Duke Energy®

T. PRESTON GILLESPIE, JR.
Vice President
Oconee Nuclear Station

Duke Energy
ON01VP / 7800 Rochester Hwy.
Seneca, SC 29672

864-873-4478
864-873-4208 fax
T.Gillespie@duke-energy.com

10 CFR 50.90

September 16, 2011

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Subject: Duke Energy Carolinas, LLC
Oconee Nuclear Station, Units 1, 2, and 3
Docket Number 50-269, 50-270 and 50-287;
Supplement to License Amendment Request to Change Technical Specification Surveillance Requirement Frequencies to Support 24-Month Fuel Cycles
License Amendment Request (LAR) No. 2010-001, Supplement 4

On May 6, 2010, Duke Energy Carolinas, LLC (Duke Energy) submitted a LAR requesting Nuclear Regulatory Commission (NRC) approval to extend Oconee Nuclear Station (ONS) Technical Specification (TS) 18-month Surveillance Requirement (SR) frequencies to 24 months in accordance with the guidance of Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle." Duke Energy provided responses to NRC Request for Additional Information (RAI) by letters dated February 11, April 28, and June 10, 2011. This supplement requests the NRC to approve the extension of one additional SR frequency located in the administrative controls section of the TS. The enclosure provides Duke Energy's evaluation of the proposed change.

Also, due to the issuance of Amendments 375, 377, and 376 on July 28, 2011 related to Appendix J, Option B, Duke Energy is submitting a revised marked-up and reprinted TS page (page 3.6.2-4) to reflect these amendments as well as the proposed change of LAR 2010-001. This is administrative and is unrelated to the extension of the SR interval described above.

Attachment 1 provides the revised retyped TS pages. Attachment 2 provides the revised marked-up TS pages. The change proposed by this supplement is bounded by the no significant hazards consideration submitted in the May 6, 2010, LAR.

If there are any questions regarding this submittal, please contact Boyd Shingleton, ONS Regulatory Compliance Group, at (864) 873-4716.

A001
NRR

I declare under penalty of perjury that the foregoing is true and correct. Executed on September 16, 2011.

Sincerely,

T Pgillespie

T. Preston Gillespie, Jr., Vice President
Oconee Nuclear Station

Enclosure:
Evaluation of Proposed Change

Attachments:
1. Technical Specifications – Marked-up Pages
2. Technical Specifications – Reprinted Pages

cc w/Enclosure/Attachments:

Mr. Victor McCree, Regional Administrator
U. S. Nuclear Regulatory Commission - Region II
Marquis One Tower
245 Peachtree Center Ave., NE, Suite 1200
Atlanta, GA 30303-1257

Mr. John Stang, Project Manager
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop O-8 G9A
Washington, DC 20555

Mr. Andy Sabisch
Senior Resident Inspector
Oconee Nuclear Site

Ms. Susan E. Jenkins, Manager
Radioactive & Infectious Waste Management
Division of Waste Management
South Carolina Department of Health and Environmental Control
2600 Bull St.
Columbia, SC 29201

ENCLOSURE

EVALUATION OF THE PROPOSED CHANGE

Enclosure
EVALUATION OF THE PROPOSED CHANGE

1 SUMMARY DESCRIPTION

On May 6, 2010, Duke Energy Carolinas, LLC (Duke Energy) submitted a LAR requesting Nuclear Regulatory Commission (NRC) approval to extend Oconee Nuclear Station (ONS) Technical Specification (TS) 18-month Surveillance Requirement (SR) frequencies to 24 months in accordance with the guidance of Generic Letter (GL) 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle." Duke Energy provided responses to NRC Request for Additional Information (RAI) by letters dated February 11, April 28, and June 10, 2011. This supplement requests the NRC to approve the extension of one additional SR frequency located in the administrative controls section of the TS. This extension will allow the test to continue to be performed at a refueling outage interval. Duke Energy's evaluation of the proposed change is provided in Section 2 below.

