

May 19, 2003

Mr. Ronald A. Jones
Vice President, Oconee Site
Duke Energy Corporation
7800 Rochester Highway
Seneca, SC 29672

SUBJECT: OCONEE NUCLEAR STATION, UNITS 1, 2 AND 3 RE: ISSUANCE OF
AMENDMENTS (TAC NOS. MB7729, MB7730 AND MB7731)

Dear Mr. Jones:

The Nuclear Regulatory Commission has issued the enclosed Amendment Nos. 331, 331, and 332 to Renewed Facility Operating Licenses DPR-38, DPR-47, and DPR-55, respectively, for the Oconee Nuclear Station, Units 1, 2, and 3. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated February 17, 2003.

The amendments revise the Oconee Nuclear Station TS Surveillance Requirement 3.10.1.9 to increase the loading requirements for the Standby Shutdown Facility diesel generator from ≥ 3000 kW to ≥ 3280 kW. The staff has found the increase in the diesel generator load to be acceptable.

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.

Sincerely,

/RA/

Leonard N. Olshan, Senior Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

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

Enclosures:

1. Amendment No. 331 to DPR-38
2. Amendment No. 331 to DPR-47
3. Amendment No. 332 to DPR-55
4. Safety Evaluation

cc w/encls: See next page

May 19, 2003

Mr. Ronald A. Jones
Vice President, Oconee Site
Duke Energy Corporation
P. O. Box 1439
Seneca, SC 29679

SUBJECT: OCONEE NUCLEAR STATION, UNITS 1, 2 AND 3 RE: ISSUANCE OF AMENDMENTS (TAC NOS. MB7729, MB7730 AND MB7731)

Dear Mr. Jones:

The Nuclear Regulatory Commission has issued the enclosed Amendment Nos. 331, 331, and 332 to Renewed Facility Operating Licenses DPR-38, DPR-47, and DPR-55, respectively, for the Oconee Nuclear Station, Units 1, 2, and 3. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated February 17, 2003.

The amendments revise the Oconee Nuclear Station TS Surveillance Requirement 3.10.1.9 to increase the loading requirements for the Standby Shutdown Facility diesel generator from ≥ 3000 kW to ≥ 3280 kW. The staff has found the increase in the diesel generator load to be acceptable.

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.

Sincerely,
/RA/

Leonard N. Olshan, Senior Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

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

DISTRIBUTION:

Enclosures:

- 1. Amendment No. 331 to DPR-38
- 2. Amendment No. 331 to DPR-47
- 3. Amendment No. 332 to DPR-55
- 4. Safety Evaluation

Public	SCahill, RII
PDII-1 R/F	CHawes
SMoore	OGC
JNakoski	RDenning
ACRS	GHill (6)
TSpecht	

cc w/encls: See next page

ADAMS Accession No. ML031390533

*No major changes to SE

OFFICE	PDII-1/Intern	PDII-1/PM	PDII-1/LA	EEIB*	OGC	PDII-1/SC
NAME	J. Rivera	LOlshan	CHawes	CHolden		JNakoski
DATE	04/22/03	4/23/03	5/13/03	03/28/03	05/08/03	05/19/03

OFFICIAL RECORD COPY

DUKE ENERGY CORPORATION

DOCKET NO. 50-269

OCONEE NUCLEAR STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 331
Renewed License No. DPR-38

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Oconee Nuclear Station, Unit 1 (the facility) Renewed Facility Operating License No. DPR-38 filed by the Duke Energy Corporation (the licensee) dated February 17, 2003, 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 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 331, 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 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

John A. Nakoski, Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: May 19, 2003

DUKE ENERGY CORPORATION

DOCKET NO. 50-270

OCONEE NUCLEAR STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 331
Renewed License No. DPR-47

1. The 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 the Duke Energy Corporation (the licensee) dated February 17, 2003, 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. 331, 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 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

John A. Nakoski, Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: May 19, 2003

