licenses to include TSs as part of the license. The U.S. Nuclear Regulatory Commission's (NRC's) regulatory requirements related to the content of the TSs are set forth in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36, "Technical specifications." This regulation requires that the TSs include items in the following five categories related to plant operation: (1) safety limits; limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements; (4) design features; and (5) administrative controls. As stated in 10 CFR 50.36(c)(2)(i):

Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met.

Currently, Oconee TS 3.8.1 notes that the licensee does not have to restore an inoperable AC Source to OPERABLE status when a KHU or its required emergency power path are made inoperable for less than or equal to 12 hours for the purpose of restoring the other KHU to OPERABLE status. In its LAR, the licensee requested to delete the less than or equal to 12-hour requirement in the note. No other changes are proposed.

Accordingly, the regulations require that the LCO must properly describe, at a minimum, the lowest functional capability or performance levels required for safe operation of the facility.

3.0 TECHNICAL EVALUATION

3.1 Description of the KHU Requirements of TS 3.8.1

Oconee TS LCO 3.8.1 requires two offsite sources connected to the 230 kV switchyard and two KHUs to be Operable. In case one of the KHUs or its required overhead emergency power path is inoperable, Condition C, RA C.2.1, requires the licensee to restore the KHU and its required overhead emergency power path to OPERABLE status within the Completion Time (CT) of 72 hours. Alternatively, the licensee can take the required actions of Condition C, RA C.2.2.1 through RA C.2.2.5. Condition C, RA C.2.2.5, allows the licensee to take up to 45 days to restore the KHU and its required overhead emergency power path to OPERABLE status, provided that both standby buses are energized from the Lee Combustion Turbine (LCT) through the 100 kV transmission line. This 45-day CT allows single or multiple entries in the TS Condition, as long as the cumulative time does not exceed 45 days for each KHU over any 3-year rolling time period. The current requirement of a 45-day CT, cumulative over 3 years, was reviewed and approved by the NRC staff in a safety evaluation (SE) issued by letter dated August 23, 2013.

In case both KHUs or their required emergency power paths are inoperable for planned maintenance or test, TS LCO 3.8.1, Condition H, RA H.2, requires the licensee to restore one KHU and its required emergency power path to Operable status within the CT of 60 hours. In the SE dated August 23, 2013, the NRC staff also approved the addition of a second CT to RA H.2 to limit the cumulative time that both KHUs are allowed to be inoperable, per rolling 3-year period, to 240 hours when in the 45-day CT of RA C.2.2.5 described above. Both Conditions C and H require certain compensatory measures to be met, including the energization of both standby buses from an LCT via the isolated power path of 100 kV transmission line from LCT (i.e., LCT electrically separated from system grid and offsite loads), prior to entry into the extended period of the condition.

When the KHU designated for maintenance is in TS LCO 3.8.1, Condition C, for greater than 72 hours (RA C.2.2.5), and the other KHU becomes inoperable, Condition L, RA L.1, requires the licensee to restore the KHU designated for operation to Operable status within a CT of 4 hours. However, per the NOTE in Condition L of RA L.1, if the KHU designated for operation or its emergency power path are made inoperable for less than or equal to 12 hours for the purpose of restoring the other KHU to Operable status, RA L.1 is not required.

3.2 Licensee's Request

Subsequent to the issuance of the amendment dated August 23, 2013, the licensee noted a discrepancy between TS LCO 3.8.1, Condition H, which allowed both KHUs to be inoperable up to 60 hours during planned maintenance of a KHU, and Condition L, which allowed both KHUs to be inoperable for up to 16 hours (i.e., 12 hours from the NOTE and 4 hours from the CT). Therefore, in its LAR, the licensee requested a change to the RAs in Condition L to delete the 12-hour restriction and thus resolve this discrepancy. Deletion of the 12-hour time limitation in the NOTE to RA L.1 would allow the licensee the use of the full 60-hour CT of Condition H, RA H.2, which had been previously approved by the NRC in its SE dated August 23, 2013. Upon deletion of the 12-hour time limitation, the 4-hour CT of Condition L, RA L.1, would still be

applicable if the second KHU is inoperable for reasons other than restoring the KHU undergoing maintenance.

On page 4 of the enclosure to its LAR, the licensee provided the following explanation for its omission of a request to delete the 12-hour time limitation from Condition L of TS LCO 3.8.1 as part of its LAR dated October 30, 2012,³ stating, in part, that:

The October 30, 2012, LAR for TS 3.8.1 should have included a proposed change that allowed the 60 hour completion Time of Condition H to be used rather than being restricted by the shorter time allowed by Condition L. This was apparently overlooked due to the focus of October 30, 2012, LAR being to allow the 45 day extended Completion Time to be used cumulatively over a 3-year period. As a result, the ONS TSs continue to require at least one KHU to be restored to operable status in 16 hours rather than the 60 hours intended when in Condition C for greater than 72 hours. A typical Keowee outage schedule/TS entry is described below:

For a typical Keowee maintenance evolution requiring use of the 45-day Completion Time of TS 3.8.1 Required Action C.2.2.5,

- The first dual KHU outage (requiring entry into Condition H which provides a 60 hour Completion Time) is completed within the 72 hour time limit of TS 3.8.1 Required Action C.2.1.
- Prior to exceeding 72 hours in Condition C, Required Action C.2.2.3 requires verification by administrative means that the remaining KHU and its required emergency power path are OPERABLE.
- TS 3.8.1 Condition L applies when an AC source (KHU) is inoperable or LCO is not met, as stated in RA C.2.2.3 when in Condition C for > 72 hours.
- As a result, since the 2nd dewatering outage to restore the KHU undergoing maintenance occurs after 72 hours, Condition L also applies which limits the restoration time to 16 hours (The Note to TS 3.8.1 Required Action L.1 indicates that RA L.1 is not required when a KHU or its required emergency path is made inoperable for ≤ 12 hours for the purpose of restoring the other KHU to OPERABLE status and the Completion Time for L.1 is 4 hours adding up to a total of 16 hours).
- Due to this technicality, the license amendment cannot be used as intended since the Note and Required Action Completion Time of TS 3.8.1 Required Action L.1 limits the time both KHUs can be inoperable to 16 hours when in Condition C for > 72 hours.