Also, due to the issuance of Amendments 375, 377, and 376 (Appendix J, Option B) on July 28, 2011, Duke Energy is submitting a revised marked-up and reprinted TS page (page 3.6.2-4) to reflect these amendments as well as the proposed change of LAR 2010-001. The LAR for these amendments was submitted after the LAR for 24-month fuel cycles. Because of this, the revised TS page for 24-month fuel cycles did not include the changes associated with these amendments. This is administrative and is unrelated to the extension of the SR interval described below.

Attachment 1 provides the revised retyped TS pages. Attachment 2 provides the revised marked-up TS pages. The change proposed by this supplement is bounded by the no significant hazards consideration submitted in the May 6, 2010, LAR.

2 DETAILED DESCRIPTION AND EVALUATION OF THE PROPOSED CHANGE

Duke Energy is supplementing LAR 2010-001 to change the 18-month frequency of Administrative Controls Section 5.5.19, Lee Combustion Turbine Testing Program, Item c to 24 months. This surveillance is currently performed at a refueling outage interval during Unit 3 refueling outages. A surveillance interval extension from 18 to 24 months will allow the test to continue to be performed at a refueling outage interval. An evaluation consistent with that provided in the initial LAR is provided below.

TS 5.5.19, Lee Combustion Turbine Testing Program, Item TS 5.5.19 c. states:

"Verify an LCT can provide equivalent of one Unit's Loss of Coolant Accident (LOCA) loads within one hour through 100KV line electrically separated from system grid and offsite loads every 18 months."

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Lee Combustion Turbine Testing Program surveillance frequencies.

The above surveillance is met by the performance of PT/3/A/0610/006. This test procedure consists of energizing the Unit 3 4160 Volt Main Feeder Buses from transformer CT-5 from an isolated Lee Steam Station Combustion Turbine and loading to greater than or equal to 6 MWe within one hour. This testing alignment is required to be performed during a Unit 3 outage.

The steps required to evaluate the extension of non-calibration surveillances is documented in Section 4.1 of LAR 2010-001 "License Amendment Request to Change Technical Specification Surveillance Requirement Frequencies to Support 24 Month Cycles" submitted May 6, 2010.

Also, the following requirements for extension of non-calibration related surveillances are documented in Attachment 6 of LAR 2010-001 "Detailed GL 91-04 Evaluation Results License Amendment Request No. 2010-001."

"For the non-calibration 18-month surveillances, GL 91-04 requires the following information to support conversion to a 24-month frequency:

1) Licensees should evaluate the effect on safety of the change in surveillance intervals to accommodate a 24-month fuel cycle. This evaluation should support a conclusion that the effect on safety is small.

2) Licensees should confirm that historical maintenance and surveillance data do not invalidate this conclusion.

3) Licensees should confirm that the performance of surveillances at the bounding surveillance interval limit provided to accommodate a 24-month fuel cycle would not invalidate any assumption in the plant licensing basis.

In consideration of these confirmations, GL 91-04 provides that licensees need not quantify the effect of the change in surveillance intervals on the availability of individual systems or components."

The surveillance test interval for the TS 5.5.19 c. program surveillance requirement is being increased from once every 18 months to once every 24 months, for a maximum interval of 30 months including the 25% grace period. A performance history review has been completed for this surveillance. The review included the last six performances of PT/3/A/0610/006. A review of the surveillance history demonstrated that there were no previous failures of the TS functions that would have been detected solely by the periodic performance of this surveillance. As such, the impact, if any, on system availability is minimal from the proposed change to a 24-month testing frequency. Based on the history of system performance, the impact of this change on safety, if any, is small.

The performance history evaluation confirmed that the effect on plant safety is small, and the change does not invalidate any assumption in the plant licensing basis, and that the impact, if any, on system availability is minimal from the proposed change to a 24-month testing frequency.

