



**NRC Public Meeting on
10 CFR 50.55a(b)(2)(xxvi) Section XI
Condition: Pressure Testing Class 1, 2
and 3 Mechanical Joints**

Agenda

- Introduction and Opening Remarks
 - NEI
 - ASME
 - EPRI
 - Entergy

- Statement of Problem

- Examples

10CFR50.55a(b)(2)(xxvi) Condition prior to June 3, 2020

“Section XI condition: Pressure testing Class 1, 2, and 3 mechanical joints. The repair and replacement activity provisions in IWA–4540(c) of the 1998 Edition of Section XI for pressure testing Class 1, 2, and 3 mechanical joints must be applied when using the 2001 Edition through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section.”

IWA-4540(c) from the 1998 Edition of ASME Section XI also states:

“Mechanical joints made in the installation of pressure retaining items shall be pressure tested in accordance with IWA-5211(a). Mechanical joints for component connections, piping, tubing (except heat exchanger tubing), valves, and fittings, NPS-1 and smaller, are exempt from the pressure test.”

10CFR50.55a(b)(2)(xxvi) Condition after June 3, 2020

“Section XI condition: Pressure testing Class 1, 2, and 3 mechanical joints. When using the 2001 Edition through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section, licensees shall pressure test in accordance with IWA–5211(a) mechanical joints in Class 1, 2, and 3 piping and components greater than NPS–1 which are disassembled and reassembled during the performance of a Section XI repair/ replacement activity requiring documentation on a Form NIS–2. The system pressure test and NDE examiners shall meet the requirements of the licensee’s/applicant’s current ISI code of record.”

Problem Statement

The revised condition wording clarifies how the required pressure test shall be performed by removing reference to the 1998 edition of Section XI, however, it also introduces confusion as to when these pressure tests are intended to be required with the removal of the reference to IWA-4540(c). As worded, the condition prevents Owners from applying the exemptions provided by IWA-4540(b) when a mechanical joint is disassembled and assembled as part of a Repair/Replacement activity (RRA).

Examples of Impacts Created by Condition Revision

- VT-2 will be required at mechanical joints that were not involved in the RRA (Repair/Replacement Activity) but disassembled to facilitate the RRA
- VT-2 will be required for RRAs that are specifically exempted by IWA-4540(b) exemptions from pressure test
- Disassembled and reassembled (including seal weld) of threaded and seal welded valve body-bonnet connection for internal valve inspection
- Component (valve or pump) disassembly/reassembly for inspection or internal repair and an individual bolt replaced