

September 29, 2003

Mr. Ronald A. Jones  
Vice President, Oconee Site  
Duke Energy Corporation  
7800 Rochester Highway  
Seneca, SC 29672

SUBJECT: RELIEF REQUESTS 02-005 AND 02-004 FOR OCONEE NUCLEAR STATION,  
UNIT 1 (TAC NOS. MB5815 AND MB5830)

Dear Mr. Jones:

By two separate letters dated July 29, 2002, as supplemented by letter dated May 15, 2003, you submitted two Requests for Reliefs 02-005 and 02-004, for the third 10-year interval for the Oconee Nuclear Station, Unit 1. The letter dated May 15, 2003, provided additional information requested by the NRC staff, and combined your applications for reliefs 02-005 and 02-004. The NRC staff has found the licensee's Request for Reliefs 02-004 and 02-005, acceptable.

Request for Reliefs 02-004 (Parts A and B) and 02-005 (Parts A, B, and D) states that Code examination coverage requirements are impractical for the components listed in the subject reliefs. Furthermore, reasonable assurance of the structural integrity of the subject components will be provided by the examinations that are being performed. Therefore, relief is granted pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a(g)(6)(i) for the third 10-year interval. All other requirements of the ASME Code, Section III and XI for which relief has not been specifically requested remain applicable, including third party review by the Authorized Nuclear Inservice Inspector.

For Request for Reliefs 02-004 (Parts C and D) and 02-005 (Part C), compliance to the Code requirements would result in a hardship or unusual difficulty without a compensating increase in the level of quality and safety. Furthermore, the licensee's proposed alternatives provide reasonable assurance of structural integrity for the subject components. Therefore, the licensee's proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(ii) for the third 10-year interval. All other requirements of the ASME Code, Section XI for which relief has not been specifically requested remain applicable, including third party review by the Authorized Nuclear Inservice Inspector.

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The NRC staff's evaluation and conclusions are contained in the enclosed NRC staff's Safety Evaluation (Enclosure 1). Enclosure 2 lists each relief request and the status of approval. Enclosure 3 is the Pacific Northwest National Laboratory Technical Letter Report.

Sincerely,

**/RA/**

John A. Nakoski, Section Chief, Section 1  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-269

Enclosures: As stated

cc w/encl: See next page

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John A. Nakoski, Section Chief, Section 1  
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO RELIEF REQUEST NOS. 02-005 AND 02-004

THE THIRD 10-YEAR INTERVAL INSERVICE INSPECTION

DUKE ENERGY CORPORATION

OCONEE NUCLEAR STATION, UNIT 1

DOCKET NO. 50-269

1.0 INTRODUCTION

The NRC staff, with technical assistance from Pacific Northwest National Laboratory (PNNL), has reviewed the information concerning inservice inspection (ISI) program Request for Relief Nos. 02-004 and 02-005, submitted for the third 10-year interval for Oconee Nuclear Station, Unit 1, in two separate Duke Power Company (the licensee) letters dated July 29, 2002. In its letter dated May 15, 2003, the licensee addressed an NRC request for additional information and combined the requests for reliefs 02-004 and 02-005.

2.0 REGULATORY REQUIREMENTS

ISI of the American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 components is performed in accordance with Section XI of the ASME Boiler and Pressure Vessel (B&PV) Code and applicable addenda as required by Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i). 10 CFR 50.55a(a)(3) states that alternatives to the requirements of paragraph (g) may be used, when authorized by the NRC, if: (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) shall meet the requirements, except the design and access provisions and the pre-service examination requirements, set forth in the ASME Code, Section XI, "Rules for Inservice Inspection (ISI) of Nuclear Power Plant Components," 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) 12 months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein. The applicable Code of record for the third 10-year ISI for Oconee Nuclear Station, Unit 1 is the 1989 Edition of the ASME B&PV Code, Section XI with no addenda.

### 3.0 STAFF EVALUATION

Request for Reliefs 02-004 (Parts A through D) and 02-005 (Parts A through D)

The NRC staff adopts the evaluations and recommendations for authorizing alternatives and granting relief contained in the Technical Letter Report (TLR), included as Enclosure 3, prepared by PNNL. Enclosure 2 lists each relief request and the status of approval. For clarification and for the ease of tracking the various Code Examination Categories and Items numbers, the NRC staff divided the licensee's Request for Reliefs 02-004 and 02-005 into Parts A through D.

For Request for Reliefs 02-004 (Parts A and B) and 02-005 (Parts A, B, and D), the NRC staff determined that the inaccessibility of the subject welds makes the Code-required examinations impractical to perform. For complete examination coverage of the welds, redesign and modification of the of the subject components would be an unnecessary burden on the licensee. Furthermore, the licensee's proposed alternatives provide reasonable assurance of structural integrity of the subject components.

For Request for Reliefs 02-004 (Parts C and D) and 02-005 (Part C) the NRC staff determined that compliance to the Code requirements would result in a hardship or unusual difficulty without a compensating increase in the level of quality and safety. Furthermore, the licensee's proposed alternatives contained in the subject reliefs provide reasonable assurance of structural integrity of the subject components.

### 4.0 CONCLUSION

The NRC staff adopts the evaluations and recommendations for authorizing alternatives and granting reliefs contained in the TLR, included as Enclosure 3, prepared by PNNL. Enclosure 2 lists each relief request and the status of approval.

The NRC staff concludes that Request for Reliefs 02-004 (Parts A and B) and 02-005 (Parts A, B, and D) Code examination coverage requirements are impractical for the components listed in the subject reliefs. Furthermore, reasonable assurance of the structural integrity of the subject components will be provided by the examinations that are being performed. Therefore, relief is granted pursuant to 10 CFR 50.55a(g)(6)(i) for the third 10-year interval. All other requirements of the ASME Code, Section III and XI for which relief has not been specifically requested remain applicable, including third party review by the Authorized Nuclear Inservice Inspector.

The NRC staff concludes for Request for Reliefs 02-004 (Parts C and D) and 02-005 (Part C) that compliance to the Code requirements would result in a hardship or unusual difficulty without a compensating increase in the level of quality and safety. Furthermore, the licensee's proposed alternatives contained in the subject reliefs provide reasonable assurance of

structural integrity of the subject components in the licensee's requests for relief. Therefore, the licensee's proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(ii) for the third 10-year interval. All other requirements of the ASME Code, Section XI for which relief has not been specifically requested remain applicable, including third party review by the Authorized Nuclear Inservice Inspector.

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Date: September 29, 2003

Oconee Nuclear Station

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