EL503
Overview of In-service Codes for Inspection, Repairs, and Alterations of Pressure Equipment

Module One

- Introduction to In-Service Codes and Standards
  - Introduction to Post Construction Activities
  - Introduction to NBIC and API 510
  - Introduction to Other Documents
  - Identify In-service documents

Module Two

- National Board Inspection Code (NBIC) Rules
  - Introduction to the NBIC
  - Part 1 – Installation
  - Part 2 - Inspection
  - Part 3 – Repairs and Alterations

Module Three

- API-510 Rules
  - Scope of API-510
    - Identify the differences between API-510 and NBIC
  - RBI (risk-based inspection) Planning Process

Module Four – Part 1

- Introduction to API-579
  - Scope of API-579
    - Fitness for Service
    - Flaw evaluation procedures
    - Relationship between API-579 and Post Construction codes
    - “Remaining Strength Factor (RSF)”
    - "Critical Thickness Profile" (CTP)

Module Four – Part 2

- API-579
  - Scope of API-579
    - Assessment of local metal loss
    - Assessment of pitting corrosion
    - Assessment of hydrogen blisters and hydrogen damage
    - Assessment of weld misalignment and shell distortions
    - Assessment of crack like flaws
    - Evaluating the fitness-for-service of equipment that has been operating in the creep range
    - Assessing fire damage

Module Five

- ASME and PVRC Post-Construction Documents
  - Mission and responsibilities of the PVRC (Pressure Vessel Research Committee)
  - Scope of PCC-1 (post-construction committee) and PCC-2
  - Welding Research Council (WRC)
  - Damage mechanisms