

May 31, 2006

Mr. Bruce H. Hamilton  
Vice President, Oconee Site  
Duke Power Company LLC  
7800 Rochester Highway  
Seneca, SC 29672

SUBJECT: BULLETIN 2004-01, "INSPECTIONS OF ALLOY 82/182/600 MATERIALS USED IN THE FABRICATION OF PRESSURIZER PENETRATIONS AND STEAM SPACE PIPING CONNECTIONS AT PRESSURIZED-WATER REACTORS," RESPONSE FOR OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3 (OCONEE) (TAC NOS. MC3493, MC3494, AND MC3495)

Dear Mr. Hamilton:

On May 28, 2004, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin 2004-01, "Inspections of Alloy 82/182/600 Materials Used in the Fabrication of Pressurizer Penetrations and Steam Space Piping Connections at Pressurized-Water Reactors," to the industry. This bulletin informed addressees that current methods of inspecting the pressurizer penetrations and steam space piping connections fabricated from Alloy 82/182/600 materials may need to be supplemented with additional measures (e.g., bare-metal visual inspections) to detect pressurizer penetration and steam space piping connection flaws or leakage. The bulletin requested that addressees provide the NRC with information related to the materials of construction, the inspections that have been performed, and the inspections which will be performed to verify the integrity of the pressurizer penetrations and steam space piping connections.

By letter dated September 21, 2004, and by supplemental letters dated January 5, May 31, and December 14, 2005, you provided responses to items 1a, 1b, 1c, and 1d of Bulletin 2004-01 for Oconee Nuclear Station, Units 1, 2, and 3 (Oconee). Your responses described the materials of fabrication and past, current and future pressurizer penetrations and steam space piping inspection programs at Oconee.

Your response to item 1a reported that some of the materials used in the fabrication of the pressurizer penetrations and steam space piping connections were Alloy 82/182/600 materials. This reply required you to provide further responses to the remaining items in the bulletin.

In response to item 1b, you described prior inspections and inspection results of pressurizer penetrations and steam space piping connections which had been performed at Oconee. Your response included the basis for concluding that Oconee satisfies the applicable regulatory requirements related to the integrity of pressurizer penetrations and steam space piping connections.

In response to item 1c in the bulletin, you provided a description of the Alloy 82/182/600 pressurizer penetration and steam space piping connection inspection program that will be implemented at your plant during the next and subsequent refueling outages. The description included the items to be inspected; the percent of coverage that would be performed at each

location; the inspection methods to be used; the qualification standards for the inspection methods and personnel; the process used to resolve any inspection indications; the inspection documentation to be generated; and the basis for concluding that your plant will satisfy the applicable regulatory requirements related to the structural and leakage integrity of pressurizer penetrations and steam space piping connections. If leaking pressurizer penetrations or steam space piping connections are found, you indicated that follow-up nondestructive examination (NDE) will be performed to characterize flaws in the leaking penetrations. You provided your plans for expansion of the scope of NDE to be performed if circumferential flaws are found in any portion of the leaking pressurizer penetrations or steam space piping connections.

In response to item 1d in the bulletin, you explained why the inspection program identified in the response to item 1c in the bulletin is adequate for the purpose of maintaining the integrity of the Oconee reactor coolant pressure boundary and for meeting all applicable regulatory requirements which pertain to your facility.

Your response to item 2a provided a statement to the NRC indicating that the inspections described in your response to item 1c of the bulletin were completed during a recent outage and a description of the as-found condition of the locations inspected was provided. You also described any findings of relevant indications of through-wall leakage and follow-up NDE performed to characterize flaws in leaking penetrations or steam space piping connections. A summary of all relevant indications found by NDE, a summary of the disposition of any findings of boric acid, and a description of any corrective actions taken and/or repairs made as a result of the indications found was also provided in these letters.

The NRC staff has completed its activities associated with the review of your responses to Bulletin 2004-01 and finds your responses acceptable. It should be noted that industry commitments or NRC staff regulatory actions may result in the need for you to modify your plans for the inspection and repair of items discussed in Bulletin 2004-01. It is the NRC staff's expectation that you will revise your plan for the inspection and repair of items discussed in Bulletin 2004-01 consistent with other industry commitments or the NRC staff's regulatory actions. This closes the NRC staff's efforts with regard to the review of the response to Bulletin 2004-01 for Oconee. Please contact me at (301) 415-1419 if you have any questions on this issue.

Sincerely,

*/RA/*

Leonard N. Olshan, 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

cc: See next page

location; the inspection methods to be used; the qualification standards for the inspection methods and personnel; the process used to resolve any inspection indications; the inspection documentation to be generated; and the basis for concluding that your plant will satisfy the applicable regulatory requirements related to the structural and leakage integrity of pressurizer penetrations and steam space piping connections. If leaking pressurizer penetrations or steam space piping connections are found, you indicated that follow-up nondestructive examination (NDE) will be performed to characterize flaws in the leaking penetrations. You provided your plans for expansion of the scope of NDE to be performed if circumferential flaws are found in any portion of the leaking pressurizer penetrations or steam space piping connections.

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Leonard N. Olshan, Project Manager  
Plant Licensing Branch II-1  
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