



SCOTT L. BATSON  
Vice President  
Oconee Nuclear Station

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

864-873-3274  
864-873-4208 fax  
Scott.Batson@duke-energy.com

ONS-2015-054

10CFR50.90

May 28, 2015

ATTN: Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Duke Energy Carolinas, LLC  
Oconee Nuclear Station, Units 1, 2, and 3  
Docket Numbers 50-269, 50-270, and 50-287  
Renewed License Numbers DPR-38, DPR-47, and DPR-55

Subject: Proposed License Amendment Request for the Reactor Vessel Internals Inspection Plan; LAR Number 2010-06 – Action Item No. 6 Completion Date Change

References:

1. License Amendment Request for the Reactor Vessel Internals Inspection Plan (Supplement 1), Duke Energy Carolinas, LLC, dated June 28, 2012.
2. NRC Final Safety Evaluation of EPRI Report, Materials Reliability Program Report 1016596 (MRP-227), Revision 0, "Pressurized Water Reactor (PWR) Internals Inspection and Evaluation Guidelines," (TAC No. ME0680), dated June 22, 2011.

By letter dated June 28, 2012 (Ref. 1), Duke Energy committed to respond to Action Item No. 6 (AI6) as described in the NRC Safety Evaluation Report associated with the pressurized water reactor internals inspection program's material reliability (Ref. 2). AI6 requires the applicant provide justification for the continued operability of each of the inaccessible components and if necessary, provide a plan for the replacement of the components for NRC review and approval. During the Oconee MRP-227 initial inspections, Request for Additional Information (RAI) 4 established that the justification would be due one (1) year from the initial inspection if inspection results met certain expansion criteria. During the initial inspections of the three Oconee Units, none of the expansion criteria for these components was met and thus, the 1-year response due date requirement did not apply.

On May 6, 2015, by conference call, Duke Energy discussed the completion status of AI6 with the NRC. As part of this conference call, Duke Energy requested an additional 1-year to complete AI6. Based primarily on the component inspection information collected to date (that the NRC requested be docketed [attached]), the NRC verbally approved a due date extension to May 31, 2016.

A001  
MRK

U. S. Nuclear Regulatory Commission  
May 28, 2015  
Page 2

Any inquiries on this letter should be directed to Stephen C. Newman, Oconee Nuclear Station, Regulatory Affairs Lead Engineer, at (864) 873-4388.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 28, 2015.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott L. Batson", with a horizontal line extending from the end of the signature.

Scott L. Batson  
Vice President  
Oconee Nuclear Station

Attachment

U. S. Nuclear Regulatory Commission  
May 28, 2015  
Page 3

cc: (w/attachment)

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

Mr. James R. Hall, Senior Project Manager  
(by electronic mail only)  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Mail Stop O-8 G9A  
11555 Rockville Pike  
Rockville, Maryland 20852

Mr. Jeffrey A. Whited  
Project Manager  
(by electronic mail only)  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Mail Stop O-8G9A  
Rockville, Maryland 20852

Mr. Eddy Crowe  
NRC Senior Resident Inspector  
Oconee Nuclear Station

Ms. Susan E. Jenkins, Manager, Infectious and Radioactive Waste Management,  
Bureau of Land and Waste Management  
Department of Health & Environmental Control  
2600 Bull Street  
Columbia, SC 29201

## Attachment

### Action Item #6 (AI6) Inspection Status and Justification to Extend the Completion Date to May 31, 2016

The initial MRP-227-A inspections were completed in the fall of 2012 for Oconee Unit 1, Fall of 2013 for Oconee Unit 2, and Spring 2014 for Oconee Unit 3. For four (4) of the inaccessible "Expansion" components, 100% of their "Primary" components were visually inspected and no relevant indications were found. They are as follows:

Expansion Component	Primary Component
Core barrel cylinders including vertical and circumferential welds	Baffle plates, 100% inspected no relevant indications.
Former plates	Baffle plates, 100% inspected no relevant indications.
Locking devices for external baffle-to-baffle bolt	Locking devices, including locking welds, of baffle-to-former bolts and in internal baffle-to-baffle bolts. 100% inspected no relevant indications.
Locking devices for core barrel-to-former bolts	Locking devices, including locking welds, of baffle-to-former bolts and in internal baffle-to-baffle bolts. 100% inspected no relevant indications.

The other three (3) inaccessible/un-inspectable "Expansion" components are the core barrel-to-former bolts, the external baffle-to-baffle bolts, and the internal baffle-to-baffle bolts. The "Primary" inspection for these is an ultrasonic (UT) inspection of the baffle-to-former bolts. Each of the three Oconee Units has 864 baffle-to-former bolts. The results of the initial inspections are given below:

Unit	Baffle-to-Former Bolt UT Inspection Results
Oconee Unit 1	4 of 864 bolts un-inspectable due to not being able seat the transducer correctly.
Oconee Unit 2	1 of 864 bolts un-inspectable due to not being able seat the transducer correctly.
Oconee Unit 3	1 of 864 bolts un-inspectable due to not being able seat the transducer correctly, and 1 was found to contain a crack like indication located in the head to shank region.

To date there have been four (4) UT examinations of the baffle-to-former bolt performed at the B&W-designed unit Crystal River Unit 3 in addition to the three Oconee Units which amounts to 3,456 bolts. Six (6) bolts were un-inspectable due to not being able to seat the UT probe and only one was identified with a crack-like indication. The core barrel-to-former and

baffle-to-former bolts have the function of maintaining structural integrity of the baffle and former portion of the structural assembly and thus maintaining flow geometry during normal operation. For faulted events, only a small number of the core barrel-to-former and baffle-to-former bolts are necessary to restrain the baffle so that a coolable core geometry is maintained for safety considerations. The loss of the baffle-to-baffle bolts only slightly influence core bypass flow but the baffle-to-baffle bolts are not necessary to maintain structural integrity.

The Oconee units will be re-inspected in approximately 10 years. With only one (1) crack-like indication found to date, there is reasonable assurance that there are no safety concerns to extending the AI6 completion date to May 31, 2016.