

September 26, 2003

Mr. John L. Skolds
Chairman and CEO
AmerGen Energy Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION (OCNGS) -
ALTERNATIVES AND RELIEFS CONCERNING THE FOURTH 10-YEAR
INTERVAL INSERVICE INSPECTION PROGRAM (TAC NOS. MB5790,
MB5791, MB5792, AND MB5793)

Dear Mr. Skolds:

The Nuclear Regulatory Commission (NRC) staff, with technical assistance from its contractor, the Pacific Northwest National Laboratory (PNNL), has reviewed and evaluated the relief requests submitted by AmerGen Energy Company, LLC (the licensee), in its application dated August 1, 2002. The licensee withdrew Relief Request No. OC-02-04 and provided additional information for the remaining relief requests in its letter dated June 23, 2003. The NRC staff found the licensee's Relief Request Nos. OC-02-01, OC-02-02, OC-02-03, and OC-02-05 to be acceptable, as discussed below.

The details of the NRC staff's evaluation and conclusions are contained in the enclosed Safety Evaluation, which incorporates the PNNL Technical Letter Report (TLR) as an Attachment. For Relief Request No. OC-02-02, relief is granted pursuant to 10 CFR 50.55a(g)(6)(i) for the fourth 10-year interval, provided the licensee performs the additional UT as described in the TLR. The NRC staff has concluded that the examination coverage required by the American Society for Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) is impractical for the components for which the licensee has requested relief. The NRC staff has concluded that, provided the licensee performs the additional UT specified in the TLR, there exists reasonable assurance that structural integrity will be maintained. Further, granting relief pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.55a(g)(6)(i) is authorized by law and will not endanger life or property or the common defense and security, and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

For Relief Request Nos. OC-02-01 and -03, the licensee's proposed alternatives are authorized pursuant to 10 CFR 50.55a(a)(3)(ii) for the fourth 10-year interval. The NRC staff has concluded that compliance with the ASME Code requirements would result in a hardship or unusual difficulty without a compensating increase in the level of quality or safety. Furthermore, the licensee's proposed alternatives provide reasonable assurance of structural integrity of the subject components. For Relief Request No. OC-02-05, the licensee's proposed alternative provides an acceptable level of quality and safety and is authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the fourth 10-year interval.

J. L. Skolds

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This completes the NRC staff's efforts on the licensee's application. If you have any questions or need for clarification on the enclosed SE and its attached TLR, please contact the OCNGS Project Manager, Mr. Peter S. Tam, at 301-415-1451.

Sincerely,

/RA/

Richard J. Laufer, Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-219

Enclosure: Safety Evaluation w/attachment

cc w/encl: See next page

J. L. Skolds

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REQUEST FOR RELIEF NOS. OC-02-01, -02, -03, AND -05

AMERGEN ENERGY COMPANY, LLC

OYSTER CREEK NUCLEAR GENERATING STATION

DOCKET NO. 50-219

1.0 INTRODUCTION

The Nuclear Regulatory Commission (NRC) staff, with assistance from Pacific Northwest National Laboratory (PNNL), has reviewed the Inservice Inspection (ISI) Program Request for Relief Nos. OC-02-01, OC-02-02, OC-02-03, OC-02-04, and OC-02-05 submitted for the fourth 10-year interval for Oyster Creek Nuclear Generating Station (OCNGS) by AmerGen Energy Company, LLC (the licensee) letter dated August 1, 2002. The NRC requested additional information by letter dated April 17, 2003. The licensee provided additional information and withdrew Relief Request No. OC-02-04 in its letter dated June 23, 2003.

2.0 REGULATORY EVALUATION

Inservice inspection 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 Code (ASME Code) and applicable addenda as required by 10 CFR 50.55a(g), except where specific written relief has been granted by the Commission pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.55a(g)(6)(i). Pursuant to 10 CFR 50.55a(a)(3), 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) twelve 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 fourth 10-year ISI for OCNGS is the 1995 Edition with the 1996 Addenda of the ASME Code, Section XI.

Enclosure

3.0 TECHNICAL EVALUATION

The NRC staff adopts the evaluations and recommendations for authorizing alternatives and granting relief contained in the Technical Letter Report (TLR), included as an Attachment to this Safety Evaluation (SE), prepared by its contractor PNNL. The table at the end of this SE lists each relief request and the status of approval.

