

September 27, 2006

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

SUBJECT: OCONEE NUCLEAR STATION, UNIT 2, REQUEST FOR USE OF LATER  
EDITION AND ADDENDA OF THE ASME CODE (TAC NO. MC8259)

Dear Mr. Hamilton:

By letter dated September 1, 2005, Duke Power Company LLC submitted a request to use certain paragraphs and related portions of the 1998 edition of the American Society of Mechanical Engineers (ASME), *Boiler and Pressure Vessel Code* (Code), with the 1999 and 2000 addenda of the Code at Oconee, Unit 2 (Oconee 2). The request is for the remainder of the second 10-year inservice inspection (ISI) interval at Oconee 2, which ended on September 9, 2006.

The enclosed Safety Evaluation (SE) contains the Nuclear Regulatory Commission (NRC) staff's evaluation and conclusions. Based on the information provided in the request, the NRC staff has determined that the identified portions of the 1998 edition with the 1999 and 2000 addenda will provide an acceptable level of quality and safety in lieu of the requirements in the 1989 edition, with the exceptions, as stated in the SE.

Sincerely,

**/RA/**

Evangelos C. Marinos, Chief  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-270

Enclosure:  
Safety Evaluation

cc w/encl: See next page

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NRR-106

\*SE input dated

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

INSERVICE INSPECTION PROGRAM

REQUEST FOR USE OF LATER EDITION AND ADDENDA OF THE ASME CODE

OCONEE NUCLEAR STATION, UNIT 2

DUKE POWER COMPANY LLC

DOCKET NO. 50-270

1.0 INTRODUCTION

By letter dated September 1, 2005, Duke Power Company LLC (Duke), the licensee, submitted a request to use certain paragraphs and related portions of the 1998 edition with the 1999 and the 2000 addenda of Section XI of the American Society of Mechanical Engineers (ASME), *Boiler and Pressure Vessel Code* (ASME Code), at Oconee Nuclear Station, Unit 2 (Oconee 2). The inservice inspection (ISI) Code of record for Oconee 2 for the second 10-year ISI interval is the ASME Code, Section XI, 1989 edition, no addenda. The request is for the remainder of the second 10-year ISI interval at Oconee 2, which ended on September 9, 2006.

2.0 REGULATORY EVALUATION

The ISI of the ASME Code Class 1, 2, and 3 components is to be performed in accordance with Section XI, "*Rules for Inservice Inspection of Nuclear Power Plant Components*," and applicable edition and addenda as required by Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.55a(g), except when specific relief has been granted by the Nuclear Regulatory Commission (NRC) pursuant to, 10 CFR 50.55a(g)(6)(i). Section 50.55a(a)(3) states in part that alternatives to the requirements of paragraph (g) may be used, when authorized by the NRC, if the applicant demonstrates that: (i) the proposed alternatives would provide an acceptable level of quality and safety, or (ii) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) will meet the requirements, except the design and access provisions and the preservice examination requirements, set forth in ASME Code, Section XI, to the extent practical within the limitations of design, geometry, and materials of construction of the components. The regulations require that inservice examination of components and system pressure tests conducted during the first 10-year interval and subsequent intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code incorporated by reference in 10 CFR 50.55a(b) twelve months prior to the start of the

120-month interval, subject to the limitations and modifications listed therein. The ISI Code of Record for Oconee 2 for the second 10-year ISI interval is the ASME Code, Section XI, 1992 edition, with the no addenda.

### 3.0 TECHNICAL EVALUATION

#### 3.1. System/Component(s) for which Relief is Requested

Class 1, 2, and 3 components and component supports required to be examined during the remainder of the second 10-year ISI interval, which ended on September 9, 2006.

#### 3.2. Applicable Code Requirements

ASME Code of record for the second 10-year ISI interval is the 1992 edition with the 1992 addenda of Section XI.

#### 3.3 Licensee Request

Pursuant to 10 CFR 50.55a(g)(4)(iv), the licensee requests approval to use selected portions of the ASME Code, Section XI, 1998 edition with the 1999 and 2000 addenda, for Category L-A, Item L.11 and L1.12 examinations, in lieu of the 1992 edition, for the remainder of the Oconee 2 second 10-year ISI interval (Class 1, 2, and 3 components and component supports), which ended on September 9, 2006.

#### 3.4 Proposed Subsequent Portions of the ASME Code and Related Requirements

To use selected portions of the ASME Code, Section XI, 1998 edition with the 1999 and 2000 addenda, in lieu of the 1992 edition with the 1992 addenda, for Category L-A, Item L1.11 and L1.12 examinations. This request is limited to Oconee 2 for the duration of the second 10-year Containment ISI, which ended on September 9, 2006.

### 4.0 EVALUATION

The licensee's ISI ASME Code of record is the 1992 edition with the 1992 addenda. The licensee's proposed use of portions of subsequent edition and addenda to the ASME Code, Section XI that is incorporated by reference in 10 CFR 50.55a(b)(2) subject to any modifications and limitations is in accordance with 10 CFR 50.55a(g)(4)(iv). The NRC staff's review has focused on whether the related requirements of the respective code and addenda are being met and any modifications and limitations apply.

The NRC staff has reviewed the incorporation of the provisions of IWA-2210 of the requirements of the 1998 edition with the 1999 and 2000 addenda. The licensee identified the related requirements of the 1998 edition with the 1999 and 2000 addenda that will be met. The NRC staff's review determined that the 1998 edition with the 1999 addenda provide acceptable requirements for performing Category L-A, Item L1.11 and L1.12 examinations. The NRC staff notes that the incorporation of the provisions of IWA-2210 would not be acceptable, since its requirements will be deleted under Section IWL-2100 of the 1998 edition of the ASME Code. As stated in the the September 1, 2005, letter the licensee will continue to use IWL-2100 of the 1992 edition with the 1992 addenda for the duration of the Oconee 2 containment ISI interval.

Because IWL-2100 does not exempt the licensee from complying with the requirements of IWA-2000, the licensee is required to comply with both IWA-2210 and IWA-2300 of the 1992 edition with the 1992 addenda. Therefore, the NRC staff finds the incorporation of the provisions of IWA-2210 of the 1998 edition with the 1999 and 2000 addenda of the ASME Code acceptable.

The NRC staff has reviewed the incorporation of the provisions Subarticle IWA-2300 of the 1998 edition with the 1999 addenda and 2000 addenda. The licensee identified the related requirements of the 1998 edition with the 1999 and 2000 addenda that will be met. The NRC staff noted that in the 1998 Edition of the Code, under the provisions of Section IWL-2100, it is stated that "the requirements of IWA-2000 apply, except that the requirements of IWA-2210 and IWA-2300 are not applicable to visual examinations or qualification of visual examination personnel for concrete containments." It is stated in 10 CFR 50.55a(b)(2)(viii)(F) that "Personnel that examine containment concrete surface and tendon hardware, wires, or strands must meet the qualification provisions in IWA-2300. The "owner-defined" personnel qualification provisions in IWL-2310(d) are not approved for use." Based on these statements, the NRC staff concludes that the use of the provisions of 1998 edition with the 1999 and 2000 addenda of the ASME Code for IWA-2300 is acceptable.

#### 4.0 CONCLUSION

Based on the NRC staff's review and comparison of the ASME Section XI Code, the NRC staff finds that the identified portions of the 1998 edition with the 1999 and 2000 addenda will provide an acceptable level of quality and safety in lieu of the requirements in the 1989 edition, with the exceptions described above. The NRC staff authorizes the alternative with this noted exception for the remainder of the second 10-year ISI interval at Oconee 2.

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Date: September 27, 2006

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