



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

July 28, 2011

Mr. Preston Gillespie  
Site Vice President  
Oconee Nuclear Station  
Duke Energy Carolinas, LLC  
7800 Rochester Highway  
Seneca, SC 29672

SUBJECT: OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3, ISSUANCE OF AMENDMENTS REGARDING A PROPOSED CHANGE TO THE TECHNICAL SPECIFICATIONS TO ADOPT TECHNICAL SPECIFICATION TASK FORCE (TSTF) TECHNICAL CHANGE TRAVELER 52, REVISION 3, TO IMPLEMENT OPTION B OF APPENDIX J TO TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS*, PART 50 (TAC NOS. ME4557, ME4558, AND ME4559)

Dear Mr. Gillespie:

The Nuclear Regulatory Commission has issued the enclosed Amendment Nos. 375, 377, and 376 to Renewed Facility Operating Licenses 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) in response to your application dated July 14, 2010.

These amendments revise the TSs to adopt technical specification task force technical change Traveler 52, Revision 3, to implement option B of Appendix J to Title 10 of the *Code of Federal Regulations*, Part 50.

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.

P. Gillespie

- 2 -

If you have any questions, please call me at 301-415-1345.

Sincerely,

***/RA/ by JThompson for***

John Stang, 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

Enclosures:

1. Amendment No. 375 to DPR-38
2. Amendment No. 377 to DPR-47
3. Amendment No. 376 to DPR-55
4. Safety Evaluation

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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. 375  
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 Carolinas, LLC (the licensee), dated July 14, 2010, 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.

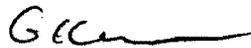
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 3.B of Renewed Facility Operating License No. DPR-38 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 375 , 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



Gloria Kulesa, Chief  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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

Date of Issuance: July 28, 2011



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. 377  
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 Carolinas, LLC (the licensee), dated July 14, 2010, 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.

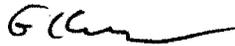
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 3.B of Renewed Facility Operating License No. DPR-47 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 377 , 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



Gloria Kulesa, Chief  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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

Date of Issuance: July 28, 2011



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. 376  
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 Carolinas, LLC (the licensee), dated July 14, 2010, 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.

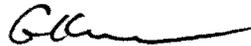
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 3.B of Renewed Facility Operating License No. DPR-55 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 376, 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



Gloria Kulesa, Chief  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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

Date of Issuance: July 28, 2011

ATTACHMENT TO LICENSE AMENDMENT NO. 375  
RENEWED FACILITY OPERATING LICENSE NO. DPR-38  
DOCKET NO. 50-269  
AND  
TO LICENSE AMENDMENT NO. 377  
RENEWED FACILITY OPERATING LICENSE NO. DPR-47  
DOCKET NO. 50-270  
AND  
TO LICENSE AMENDMENT NO. 376  
RENEWED FACILITY OPERATING LICENSE NO. DPR-55  
DOCKET NO. 50-287

Replace the following pages of the 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

3.6.1-2  
3.6.2-4  
5.0-7  
5.0-8

Insert Pages

Licenses

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

TSs

3.6.1-2  
3.6.2-4  
5.0-7  
5.0-8

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. 375 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. 377 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. 376 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) "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.
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SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.6.1.1      Perform required visual examinations and leakage rate testing except for containment airlock testing in accordance with the Containment Leakage Rate Testing Program.	In accordance with the Containment Leakage Rate Testing Program
SR 3.6.1.2      Verify containment structural integrity in accordance with the Containment Tendon Surveillance Program.	In accordance with the Containment Tendon Surveillance Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.2.1	<p>-----NOTES-----</p> <ol style="list-style-type: none"> <li>1. An inoperable air lock door does not invalidate the previous successful performance of the overall air lock leakage test.</li> <li>2. Results shall be evaluated against acceptance criteria applicable to SR 3.6.1.1.</li> </ol> <p>-----</p> <p>Perform required air lock leakage rate testing in accordance with the Containment Leakage Rate Testing Program.</p>	In accordance with the Containment Leakage Rate Testing Program
SR 3.6.2.2	Verify only one door in the air lock can be opened at a time.	18 months

## 5.0 ADMINISTRATIVE CONTROLS

### 5.5 Programs and Manuals

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The following programs shall be established, implemented, and maintained.