DUKE ENERGY CORPORATION

DOCKET NO. 50-287

OCONEE NUCLEAR STATION, UNIT 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 332
Renewed License No. DPR-55

1. The 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 the Duke Energy Corporation (the licensee) dated February 17, 2003, 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. 332, 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 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

John A. Nakoski, Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: May 19, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 331
RENEWED FACILITY OPERATING LICENSE NO. DPR-38
DOCKET NO. 50-269
AND
TO LICENSE AMENDMENT NO. 331
RENEWED FACILITY OPERATING LICENSE NO. DPR-47
DOCKET NO. 50-270
AND
TO LICENSE AMENDMENT NO. 332
RENEWED FACILITY OPERATING LICENSE NO. DPR-55
DOCKET NO. 50-287

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

Remove

3.10.1-4

Insert

3.10.1-4

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO
AMENDMENT NO. 331 TO RENEWED FACILITY OPERATING LICENSE DPR-38
AMENDMENT NO. 331 TO RENEWED FACILITY OPERATING LICENSE DPR-47
AND AMENDMENT NO. 332 TO RENEWED FACILITY OPERATING LICENSE DPR-55
DUKE ENERGY CORPORATION
OCONEE NUCLEAR STATION, UNITS 1, 2 AND 3
DOCKET NOS. 50-269, 50-270 AND 50-287

1.0 INTRODUCTION

By letter dated February 17, 2003, Duke Energy Corporation (the licensee) submitted a request for a change to the Oconee Nuclear Station (ONS), Units 1, 2, and 3, Technical Specifications (TS). The requested change was a revision of the Oconee Nuclear Station (ONS) TS Surveillance Requirement (SR) 3.10.1.9 to increase the loading requirements for the Standby Shutdown Facility (SSF) diesel generator (DG) from ≥ 3000 kW to ≥ 3280 kW.

ONS's current plant design contains an SSF, as a separate plant facility, that provides Reactor Coolant System (RCS) makeup with boron, RCS pump seal cooling, auxiliary service water as a cooling medium, pressurizer (PZR) heater control, and a DG to power the SSF. These systems are required in order to shut down and maintain a unit in hot standby, which is Mode 3 as defined on page 1.1-6 of the TS, for a period of 72 hours.

The licensee determined that the existing PZR heater banks currently operated from the SSF may not be adequate to maintain the PZR steam bubble due to ambient PZR losses. This could result in a loss of RCS pressure control. Therefore, the licensee is planning a modification that will install additional heater control capability to the SSF. Increasing the DG loading requirement will accommodate the power the additional heaters would need. The addition of heaters will make up for the above mentioned ambient losses.

2.0 REGULATORY EVALUATION

The ONS licensing basis credits the SSF for events that would render normal plant shutdown facilities unavailable. These events include fire, turbine building flood, sabotage, station black out, and tornado missile events.

Currently, SR 3.10.1.9 requires that the SSF DG be operated at a load of ≥ 3000 kW for a period of ≥ 60 minutes every 92 days. The licensee determined that additional PZR heater

control capability is needed to overcome PZR ambient heat losses that were not realized previously. Due to this need, the licensee proposed to increase the SR 3.10.1.9 loading requirement from the current ≥ 3000 kW to ≥ 3280 kW. In accordance with Regulatory Guide 1.9, "Selection, Design, Qualification, and Testing of Emergency Diesel Generator Units Used as Class 1E Onsite Electric Power Systems at Nuclear Power Plants," Section 2.2.2, the U.S. Nuclear Regulatory Commission (NRC) adopted the industry standard Institute of Electrical and Electronics Engineers (IEEE) 387, "IEEE Standard Criteria for Diesel-Generator Units Applied as Standby Power Supplies for Nuclear Power Generating Stations," Section 7.5.2. This industry standard directs the loading of the DG to be in the range of 90 to 100 percent of the DG's continuous duty rating, which is 3500 kW for ONS's SSF DG. The proposed loading of ≥ 3280 kW falls within this range.