³ ADAMS Accession No. ML12307A377

3.3 Proposed TS Change

The licensee proposed changing TS 3.8.1, "AC Sources – Operating," as follows:

Current TS 3.8.1, Condition L:

Required Actions L.1, L.2, L.3

NOTE Not required when a KHU or its required emergency power path are made inoperable for ≤ 12 hours for the purposes of restoring the other KHU to OPERABLE status.

Proposed change to TS 3.8.1, Condition L:

Required Actions L.1, L.2, L.3

NOTE Not required when a KHU or its required emergency power path are made inoperable for the purposes of restoring the other KHU to OPERABLE status.

The above proposed change revises the NOTE by deleting the 12-hour limit when the second KHU is required to be made inoperable for the purpose of restoring the other KHU returning from maintenance to OPERABLE status (both KHUs becoming inoperable for a limited time).

3.4 NRC Staff Review

In its SE dated August 23, 2013, the NRC staff reviewed and approved the addition of the second CT to RA H.2 to limit the cumulative time that both KHUs are allowed to be inoperable per rolling 3-year period to 240 hours when in the 45-day CT of RA C.2.2.5. The NRC staff provided, in part, the following explanation for approving the addition of the second CT to RA H.2:

[T]he current TS allow a 60-hour period for a dual KHU outage for planned maintenance. Assuming there is the need to dewater the penstock at the beginning and end of the current 45-day outage allowed by TS 3.8.1, there could be as much as 120 hours of dual KHU outage time in a 3-year period for each KHU. This adds up to 240 hours of dual KHU outage time when counting both KHUs. The licensee's qualitative risk analysis in its letter dated July 26, 2013⁴, indicated an insignificant impact on average annual plant risk with the maximum inoperability time of 240 hours for both KHUs when this unavailability is averaged over a 3-year period. Based on this analysis, the licensee proposed to limit the time allowed for dual KHUs outages to 240 hours when using the extended outage period of 45 days cumulative over 3 years. The licensee provided a revision to TS LCO 3.8.1 RA H.2 CT by adding an additional condition stating that the total duration of dual KHU outages shall not exceed 240 hours cumulative in a 3-year rolling time period when entered during the 45-day CT of

⁴ ADAMS Accession No. ML13217A002

RA C.2.2.5. The NRC staff determined that this additional condition would limit the total dual KHU outage time in a manner that is consistent with the current TSs, and addresses the staff's question about potential increases in total (3-year cumulative) dual KHU outage time.

The NRC staff reviewed the SE dated August 23, 2013, and the associated correspondence between the licensee and the NRC, and finds that, with the addition of the 240-hour CT to Condition H, RA H.2, the licensee was assuming two entries in Condition H for the maximum 60-hour CT for each dual KHU outage. In its SE dated August 23, 2013, the NRC staff found that the 60-hour CT of Condition H, RA H.2, was acceptable to be used for each dual KHU outage required for the isolation and restoration of the KHU undergoing maintenance. As part of this previous LAR, however, the licensee did not notice that the current NOTE in the RAs of TS 3.8.1, Condition L, would restrict a KHU to be restored to operable status in 16 hours rather than the 60 hours intended for the purpose of restoring the other KHU to Operable status. The licensee now seeks to correct this discrepancy with its LAR. The NRC staff finds that the LAR's proposed revision to the NOTE in the RAs of Condition L to delete the 12-hour time limitation does not change the NRC staff's previous conclusion of continued safe operation of the plant as described in the SE dated August 23, 2013. Therefore, the NRC staff finds that the proposed revision to the NOTE in the RAs of TS LCO 3.8.1, Condition L, is acceptable.

3.5 Technical Conclusion

The NRC staff reviewed the licensee's proposed change to the RA NOTE of TS LCO 3.8.1, Condition L, to delete the 12-hour time limitation when one KHU is made INOPERABLE for the purpose of restoring the other KHU undergoing maintenance to OPERABLE status. Based on this review, the NRC staff concludes that TS LCO 3.8.1 will continue to meet the regulatory requirements of 10 CFR 50.36(c)(2) in that the amended LCO will properly describe, at a minimum, the lowest functional capability or performance levels required for safe operation of the facility.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the South Carolina State officials were notified of the proposed issuance of the amendments. The State officials had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register* on November 10, 2015 (80 FR 69710). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

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: Sergiu Basturescu

Date of Issuance: June 6, 2016

S. Batson

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If you have any questions regarding this matter, I may be reached at (301) 415-4090 or by e-mail at Jeffrey.White@nrc.gov.

Sincerely,

/RA/

Jeffrey A. Whited, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-269, 50-270, and 50-287

Enclosures:

1. Amendment No. 400 to DPR-38
2. Amendment No. 402 to DPR-47
3. Amendment No. 401 to DPR-55
4. Safety Evaluation

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