#### 5.5.1 Offsite Dose Calculation Manual (ODCM)

The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program.

Licensee initiated changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
  1. sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s), and
  2. a determination that the change(s) do not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations;
- b. Shall become effective after the approval of the Station Manager; and
- c. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

#### 5.5.2 Containment Leakage Rate Testing Program

A program shall establish the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-

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**5.5 Programs and Manuals**

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**5.5.2 Containment Leakage Rate Testing Program (continued)**

Test Program," dated September 1995. Containment system visual examinations required by Regulatory Guide 1.163, Regulatory Position C.3 shall be performed as follows:

1. Accessible concrete surfaces and post-tensioning system component surfaces of the concrete containment shall be visually examined prior to initiating SR 3.6.1.1 Type A test. These visual examinations, or any portion thereof, shall be performed no earlier than 90 days prior to the start of refueling outages in which Type A tests will be performed. The validity of these visual examinations will be evaluated should any event or condition capable of affecting the integrity of the containment system occur between the completion of the visual examinations and the Type A test.
2. Accessible interior and exterior surfaces of metallic pressure retaining components of the containment system shall be visually examined at least three times every ten years, including during each shutdown for SR 3.6.1.1 Type A test, prior to initiating the Type A test.

The calculated peak containment internal pressure for the design basis loss of coolant accident,  $P_a$ , is 59 psig. The containment design pressure is 59 psig.

The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , shall be 0.20% of the containment air weight per day.

Leakage rate acceptance criterion is:

- a. Containment leakage rate acceptance criterion is  $\leq 1.0 L_a$ . During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are  $< 0.60 L_a$  for the Type B and C tests, and  $\leq 0.75 L_a$  for Type A tests;

The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.

Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. 375 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-38

AMENDMENT NO. 377 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-47

AND

AMENDMENT NO. 376 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 application dated July 14, 2010 (Agencywide Documents Access and Management System (ADAMS), Accession No. (ML102030253), Duke Energy Carolinas, LLC (Duke, the licensee), requested changes to the Technical Specifications (TSs) for the Oconee Nuclear Station, Units 1, 2, and 3 (Oconee 1/2/3).

The proposed changes would adopt Nuclear Regulatory Commission (NRC) staff approved Technical Specification Task Force (TSTF) Change to the Standard TS, TSTF-52, Revision 3, to implement Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Appendix J, Option B, for Types B and C testing, for Oconee 1/2/3. Oconee 1/2/3 previously implemented 10 CFR Part 50, Appendix J, Option B, to Type A testing. This was approved by the NRC in a license amendment dated October 30, 1996 (ADAMS Accession No. ML012050049).

2.0 REGULATORY EVALUATION

Compliance with 10 CFR Part 50, Appendix J, provides assurance that the primary containment, including those systems and components, which penetrate the primary containment, do not exceed the allowable leakage rates specified in the TSs. The allowable leakage rate is determined so that the leakage assumed in the safety analyses is not exceeded.

On February 4, 1992, the NRC published a notice in the *Federal Register* (FR) (57 FR 4166) that discussed a planned initiative to begin eliminating requirements marginal to safety which impose a significant regulatory burden. Appendix J of 10 CFR Part 50 was considered for this initiative and the NRC undertook a study of possible changes to this regulation. The study examined the performance history of domestic containments and examined the effect on risk of a revision to the

requirements of Appendix J. The results of this study are reported in NUREG-1493, "Performance-Based Leak-Test Program."