For Request for Relief No. OC-02-02, regarding examination area requirements of reactor vessel support skirt weld 1-569, 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 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, provided the licensee performs a best-effort ultrasonic examination of the inside weld of the reactor vessel support skirt from the outside of the skirt as described in the PNNL TLR.

For Request for Relief Nos. OC-02-1, regarding surface examination requirements for circumferential welds, and OC-02-03, regarding hydrostatic tests for Class 3 pressure retaining components, the NRC staff determined that compliance with 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.

For Request for Relief No. OC-02-05, regarding training of ultrasonic examination personnel, the NRC staff determined that the licensee's proposed alternative to use 8 hours of hands-on training in accordance with 10 CFR 50.55a(b)(2)(xiv) in lieu of the Code requirements provides reasonable assurance of quality of safety.

4.0 CONCLUSION

The NRC staff concludes that for Relief Request No. OC-02-02, the examination coverage requirements imposed by the ASME Code are impractical for the components listed by the licensee. Furthermore, reasonable assurance of the structural integrity of the subject components has been provided by the examinations that are being performed, provided the licensee performs a best-effort ultrasonic examination of the inside weld of the reactor vessel support skirt from the outside of skirt weld. Therefore, relief is granted pursuant to 10 CFR 50.55a(g)(6)(i) for the fourth 10-year interval provided the licensee performs the additional ultrasonic examination as noted above and described in the TLR. 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. Granting relief pursuant to 10 CFR 50.55a(g)(6)(i) is authorized by law and will not endanger life or property or the common defense and security, and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

The NRC staff concludes that for Relief Request Nos. OC-02-1 and OC-02-03, compliance with 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 alternative provides reasonable assurance of structural integrity of the subject components. Therefore, the licensee's proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(ii) for the fourth 10-year ISI 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 that for Relief Request No. OC-02-05, the licensee's proposed alternative provides an acceptable level of quality and safety. Therefore, the licensee's proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the fourth 10-year interval. All other requirements of the ASME Code, Sections III and XI, for which relief has not been specifically requested remain applicable, including third party-review by the Authorized Nuclear Inservice Inspector.

Principal Contributors: T. McLellan
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Date: September 26, 2003

TABLE 1
SUMMARY OF RELIEF REQUESTS

Relief Request Number	TLR RR Sec.	System or Component	Exam. Category	Item No.	Volume or Area to be Examined	Required Method	Licensee Proposed Alternative	Relief Request Disposition
OC-02-1	3.1	Piping Welds	B-J C-F-1	B9.10 C5.10	Inner one-third volume and entire outside surface area of selected piping welds	Volumetric and Surface	Discontinue surface examinations	Authorized 10 CFR 50.55a(a)(3)(ii)
OC-02-02	3.2	RPV support skirt attachment weld	B-K	B10.10	100% length of inner and outer surfaces for integral attachment Weld 1-569	Surface	Perform outer surface examination and VT-3 of inner surface	Granted, with provision 10 CFR 50.55a(g)(6)(i)
OC-02-03	3.3	All Class 3 pressure retaining components	D-B	D2.20 D2.40 D2.60 D2.80	A hydrostatic test for all pressure vessels, piping, pumps and valves in each system once per interval	VT-2 Visual	Use Code Case N-498-4 with hold times imposed	Authorized 10 CFR 50.55a(a)(3)(ii)
OC-02-04	3.4	Metal containment bolted connections	E-G	E8.10 E8.20	A visual examination of all bolted connections, including bolts, studs, nuts, bushings, and washers. A torque or tension test of connections not disassembled during interval	VT-1 Visual and Torque or Tension Test	Use Examination Category E-A General Visual requirements	Withdrawn by licensee
OC-02-05	3.5	Various	All	All	Appendix VII, VII-4240 requires 10 hours annual training for ultrasonic personnel	Ultrasonic Testing	Use 8 hours of hands-on training in accordance with 10 CFR 50.55a(b)(2)(xiv)	Authorized 10 CFR 50.55a(a)(3)(i)

Oyster Creek Nuclear Generating Station

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