

August 25, 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. MB8415, MB8416, AND MB8417)

Dear Mr. Jones:

The Nuclear Regulatory Commission has issued the enclosed Amendment Nos. 333, 333, and 334 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 in response to your application dated April 10, 2003, as supplemented by letter dated July 1, 2003.

The amendments revise the frequencies associated with Surveillance Requirements 3.4.12.5 and 3.4.12.7 concerning the Low Temperature Overpressure Protection System.

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. 333 to DPR-38
2. Amendment No. 333 to DPR-47
3. Amendment No. 334 to DPR-55
4. Safety Evaluation

cc w/encls: See next page

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CHawes	OGC	ACRS	GHill(6)	KKavanagh	
RHaag,RII	RDennig	LPlisco, RII			

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Amendment: ML032380468

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NAME	LOlshan	CHawes	SCole	JWermiel	SMagruder	JNakoski
DATE	8/7/03	8/7/03	8/14/03	8/21/03	8/6/03	8/22/03

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DUKE ENERGY CORPORATION

DOCKET NO. 50-269

OCONEE NUCLEAR STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 333  
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 April 10, 2003, as supplemented July 1, 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. 333, 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 30 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: August 25, 2003

DUKE ENERGY CORPORATION

DOCKET NO. 50-270

OCONEE NUCLEAR STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 333  
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 April 10, 2003, as supplemented July 1, 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. 333, 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 30 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: August 25, 2003

DUKE ENERGY CORPORATION

DOCKET NO. 50-287

OCONEE NUCLEAR STATION, UNIT 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 334  
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 April 10, 2003, as supplemented July 1, 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. 334, 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 30 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: August 25, 2003



ATTACHMENT TO LICENSE AMENDMENT NO. 333  
RENEWED FACILITY OPERATING LICENSE NO. DPR-38  
DOCKET NO. 50-269  
AND  
TO LICENSE AMENDMENT NO. 333  
RENEWED FACILITY OPERATING LICENSE NO. DPR-47  
DOCKET NO. 50-270  
AND  
TO LICENSE AMENDMENT NO. 334  
RENEWED FACILITY OPERATING LICENSE NO. DPR-55  
DOCKET NO. 50-287

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

Remove

3.4.12-4  
3.4.12-5  
B 3.4.12-11  
B 3.4.12-12

Insert

3.4.12-4  
3.4.12-5  
B 3.4.12-11  
B 3.4.12-12

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO  
AMENDMENT NO. 333 TO RENEWED FACILITY OPERATING LICENSE DPR-38  
AMENDMENT NO. 333 TO RENEWED FACILITY OPERATING LICENSE DPR-47  
AND AMENDMENT NO. 334 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 April 10, 2003, as supplemented by letter dated July 1, 2003, Duke Energy Corporation, the licensee, submitted a request to revise Technical Specification (TS) 3.4.12, "Low Temperature Overpressure Protection (LTOP) System," for the Oconee Nuclear Station, Units 1, 2 and 3. Specifically, the licensee requested to revise the frequencies associated with Surveillance Requirements (SR) 3.4.12.5 and 3.4.12.7. The supplemental letter dated July 1, 2003, provided clarifying information that did not change the scope of the April 10, 2003, application nor the initial proposed no significant hazards consideration determination.

## 2.0 REGULATORY EVALUATION

The LTOP system protects the reactor vessel from excessive pressure at low temperature conditions. The LTOP system TS requires the system to be operable with high pressure injection deactivated and the core flood tanks isolated and an operable pressurizer power operated relief valve (PORV) with a lift setpoint based on the low temperature overpressure limits. The TS also requires operator action, assisted by administrative controls and alarms. TS 3.4.12 provides reactor coolant system (RCS) overpressure protection in MODE 3 when any RCS cold leg temperature is  $\leq$  325 degrees Fahrenheit, and MODES 4, 5, and 6 when an RCS vent path capable of mitigating the most limiting LTOP event is not open. When the reactor is in the applicable MODES, TS 3.4.12 ensures an adequate pressure relief capacity and a limit on coolant addition capability, and thus ensures that the RCS pressure boundary is not compromised by violating the pressure and temperature requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix G.

The Commission's regulatory requirements related to the content of Technical Specifications are set forth in 10 CFR 50.36. This regulation requires that the TS include items in five specific categories. These categories include 1) safety limits, limiting safety system settings and

limiting control settings, 2) limiting conditions for operation, 3) surveillance requirements, 4) design features, and 5) administrative controls.