Based on the result of the study, the NRC staff developed a performance-based approach to containment leakage rate testing. On September 12, 1995, the NRC approved issuance of a revision to 10 CFR Part 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors," which was subsequently published in the FR on September 26, 1995, and became effective on October 26, 1995. The revision added Option B, "Performance-Based Requirements" to Appendix J to allow licensees to voluntarily replace the prescriptive testing requirements of Appendix J, with testing requirements based on both overall and individual component leakage rate performance. The previous rule was retained as Option A.

Regulatory Guide (RG) 1.163, "Performance-Based Containment Leak Test Program" (ADAMS Accession No. ML003740058), dated September, 1995, was developed as a method acceptable to the NRC staff for implementing Option B. This RG provides methods acceptable to the NRC staff for complying with Option B and endorses (1) Nuclear Energy Institute (NEI) guidance document NEI 94-01, "Industry Guideline for Implementing Performance-Based Option of 10 CFR Part 50, Appendix J," Revision 0 (ADAMS Accession No. ML071300184), with exceptions, which are described therein and (2) ANSI/ANS 56.8-1994, "Containment System Leakage Testing Requirements".

Option B to 10 CFR Part 50, Appendix J, requires that the RG or other implementation documents used by a licensee to develop a performance-based leakage rate testing program must be included, by general reference, in the plant TSs. The licensee has referenced RG 1.163 in the Oconee 1/2/3 TSs.

Regulatory Guide 1.163 specifies an extension in Type A test frequency to at least one test in 10 years based upon two consecutive successful tests. Type B tests may be extended up to a maximum interval of 10 years based upon completion of two consecutive successful tests and Type C tests may be extended up to 5 years based on two consecutive successful tests.

By letter dated October 20, 1995, Nuclear Energy Institute (NEI) proposed TSs to implement Appendix J, Option B, to 10 CFR Part 50. After some discussion, the NRC staff and NEI agreed on final TSs which were transmitted to NEI in a letter dated November 2, 1995 (ADAMS Accession No. 9511100056 (Legacy Library)). These TSs served as a model for licensees to develop plant-specific TSs in preparing amendment requests to implement Option B. However, the Standard Technical Specifications (STS) have subsequently been revised in accordance with the TSTF generic change Traveler TSTF-52, Revision 3, and this is now used as the standard for TSs related to Option B.

Option B requires that the licensee maintain records to show that the criteria for Type A, B, and C tests have been met. In addition, the licensee must maintain comparisons of the performance of the overall containment system and the individual components to show that the test intervals are adequate. These records are subject to Nuclear Regulatory Commission (NRC) inspection.

The regulatory requirements, criteria, and guidance applied by the NRC staff in the review of the proposed change are discussed below.

Updated Final Safety Analysis Report (UFSAR):

- Oconee 1/2/3 UFSAR provides the current licensing bases requirements in Chapter 3, Section 3.8, Chapter 6, Section 6.3.

Appendix J to 10 CFR Part 50, Option B

- Option B will provide performance-based requirements for Types B and C Tests by conforming to the requirements of Technical Change Traveler TSTF 52, Revision 3. Option B will allow an extended test interval for Types B and C testing. Types B and C extended test intervals are based upon satisfactory performance of two "As Found" tests (test performance prior to any maintenance on the component).

For a licensee to determine the performance of each component, factors that are indicative of or affect performance, such as an administrative leakage limit, must be established. The administrative limit is selected to be indicative of the potential onset of component degradation. Although these limits are subject to NRC inspection to assure that they are selected in a reasonable manner, they are not TS requirements. Failure to meet an administrative limit requires the licensee to return to the minimum value of the test interval.

Section 50.59 establishes the requirements for changes, tests, and experiments.

Regulatory Guide (RG)

- RG 1.163, "Performance-Based Containment Leak Test Program," September 1995, provides guidance for performance-based containment leak test program.

NUREG

- NUREG-1493, September 1995, provides guidance for performance-based containment leak-test program.

