Discussion is needed for the following Relief Requests:

Relief Request RR-26:

The staff has no problem with the alternative proposed by the licensee. However, the licensee, in its alternative, needs to indicate who will be responsible for determining the acceptable minimum illumination (decreased from the code required minimum illumination) and the maximum direct examination distance (extended from the code required maximum direct examination distance). The submittal by Fort Calhoun dated 11/17/00 is a good example for the licensee.

Relief Request RR-29:

In the proposed alternative, the licensee should also committed to either (1) conduct a VT-3 (or general) visual examination during or after the pressure test on areas affected by the repair/replacement activity if a pressure test is performed for the leak-tight integrity of the pressure boundary, or (2) perform a VT-1 (or detailed) visual examination on areas affected by the repair/replacement activity if a pressure test is deferred. For the second option, the requirement of IWE-5240 shall be met, when the pressure test is performed. The licensee can use the draft ASME code case to respond the staff's concern.

Relief Request RR-31:

In the "Alternative Provisions" section of its relief request, the licensee stated that 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.

The licensee needs to clarify which visual examination is to be performed: general examination or VT-3? An acceptable alternative to the staff is for licensees to perform a VT-3 examination on all bolted connections. If an area is found to be suspect, then a VT-1 examination must be performed to determine the magnitude and extent of degradation. If required, the bolted connection must be disassembled to support the VT-1 examination. This alternative has been authorized in the Brunswick safety evaluation (SE) dated 08/10/99, Robinson SE (07/26/99) and Quad Cities SE (01/10/00).

SUBJECT: Code Case N-XXX on Alternative to Visual Examination Requirements of IWE-5240

FILE NUMBER: WG/C-E 97-19

PROPOSAL: Approve the attached Code Case

EXPLANATION:

This action will provide an alternative to the visual examination requirements of IWE-5240 following repair/replacement. The code case would be applicable to all Editions and Addenda from 1992 to 1999.

IWE-5240 states that following repair/replacement, the visual examination (VT-2) requirements of IWA-5240 are applicable. The NRC staff has received several requests for relief from performing the VT-2 examination required by IWE-5240. In the first instance, the staff issued a safety evaluation for the Davis-Besse plant in which the licensee requested such relief. The NRC staff did not approve the relief request for Davis-Besse because of the lack of adequate justification. For its Ginna plant, Rochester Gas and Electric opted to use the "detailed visual examination (VT-1)" of 1998 Code in lieu of VT-2 visual examination requirement of 1992 Code. By letter dated August 16, 1999, the staff authorized this alternative. Two other licensees have proposed to use VT-2 visual examination in accessible areas of the repaired/replaced components. The staff is currently reviewing this alternative.

In August 1999, the staff received an informal correspondence from Electric Power and Research Institute pointing out the difficulties associated with the implementation of this subarticle. In response, the staff noted that changes were needed to IWE-5240 to allow a more practicable and meaningful implementation of the requirements. For example, if after performing a repair or replacement affecting the containment pressure boundary, a pressure test is required to verify the leak tight integrity of the affected pressure boundary, some type of visual examination of the repair/modification should be performed in accessible areas to ensure the overall integrity of the repair/modification. However, the visual examination should not be redundant or duplicative with other existing Code requirements. In developing a position on this issue, the performance based Option B of Appendix J, and associated documents, NEI 94-01 and RG 1.163, have to be reviewed. Additionally, the staff noted that preservice requirements did not necessarily include a visual examination of the repaired/replaced areas.

After reviewing the relevant documents, the proposed code case has been developed. This proposed code case would reduce the unnecessary burden on the users of the Code without sacrificing quality and safety.

TECHNICAL PROJECT MGR:

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SUBCOMMITTEE NEGATIVES:

MAIN COMMITTEE NEGATIVES:

HISTORY:

Case N-XXX

Alternative to Visual Examination Requirements of IWE-5240
Section XI, Division 1

Inquiry: What alternative to the requirements of IWE-5240 may be used in lieu of the current requirements in the 1992 Edition through the 1999 Addenda for visual examination of the pressure retaining boundary following repair, modification, or replacement?

Proposed Reply: It is the opinion of the Committee that the following requirements may be used in lieu of those in IWE-5240 in all Editions and Addenda of the Code from 1992 through 1999.

After any repair or replacement affecting the containment pressure boundary, if a pressure test (Type A, Type B, or Type C) is performed to verify the leak tight integrity of the affected pressure boundary, a general visual examination of the accessible areas shall be performed during or after the pressure test to ensure the overall integrity of the repaired/replaced component with the containment.

For any repair or replacement affecting the containment pressure boundary, where a pressure test is deferred or not performed, a VT-1 or detailed visual examination shall be performed to ensure the overall integrity of the repaired/replaced component with the containment.