



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

August 6, 2015

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

SUBJECT: OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3 – SUPPLEMENTAL
INFORMATION NEEDED FOR ACCEPTANCE OF REQUESTED LICENSING
ACTION RE: LICENSE AMENDMENT TO ADD HIGH FLUX TRIP FOR 3
REACTOR COOLANT PUMP OPERATION (TAC NOS. MF6363, MF6364, AND
MF6365)

Dear Mr. Batson:

By letter dated May 19, 2015, Duke Energy Carolinas, LLC (the licensee) requested a license amendment to add a High Flux trip for 3 reactor coolant pump operation to the Technical Specifications (TS) for the Oconee Nuclear Station, Units 1, 2, and 3 (ONS).

The purpose of this letter is to provide the results of the U.S. Nuclear Regulatory Commission (NRC) staff's acceptance review of this license amendment request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

Consistent with Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR), an amendment to the license (including the technical specifications) must fully describe the changes requested, and following as far as applicable, the form prescribed for original applications. Section 50.34 of 10 CFR addresses the content of technical information required. This section stipulates that the submittal address the design and operating characteristics, unusual or novel design features, and principal safety considerations.

The NRC staff has reviewed your application and concluded that the information delineated in the enclosure to this letter is necessary to enable the NRC staff to make an independent assessment regarding the acceptability of the proposed amendment request in terms of regulatory requirements and the protection of public health and safety and the environment.

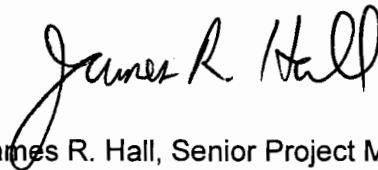
In order to make the application complete, the NRC staff requests that the licensee supplement the application to address the information requested in the enclosure by August 26, 2015. This will enable the NRC staff to complete its detailed technical review. If the information responsive to the NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC staff will cease its review activities associated with the application. If the application is subsequently accepted for review, you will

be advised of any further information needed to support the NRC staff's detailed technical review by separate correspondence.

The information requested and the associated time frame in this letter were discussed with Mr. Stephen Newman of your staff on August 6, 2015.

If you have any questions, please contact me at (301) 415-4032 or via e-mail at Randy.Hall@nrc.gov.

Sincerely,

A handwritten signature in black ink that reads "James R. Hall". The signature is written in a cursive style with a large, stylized "J" and "H".

James R. Hall, Senior 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

Enclosure:
Request for Supplemental Information

cc w/encl: Distribution via Listserv

SUPPLEMENTAL INFORMATION NEEDED
LICENSE AMENDMENT REQUEST TO ADD
HIGH FLUX TRIP FOR 3 REACTOR COOLANT PUMP OPERATION
DUKE ENERGY CAROLINAS, LLC
OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3
DOCKET NOS. 50-269, 50-270, AND 50-287

The Nuclear Regulatory Commission (NRC) staff has reviewed the application submitted by Duke Energy Carolinas, LLC (the licensee) requesting a license amendment to add a Reactor Protective System Nuclear Overpower – High Setpoint trip (high flux trip) for 3 reactor coolant pump (RCP) operation to the Technical Specifications (TS) for the Oconee Nuclear Station, Units 1, 2, and 3 (ONS) by letter dated May 19, 2015,¹ and concluded that the information delineated below is necessary to enable the NRC staff to make an independent assessment regarding the acceptability of the proposed license amendment request (LAR) in terms of regulatory requirements and the protection of public health and safety and the environment.

Pursuant to the *Code of Federal Regulations* (10 CFR) Part 50.90, whenever a holder of an operating license desires to amend the license, application for the amendment must be filed with the NRC, as specified in 10 CFR 50.4(b)(1), as applicable, fully describing the changes desired, and following as far as applicable, the form prescribed for original applications.

Please provide the following information to allow the NRC staff to make an independent assessment regarding the acceptability of the amendment request:

1. A more in-depth discussion on which regulatory criteria are applicable to the LAR. The LAR cited 10 CFR 50.36 as its regulatory basis. 10 CFR 50.36 states that limiting conditions for operation (LCO's) must be established for items meeting one of the four criteria cited in the regulation. Specifically, provide which of the 50.36 criteria are applicable to the proposed new setpoint, and a discussion of whether the existing TS requirements are sufficient to ensure operation within the bounds of the accident analysis.
2. The regulatory basis for the new reactor trip. Please describe which regulations the new reactor trip is intended to comply with (e.g., 10 CFR Part 100, GDC 10 or alternative criteria that establish the Oconee licensing basis).
3. A description of the accident analysis that demonstrates the 80.5 % reactor trip setpoint is adequate to meet the applicable AAO/Accident acceptance criteria. The description should be at a level consistent with the description of accidents in the FSAR and include the analysis codes and methods, key analysis assumptions as well as the applicable acceptance criteria.
4. A sample calculation that shows the uncertainty determination in the elements of the setpoint calculations for the high flux trip.

¹ Agencywide Documents Access and Management System Accession No. ML15146A056.

5. Identify and describe the procedure that will be used by control room operators to manually insert the high flux trip setpoint when going from 4 RCP operation to 3 RCP operation. Please also describe how this procedure accomplishes the setpoint changes to avoid overpower operation or spurious trips.
6. An explanation of how the 80.5% RTP high flux trip setpoint will be verified to be applicable to each new reactor core loading.

S. Batson

- 2 -

be advised of any further information needed to support the NRC staff's detailed technical review by separate correspondence.

The information requested and the associated time frame in this letter were discussed with Mr. Stephen Newman of your staff on August 6, 2015.

If you have any questions, please contact me at (301) 415-4032 or via e-mail at Randy.Hall@nrc.gov.

Sincerely,

/RA/

James R. Hall, Senior 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

Enclosure:
Request for Supplemental Information

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DATE	08/05/15	08/05/15	08/05/15	08/05/15	08/05/15	08/06/15	08/06/15

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