3.0 TECHNICAL EVALUATION

ONS proposed to change the SSF DG run test of SR 3.10.1.9 from ≥ 3000 kW to ≥ 3280 kW in order to accommodate the power requirement of adding additional PZR heaters. The new operating load of 3280 kW will ensure that the continuous duty rating of the DG, 3500 kW, is not compromised and is within the DG's capability. This new operating load value satisfies IEEE 387, Section 7.5.2, which recommends the loading of the DG to be in the range of 90 to 100 percent of the DG's continuous duty rating. The power loading of 3280 kW corresponds to a 94-percent loading, falling within the range of the above mentioned industry standard.

As part of the proposed TS change, the licensee analyzed support systems for the DG. This was accomplished by performing temperature calculations that tested the ability of the support systems to handle the increased DG load. These systems include service water, as well as heating, ventilation, and air conditioning (HVAC). The service water system interfaces with the SSF DG lube oil and jacket water heat exchangers. The HVAC system provides space cooling for the SSF DG. By analyzing the increased heat load on these systems, the licensee determined the added heat would be within the systems' capabilities. This determination satisfies the support system operability requirements as described in the ONS TS Bases page B 3.10.1-3.

In accordance with SR 3.10.1.4, the underground fuel oil storage tank for the SSF DG must contain $\geq 25,000$ gallons of fuel. This design consideration is based on running the DG for 72 hours at full load (continuous duty rating of 3500 KW) as described in ONS TS Bases page B 3.10.1-8. Since the DG will be loaded at less than full load, the bases of SR 3.10.1.4 are not compromised.

In summary, the staff concludes that the proposed amendments are acceptable because the increased load is within the continuous load rating of the DG, additional heat loads have been considered, and the loading requirements conform with NRC-endorsed IEEE standards.

4.0 STATE CONSULTATION

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

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to installation or use of a facility component located within the restricted area as defined in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20 and changes surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. 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 (68 FR 15759). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by increasing the DG load from ≥ 3000 kW to ≥ 3280 kW, (2) 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: Trevor Specht, EEIB

Date: May 19, 2003

Oconee Nuclear Station

cc:

Ms. Lisa F. Vaughn
Legal Department (ECIIX)
Duke Energy Corporation
422 South Church Street
Charlotte, North Carolina 28201-1006

Anne W. Cottingham, Esquire
Winston and Strawn
1400 L Street, NW
Washington, DC 20005

Manager, LIS
NUS Corporation
2650 McCormick Drive, 3rd Floor
Clearwater, Florida 34619-1035

Senior Resident Inspector
U. S. Nuclear Regulatory
Commission
7812B Rochester Highway
Seneca, South Carolina 29672

Mr. Henry Porter, Director
Division of Radioactive Waste Management
Bureau of Land and Waste Management
Department of Health and Environmental
Control
2600 Bull Street
Columbia, South Carolina 29201-1708

Mr. Michael A. Schoppman
Framatome ANP
1911 North Ft. Myer Drive
Suite 705
Rosslyn, VA 22209

Mr. L. E. Nicholson
Compliance Manager
Duke Energy Corporation
Oconee Nuclear Site
7800 Rochester Highway
Seneca, South Carolina 29672

Ms. Karen E. Long
Assistant Attorney General
North Carolina Department of
Justice
P. O. Box 629
Raleigh, North Carolina 27602

Mr. C. Jeffrey Thomas
Manager - Nuclear Regulatory
Licensing
Duke Energy Corporation
526 South Church Street
Charlotte, North Carolina 28201-1006

Mr. Richard M. Fry, Director
Division of Radiation Protection
North Carolina Department of
Environment, Health, and
Natural Resources
3825 Barrett Drive
Raleigh, North Carolina 27609-7721

Mr. Peter R. Harden, IV
VP-Customer Relations and Sales
Westinghouse Electric Company
6000 Fairview Road
12th Floor
Charlotte, North Carolina 28210

Mr. Ronald A. Jones
Vice President, Oconee Site
Duke Energy Corporation
P.O. Box 1439
Seneca, SC 29679