In particular, 10 CFR 50.36(c)(3) sets forth the criteria for SRs TS; it states:

3) *Surveillance requirements.* Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

The Commission has concluded that the timing of the frequency of a required surveillance is material to the performance of the surveillance. This is supported by the Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors, 58 FR 39132 (July 22, 1993). Therefore, a frequency for surveillance requirement can be deleted as long as it is not required to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

### 3.0 EVALUATION

#### 3.1 Revision of SR 3.4.12.5

Surveillance Requirement 3.4.12.5 currently requires the performance of a CHANNEL FUNCTIONAL TEST for PORV within 12 hours after decreasing RCS temperature to  $\leq 325$  degrees Fahrenheit AND 31 days thereafter. Since TS 3.4.12 is not required to be met in MODES 1, 2, and 3 when any RCS cold leg temperature is  $> 325$  degrees Fahrenheit, SR 3.4.12.5 is not performed during these modes. However, SR 3.0.4 requires that "entry into a MODE or other specified condition in the Applicability of an LCO shall not be made unless the LCO's Surveillances have been met within their specified Frequency." Therefore, the licensee is required to perform SR 3.4.12.5 prior to reaching MODE 3 when any RCS cold leg temperature is  $\leq 325$  degrees Fahrenheit and within 12 hours after decreasing RCS temperature to  $\leq 325$  degrees Fahrenheit.

The licensee has proposed to delete the surveillance frequency that requires the performance of the CHANNEL FUNCTIONAL TEST within 12 hours after decreasing RCS temperature to  $\leq 325$  degrees Fahrenheit. As proposed, the revised SR 3.4.12.5 FREQUENCY for the CHANNEL FUNCTIONAL TEST would be 31 days.

The NRC staff has reviewed the licensee's proposed change to SR 3.4.12.5. As discussed in the Use and Application section of the Babcock and Wilcox Standard Technical Specifications (NUREG-1430, Revision 2, dated June 2001), the revised SR 3.4.12.5 Frequency specifies an interval (31 days) during which the associated Surveillance must be performed at least one time. Performance of the Surveillance initiates the subsequent interval. Although the Frequency is stated as 31 days, an extension of the time interval to 1.25 times the stated Frequency is allowed by SR 3.0.2 for operational flexibility. The measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when the equipment is inoperable, a variable is outside specified limits, or the unit is outside the Applicability of the LCO).

If the interval as specified by SR 3.0.2 is exceeded while the unit is not in a MODE or other specified condition in the Applicability of the LCO for which performance of the SR is required, the Surveillance must be performed within the Frequency requirements of SR 3.0.2 prior to entry into the MODE or other specified condition. Failure to do so would result in a violation of SR 3.0.4. Therefore, the NRC staff has concluded that the deletion of "within 12 hours after decreasing RCS temperature to  $\leq 325$  °F" is acceptable because of the requirements of SR 3.0.4 to perform the surveillance prior to entry into the MODE of Applicability. For this reason, the deleted requirement is not needed to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the LCO will be met and is not required by 50.36 to remain in the TSs.

### 3.2 Revision of SR 3.4.12.7

Surveillance Requirement 3.4.12.7 currently requires the performance of a CHANNEL CALIBRATION for the PORV every 18 months. The licensee has proposed to reduce the current SR 3.4.12.7 Frequency from 18 months to 6 months. The licensee stated that the proposed reduction in the frequency time is necessary to reflect values in the supporting calculations. In particular, the supporting calculations for the RCS Low Range Pressure Transmitter have shown that a recalibration interval of 6 months results in a single-sided 95/95 probability confidence of 9.4 psig. The uncertainty used in the LTOP evaluation analysis bounds the 6-month 9.4 psig instrument uncertainty. The NRC staff has reviewed the proposed change. The NRC staff considers the proposed change to be more restrictive due to the reduction in frequency time for SR 3.4.12.7. Based on the above, the NRC staff has concluded that the proposed more restrictive change from 18 months to 6 months is acceptable.

### 3.3 Summary

The NRC staff has reviewed the licensee's submittal and supporting documentation. Based on its review, the NRC staff finds the proposed revision to the FREQUENCY of SR 3.4.12.5 and the proposed revision to the FREQUENCY of SR 3.4.12.7 to be acceptable for Oconee, Units 1, 2, and 3.

## 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 10 CFR Part 20 and change 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 28850). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9).

Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

## 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) 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.

## 7.0 REFERENCES

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Date: August 25, 2003

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