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U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555-0001

Subject: Duke Energy Carolinas, LLC (Duke Energy)  
Oconee Nuclear Station (ONS), Units 1, 2, and 3  
Docket Numbers 50-269, 50-270, and 50-287  
Changes in License Renewal Commitments for the Oconee Unit 1 Pressurizer  
Examinations

References:

1. NUREG-1723, Safety Evaluation Report Related to the License Renewal of Oconee Nuclear Station, Units 1, 2, and 3, Docket Nos. 50-269, 50-270 and 50-287, dated March 2000
2. Nuclear Regulatory Commission Letter from Steven J. Vias to T. Preston Gillespie, Jr., (Duke Energy) Oconee Nuclear Station Unit 2 – NRC Post-Approval Site Inspection for License Renewal, Inspection Report 05000270/2011015, dated November 30, 2011
3. Nuclear Regulatory Commission Letter from Timothy L. Hoeg to T. Preston Gillespie, Jr., (Duke Energy) Oconee Nuclear Station Unit 1 – NRC Post-Approval Site Inspection for License Renewal, Inspection Report 05000269/2011013, dated May 5, 2011
4. Nuclear Regulatory Commission Letter from Timothy L. Hoeg to T. Preston Gillespie, Jr., (Duke Energy), Errata for Oconee Nuclear Station Unit 1 – NRC Post-Approval Site Inspection for License Renewal, Inspection Report 05000269/2011013, dated May 24, 2011

The purpose of this letter is to document the mutual understanding that the Nuclear Regulatory Commission (NRC) Region II and Duke Energy have concerning the plans for addressing the license renewal commitments associated with the pressurizer VT-3 examinations, and the surface and visual examinations of the Alloy 600 pressurizer heater bundles of the Oconee Nuclear Station (ONS) Unit 1.

NUREG-1723, page 3-115, the safety evaluation report for ONS license renewal (Reference 1), and Section 18.2.5 of the ONS Updated Final Safety Analysis Report (UFSAR) describe the license renewal commitments associated with the examinations of the ONS Unit 1 pressurizer. The scope of the one-time ONS Unit 1 pressurizer examination includes the following:

- ASME Section XI VT-3 examinations of the internal spray line, spray head, fasteners used to attach the spray line to the internal surface of the pressurizer, pressurizer cladding, and the attachment welds to the cladding.

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- ASME Section XI VT-3 examination and surface examination of the heater sheath to sleeve and heater sleeve to diaphragm plate penetration welds of the 16 peripheral heaters for one of the ONS Unit 1 pressurizer heater bundles.

Duke Energy divided the VT-3 pressurizer examinations in two phases. The phase one VT-3 examinations were completed during the spring 2011 1EOC26 outage (Reference 2). The phase one scope included the internal spray line, spray line fasteners, spray head, accessible cladding, and attachment welds. Phase one VT-3 examinations for the Unit 1 pressurizer consisting of examinations down to the pressurizer thermowell or one foot above the water level were performed. VT-3 examinations were performed approximately 333 inches below the platform brackets of the pressurizer cladding. No evidence of corrosion or any other type of degradation was identified during the phase one examinations. The phase two examination will consist of the remaining cladding and attachment welds. This examination will be performed during the fall 2014 outage (1EOC28) when the Alloy 600 pressurizer heater bundle replacement occurs. The plan is to complete the VT-3 examination when the pressurizer heater bundles are removed from the pressurizer, thus allowing an adequate examination of the remaining cladding to be performed.

Duke Energy will be replacing all three Alloy 600 pressurizer heater bundles during the fall 2014 outage with heater bundles that contain stainless steel materials. The primary water stress corrosion cracking (PWSCC) aging concern associated with the Alloy 600 pressurizer heater bundles will be eliminated since ONS will no longer have Alloy 600 heater bundles (ONS Unit 2 and Unit 3 have stainless steel heater bundles). Therefore, the VT-3 examination and surface examination will no longer be needed as a method to identify degradation of Alloy 600 pressurizer heater bundles.

The changes to the license renewal commitments listed in Section 18.2.5 of the ONS UFSAR were evaluated, reported and approved in accordance with 10 CFR 50.59. (References 3 and 4)

If you have any questions regarding this letter, please contact Kent R. Alter of the ONS Regulatory Compliance Group at (864) 873-3255 or Eric Swanson of the License Renewal Implementation Project at (864) 873-3236.

Sincerely,

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