

10 CFR 50.55a

2130-03-20271
October 21, 2003

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

Oyster Creek Generating Station
Facility License No. DPR-16
Docket No. 50-219

Subject: Alternative Repair of Control Rod Drive Housing Interface with Reactor Vessel

- References:
- 1) AmerGen letter 2130-00-20300 dated November 10, 2000, "Alternative Repair of Control Rod Drive Housing Interface with Reactor Vessel"
 - 2) AmerGen letter 2130-00-20304 dated November 14, 2000, "Modification to Proposed Alternative Repair of Control Rod Drive Housing Interface with Reactor Vessel"
 - 3) USNRC letter dated November 16, 2000, "Request to Use an Alternative Repair of the Control Rod Drive Housing Interface with the Reactor Vessel at the Oyster Creek Nuclear Generating Station (TAC NO. MB0461)"
 - 4) AmerGen letter 2130-01-20031 dated January 19, 2001, "Alternative Repair of Control Rod Drive Housing Interface with Reactor Vessel Clarification of Leakage Inspection"
 - 5) USNRC letter dated January 8, 2002, "Oyster Creek Nuclear Generating Station - Clarification of Leakage Inspection (TAC NO. MB1065)"
 - 6) AmerGen letter 2130-02-20214 dated July 26, 2002, "Alternative Repair of Control Rod Drive Housing Interface with Reactor Vessel"
 - 7) AmerGen letter 2130-02-20291 dated October 4, 2002, "Additional Information - Alternative Repair of Control Rod Drive Housing Interface with Reactor Vessel (TAC No. MB5700)"
 - 8) USNRC letter dated October 18, 2002, "Oyster Creek Nuclear Generating Station - Alternative Repair of Control Rod Drive Housing Interface with Reactor Vessel (TAC NO. MB5700)"

In accordance with 10 CFR 50.55a(a)(3)(i), AmerGen Energy Company, LLC (AmerGen) is requesting continued approval of the proposed alternative to 10 CFR 50.55a(g) as contained in the Reference 6 letter above. This alternative consists of roll-expansion repairs to control rod drive (CRD) housing penetrations 42-43 and 46-39, and any re-roll repairs to penetrations 42-43 and 46-39 at Oyster Creek. This request was approved by the NRC in a Safety Evaluation Report contained in the Reference 8 letter, but only for an additional cycle (until R20). We are requesting continued approval of the use of this alternative for an additional cycle, until R21, which is expected to occur in Fall of 2006.

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As recommended by the Safety Evaluation Report contained in the Reference 8 letter, AmerGen has pursued a code case for ASME approval on roll-expansion repair of leaking CRD and in-core penetrations. During January 2003, a Focus Group was formed under the Boiling Water Reactor Vessel Internals Project (BWRVIP) to develop a BWR bottom head roll repair code case. This code case is for BWR control rod drive and in-core housing bottom head penetrations. The Focus Group has developed an outline for the white paper to support the code case. This code case was presented to the working group level at the summer ASME code meeting in Scottsdale, AZ in August 2003 by the Focus Group chair. A Task Group (TG) was assembled under the Working Group (WG) on Welding and Special Repair Processes to further develop this code case. The code case is not expected to be approved until after the R20 outage at Oyster Creek, which is scheduled for Fall of 2004.

The proposed alternative provided in Reference 6 is being updated per this letter to clarify that we are requesting approval of the use of this alternative for an additional cycle, until R21, which is expected to occur in Fall of 2006. Inspections will continue as discussed in the Reference 4 and 5 letters.

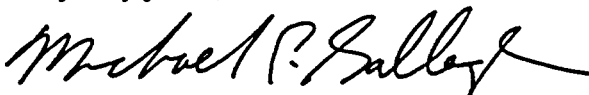
For repair of any additional penetrations that may exhibit leakage, AmerGen intends to employ the roll-expansion repair technique as described in Boiling Water Reactor Vessel and Internals Project (BWRVIP) Report, "Roll/Expansion Repair of Control Rod Drive and In-Core Instrument Penetrations in BWR Vessels (BWRVIP-17)," as used in repair of the two penetrations in Fall 2000. A weld repair according to BWRVIP-58, "BWR Vessel and Internals Project, CRD Internal Access Weld Repair," or an equivalent Code repair, will be employed if roll-expanded penetrations do not meet the leakage limits in BWRVIP-17 or more than five CRD penetrations continue to leak after roll-expansion repairs.

No additional CRD housing penetrations have been found leaking during inspections in the R19 outage nor have the two repaired penetrations exhibited any further leakage. The roll-expansion repair technique is a proven effective method of eliminating CRD housing penetration leakage as indicated by the experience at Oyster Creek and its sister plant Nine Mile Point Unit 1, as discussed in the Reference 6 letter. A summary of the results of the outage inspection results of the two CRD housing penetrations will be provided as part of the 90-day Inservice Inspection summary report.

Due to the higher level of outage preparation necessary to plan for a code repair in the event that this request is not approved, NRC approval is requested by July 15, 2004.

If you should have any questions, please contact Mr. Dave Helker at 610-765-5525.

Very truly yours,



Michael P. Gallagher
Director, Licensing and Regulatory Affairs
AmerGen Energy Company, LLC

cc: H. J. Miller, USNRC, Administrator, Region I
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