GPU NUCLEAR

GPU Nuclear, Inc.
U.S. Route #9 South
Post Office Box 388
Forked River, NJ 08731-0388
Tel 609-971-4000

July 13, 2000
1940-00-20158

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

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Inservice Inspection Relief Request R25, Revision 1

Attached to this cover letter is a request for relief from the requirements contained in ASME Section XI. This relief is requested pursuant to 10 CFR 50.55(a)(3), and has been revised based on verbal comments received from the staff during a telecon on June 22, 2000. To support planning and scheduling for our next refueling outage, staff review and approval is needed by July 28, 2000.

If any additional information or assistance is required, please contact Mr. John Rogers of my staff at 609.971.4893.

Very truly yours,

For Sander Levin, Acting Site Director
Oyster Creek Nuclear Generating Station

SL/JJR
Attachment
cc: Administrator, Region I
NRC Project Manager
Senior Resident Inspector

A047

Attachment I
Relief Request R25, Revision 1

CODE REFERENCE:

ASME Section XI, 1992 Edition, 1992 Addenda, Subsection IWE, Subarticle IWE-2500, Table IWE-2500-1, Examination Category E-G, Pressure Retaining Bolting, Items E8.10. All Class MC Pressure Retaining Bolting.

CODE REQUIREMENT:

ASME Section XI, 1992 Edition, 1992 Addenda, Table IWE-2500-1, Examination Category E-G, Pressure Retaining Bolting, Item E8.10, requires that Class MC bolted connections be subject to a VT-1 visual examination.

CODE RELIEF REQUEST:

Relief is requested from the Code required VT-1 examinations specified in Table IWE-2500-1, Examination Category E-G, Pressure Retaining Bolting, Items E8.10.

PROPOSED ALTERNATIVE EXAMINATION:

The following examinations required by Subsection IWE assure the structural integrity and the leak-tightness of Class MC pressure retaining bolting, and therefore, no additional alternative examinations are proposed.

1. Exposed surfaces of bolted connections shall be visually examined in accordance with the requirements of Table IWE-2500-1, Examination Category E-A, Containment Surfaces, using VT-3 certified inspectors. These examinations shall be evaluated in accordance with the requirements of IWE-3510. Deficiencies shall be evaluated by certified VT-1 examiners and dispositioned by the responsible engineer.
2. Bolted connections shall meet the pressure test requirements of 10 CFR 50, Appendix J.

BASIS:

Pursuant to 10 CFR 50.55a(a)(3)(ii), relief is requested for the Oyster Creek Nuclear Generating Station on the basis that compliance with the specified Code requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

10 CFR 50.55a was amended in the Federal Register (61FR41303) to require the use of the 1992 Edition, 1992 Addenda, Section XI when performing containment inspections. Section XI requires a VT-1 visual examination of bolted connections which was reevaluated during subsequent rewrites of Subsection IWE. During the review of Examination Category E-G examination criteria, the following factors were considered:

1) Containment surfaces, including bolted connections, are already subject to visual examination in accordance with Table IWE-2500-1, Examination Category E-A.
2) Bolted connections in containment are subject to the performance of 10 CFR 50 Appendix J testing.
3) Containment bolting is not exposed to any known degradation mechanism. These bolts are not within a corrosive environment, and, therefore, no problems with containment bolting has been identified throughout the industry.

The conclusion reached by ASME Section XI was that Examination Category E-G examinations on bolted connections were not warranted. In the commentary which accompanied the Subsection IWE rewrite, the following was written:

> " Pressure retaining bolting as a separate category has been deleted, and the examination requirements for pressure retaining bolting have been consolidated into Category E-A. Examination of pressure retaining bolting does not require removal or disassembly, and only those exposed surfaces of the bolting materials need be examined."

As a result, Examination Category E-G has been eliminated from Table IWE 2500-1 in the 1998 Edition of ASME Section XI.

The performance of VT-1 visual examinations on bolted connections in accordance with the 1992 Edition, 1992 Addenda represents a hardship with no compensating increase in the level of quality and safety. The reexamination of bolted connections that are already examined as part of Examination Category E-A, and tested in accordance with 10 CFR 50, Appendix J, unnecessarily increases the number of inservice examinations and the associated radiation exposure to personnel.

In addition to the visual examination of bolted connections, the 1992 Edition, 1992 Addenda, Section XI, requires that bolt torque or tension testing be performed on bolted connections that have not been disassembled and reassembled during the inspection interval. Determination of the torque or tension value would require that the bolting be un-torqued and then re-torqued or re-tensioned.

The performance of a 10CFR50, Appendix J, Type B test proves that the bolt torque or tension remains adequate to provide a leak rate that is within acceptable limits. The torque or tension value of bolting only becomes an issue if the leak rate is excessive. Once a bolt is torqued or tensioned, it is not subject to dynamic loading that could cause it to experience significant change. Appendix J testing and visual inspection is adequate to demonstrate that the design function is met. Torque or tension testing is not required on any other ASME Section XI, Class 1,2, or 3 bolted connections or their supports as part of the inservice inspection program.

PERIOD FOR WHICH RELIEF IS REQUESTED:

Relief is requested to be effective immediately upon approval for containment inspections required by ASME B&PV Code Section XI, 1992 Edition, 1992 Addenda at Oyster Creek Nuclear Generating Station, and remain in effect for the life of the plant.