

**ASME BOILER & PRESSURE VESSEL CODE
SECTION XI
INSERVICE INSPECTION
OF NUCLEAR POWER PLANT COMPONENTS**

Day One

- Introduction to the ASME Boiler & Pressure Vessel Code and Code Committees
- Organization of Section XI
- General Requirements
 - Scope
 - Jurisdiction
 - Classification of components, including 10CFR50.2(v), 10CFR50.55a and Regulatory Guide 1.26
 - Regulatory and jurisdictional requirements and responsibilities (10CFR50.55a), including relief requests
 - Duties and responsibilities of the Owner
 - Authorized Inspection
- Nondestructive examination, including personnel qualification

Day Two

- Inspection Plans and Schedules
- Application of Code Cases
- Examination requirements and exemptions
- Acceptance criteria and corrective measures
- Brief discussion on flaw evaluation
- Evaluation of plant operating events not specifically included in Design Specifications (evaluations of non-anticipated events, such as water hammer, overpressurization, or new loads)

Day Three

- Scope of repair/replacement activities
- Applicability of Section XI to repair, replacement, modification, and maintenance activities
- Alternative requirements for small items
- Items rotated from stock
- Mechanical clamping devices
- Responsibilities of Owners and Repair/Replacement Organizations
- Stamping requirements for fabrication and installation
- Preparation and content of Repair/Replacement Programs and Plans
- Verification of acceptability (Suitability evaluations)
- Authorized Inspection
- Procurement of replacement items; reconciliation of changes in later Editions and Addenda of the Construction Code

Day Four

- Procurement of replacement items; reconciliation of changes in later Editions and Addenda of the Construction Code; NRC Generic Letter 89-09
- Application of B31.1 and Section II, III, and VIII rules to Section XI repair, replacement, and modification, including quality assurance, materials, design, welding, heat treatment, examination, and testing requirements
- Design documents; configuration control
- Mitigation of defects by modification
- Welding, brazing, and defect removal, including fabrication and installation; NRC Generic Letter 90-05 & IE Notice 93-41

Day Five

- Examination (Construction Code and preservice inspection)
- Pressure testing (periodic and repair/replacement)
- Documentation and Data Reports