Industry Standards

- NEI 94-01, "Industry Guidance for Implementing Performance-Based Option of 10 CFR Part 50, Appendix J," provides methods acceptable to the NRC staff with exceptions as noted in RG 1.163.
- ANSI/ANS 56.8-1994, "Containment System Leakage Testing Requirements," provides guidance for containment system leakage testing requirements.

As additional background, the NRC staff has issued licensing amendments to a significant number of reactor units, which adopted TSTF Technical Change Traveler 52, Revision 3, including Arkansas Nuclear One, Unit Nos. 1 and 2, and McGuire Nuclear Station, Units 1 and 2.

### 3.0 TECHNICAL EVALUATION

In the July 14, 2010, application the licensee provided its assessment for the proposed TS changes concerning Oconee 1/2/3. The proposed TS changes specifically include TS Surveillance Requirements (SR) 3.6.1.1, SR 3.6.1.2 and SR 3.6.2.1; TS 5.5.2, "Containment Leakage Rate Testing Program"; and associated TS Bases B.3.6.1, "Containment," and, TS Bases 3.6.2, "Containment Air Locks"; to adopt TSTF-52, Revision 3.

Appendix J to 10 CFR Part 50, Option B, governs performance-based containment leakage testing requirements for Type A, Type B and Type C leak rate tests.<sup>1</sup> Licensees may voluntarily comply with Option B as an alternative to the prescriptive requirements in Appendix J, Option A. Appendix J, Option B permits a licensee to choose Type A; or Types B and C; or Types A, B, and C testing to be done on a performance basis. The licensee proposed to revise its TSs and Containment Leakage Rate Testing Program to implement the performance based option of 10 CFR Part 50, Appendix J for Types B and C testing.

In the current TSs, SR 3.6.1.1 deals with Type A leakage rate testing, and SR 3.6.1.2 deals with Type B and C leakage rate testing. As stated in section 1.0 above, the licensee has previously implemented 10 CFR Part 50, Appendix J, Option B for Type A testing, but retained Option A for Type B and Type C testing. The proposed change combines SRs 3.6.1.1 and 3.6.1.2 into a single SR 3.6.1.1, with appropriate reference for TS 5.5.2, "Containment Leakage Rate Testing Program." The adoption of Option B for Type B and C leakage rate testing renders the FREQUENCY NOTE concerning SR 3.0.2 in the current TS SR 3.6.1.2 inapplicable, and therefore, is proposed to be removed from it from the proposed revised SR. The FREQUENCY NOTE in SR 3.6.1.1 referencing the Containment Leakage Rate Testing Program is retained. This change reflects that the leak rate testing for all Type A, Type B, and Type C tests will now be in accordance with Containment Leakage Rate Testing Program, and that details of the testing are relocated to the Containment Leakage Rate Testing Program.

The current SR 3.6.1.3 is renumbered as SR 3.6.1.2 due to the deletion of the existing SR 3.6.1.2. This change is an editorial change with no significant affect on the current TS requirements, and therefore, the NRC staff finds it acceptable.

The periodic leakage rate testing of the primary containment air locks are presently conducted in accordance with the requirements of 10 CFR Part 50, Appendix J, Option A, as stated in SR 3.6.2.1. The proposed change to this SR reflects the adoption of Option B to the containment air lock testing, with appropriate reference to TS 5.5.2, "Containment Leakage Rate Testing Program." Note 2 is being modified to state that the acceptance criteria shall be evaluated against the acceptance criteria applicable to SR 3.6.1.1. The adoption of Option B to the primary containment air locks renders the FREQUENCY NOTE concerning SR 3.0.2 inapplicable, and therefore, is proposed to be removed from the revised SR. The FREQUENCY NOTE in SR 3.6.2.1 will now reference the Containment Leakage Testing Program instead of 10 CFR Part 50, Appendix J, Option A. The NRC staff finds the changes are consistent with NUREG-1430, "Standard Technical Specifications, Babcock & Wilcox Plants," and therefore the NRC staff finds the change acceptable.