ATTACHMENT 1

MARKED-UP TECHNICAL SPECIFICATION PAGES

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.6.2.1	----------NOTES---------- 1. An inoperable air lock door does not invalidate the previous successful performance of the overall air lock leakage test. 2. Results shall be evaluated against acceptance criteria applicable to SR 3.6.1.1. --- Perform required air lock leakage rate testing in accordance with the Containment Leakage Rate Testing Program.	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~~ 24 months

5.5 Programs and Manuals

5.5.18 KHU Commercial Power Generation Testing Program (continued)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the KHU Commercial Power Generation Testing Program surveillance frequencies.

5.5.19 Lee Combustion Turbine Testing Program

The Lee Combustion Turbine (LCT) Testing program shall include the following and shall be met when a LCT is used to comply with Required Actions of Specification 3.8.1, "AC Sources-Operating" or as a emergency power source as allowed by LCO 3.8.2, "AC Sources-Shutdown":

a. Verify an LCT can energize both standby buses using 100kV line electrically separated from system grid and offsite loads every 12 months.

b. Verify an LCT can supply equivalent of one Unit's Loss of Coolant Accident (LOCA) loads plus two Unit's Loss of Offsite Power (LOOP) loads when connected to system grid every 12 months.

c. Verify an LCT can provide equivalent of one Unit's LOCA loads within one hour through 100kV line electrically separated from system grid and offsite loads every ~~18~~ 24 months.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Lee Combustion Turbine Testing Program surveillance frequencies.

5.5.20 Battery Discharge Testing Program

The Battery Discharge Testing Program shall include the following and shall be met for batteries used to comply with LCO 3.8.3, "DC Sources Operating."

a. Verify battery capacity is ≥ 80% of the manufacturer's rating when subjected to a performance discharge test or a modified performance discharge test once every 60 months. This frequency shall be reduced to 12 months when battery shows degradation, or has reached 90% of the expected life with capacity < 100% of manufacturer's rating, and 24 months when battery has reached 90% of the expected life with capacity ≥ 100% of manufacturer's rating.

ATTACHMENT 2

REPRINTED TECHNICAL SPECIFICATION PAGES

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.6.2.1	----------NOTES---------- 1. An inoperable air lock door does not invalidate the previous successful performance of the overall air lock leakage test. 2. Results shall be evaluated against acceptance criteria applicable to SR 3.6.1.1. ---------- Perform required air lock leakage rate testing in accordance with the Containment Leakage Rate Testing Program.	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.	24 months

5.5 Programs and Manuals

5.5.18 KHU Commercial Power Generation Testing Program (continued)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the KHU Commercial Power Generation Testing Program surveillance frequencies.

5.5.19 Lee Combustion Turbine Testing Program

The Lee Combustion Turbine (LCT) Testing program shall include the following and shall be met when a LCT is used to comply with Required Actions of Specification 3.8.1, "AC Sources-Operating" or as a emergency power source as allowed by LCO 3.8.2, "AC Sources-Shutdown":

a. Verify an LCT can energize both standby buses using 100kV line electrically separated from system grid and offsite loads every 12 months.

b. Verify an LCT can supply equivalent of one Unit's Loss of Coolant Accident (LOCA) loads plus two Unit's Loss of Offsite Power (LOOP) loads when connected to system grid every 12 months.

c. Verify an LCT can provide equivalent of one Unit's LOCA loads within one hour through 100kV line electrically separated from system grid and offsite loads every 24 months.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Lee Combustion Turbine Testing Program surveillance frequencies.

5.5.20 Battery Discharge Testing Program

The Battery Discharge Testing Program shall include the following and shall be met for batteries used to comply with LCO 3.8.3, "DC Sources Operating."

a. Verify battery capacity is $\geq$ 80% of the manufacturer's rating when subjected to a performance discharge test or a modified performance discharge test once every 60 months. This frequency shall be reduced to 12 months when battery shows degradation, or has reached 90% of the expected life with capacity < 100% of manufacturer's rating, and 24 months when battery has reached 90% of the expected life with capacity $\geq$ 100% of manufacturer's rating.