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<sup>1</sup> Type A, B and C tests, as defined in Appendix J, refer to primary reactor containment tests, local leakage testing for containment penetrations and leakage testing for containment isolation valves, respectively.

The proposed change to TS 5.5.2, Containment Leakage Rate Testing Program, reflects that compliance with 10 CFR Part 50, Appendix J, Option B will be extended to include Type B and Type C testing, in addition to the previously approved Type A testing. All superfluous references to Type A testing will be deleted. The statement regarding the one time extension of the Oconee 3 Type A test is proposed to be deleted. The deletion of the note is acceptable to the staff, since it is an expired extension and no longer applicable. The licensee also proposed to add a statement to reflect the containment design pressure of Oconee 1/2/3. In addition, a statement "Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J" is proposed to be added at the end of TS 5.5.2. The NRC staff finds the addition of the proposed statement is consistent with the NRC staff approved changes to the STS in TSTF-52, Revision 3, and therefore, is acceptable.

The proposed changes to TS 5.5.2, "Containment Leakage Rate Testing Program," are consistent with the guidelines contained in RG 1.163. However, the proposed changes deviate from TSTF-52, Revision 3, in one specific area related to the airlock testing acceptance criteria. TSTF-52 includes plant-specific air lock testing acceptance criteria in the Containment Leakage Testing Program. The licensee stated that at the time of Oconee 1/2/3 conversion to improved technical specifications (ITS), they chose not to adopt the airlock testing criteria in the STS for Babcock & Wilcox plants, because no such requirement existed in the Oconee 1/2/3 TSs at that time. The licensee's justification is that the air lock's contribution to the Type B and C containment leakage is small and already accounted for in the Type B and C containment leakage limits. The licensee confirmed that periodic leakage tests on the air lock doors will be performed at a frequency of at least once per 30 months. When containment integrity is required, the air lock door seals will continue to be tested within 7 days of each containment access. When containment entries are required more frequently than once every 7 days, the airlock door seals may be tested once every 30 days. The NRC staff's review indicates that there were precedents in a small number of cases where plant-specific air lock testing acceptance criteria were not included in the Containment Leakage Rate Testing Program. The containment airlock leakage is part of the combined Type B and C tested leakage and complying with the acceptance criteria in the Primary Containment Leakage Rate Testing Program for Type B and C tests will appropriately account for the containment airlock leakage.

The TS changes proposed by the licensee are in compliance with the requirements of 10 CFR Part 50, Appendix J, Option B and are in accordance with the guidance of RG 1.163. The proposed changes are also consistent with NUREG-1430, "Standard Technical Specifications, Babcock & Wilcox Plants." Further, the proposed changes are consistent with TSTF-52, Revision 3, except for the difference concerning air lock leakage acceptance criteria. The NRC staff finds the licensee's difference concerning plant-specific air lock leakage testing acceptance criteria is also acceptable as the contribution of air lock leakage is small and accounted for in the overall Type B and C leakage. Therefore, the NRC staff finds the proposed TS changes acceptable.

#### 4.0 SUMMARY

Based on the above evaluation the NRC Staff finds the proposed change to the TSs to adopt TSTF-52, Revision 3, to implement 10 CFR Part 50, Appendix J, Option B, for Types B and C testing, for Oconee 1/2/3 is acceptable .

## 5.0 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.

## 6.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to changes of 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 published in the *Federal Register* on December 14, 2010 (75 FR 77909). The amendment also relates to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusions set forth in 10 CFR 51.22(c)(9) and (c)(10). 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.

## 7.0 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.

Principal Contributor: J. Raval

Date: July 28, 2011

P. Gillespie

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If you have any questions, please call me at 301-415-1345.

Sincerely,

***/RA/ by JThompson for***

John Stang, 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

Enclosures:

1. Amendment No. 375 to DPR-38
2. Amendment No. 377 to DPR-47
3. Amendment No. 376 to DPR-55
4. Safety Evaluation

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**\*By memo dated 6/28/11**

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