EL542
BPV Code, Section III, Division 1: Class 1 Piping Design

- Module 1: Introduction and Objectives
- Module 2: Overview of the ASME Boiler and Pressure Vessel Code
  - Structure, goals and objectives of the ASME Boiler and Pressure Vessel Code
  - Relationship of Section III to other sections of the ASME Boiler and Pressure Vessel Code
  - Relationship of NB-3000 to the other sections of the Code
- Module 3: Code Requirements for Class 1 Piping Design Specifications
  - Key individuals and organizations and their responsibilities
  - Service levels and the protection provided by service levels
  - “Typical” applied loads considered in design
  - Certification requirements and responsibilities
  - Analysis methods
    - Loads to consider
    - Static analysis
    - Dynamic analysis
    - RSMA (Response Spectra Modal Analysis)
    - Modal coordinates
- Module 4: Class 1 Piping Design by Rule (NB-3600)
  - Class1 Piping Design by Rule methods
  - Class 1 pipe supports design requirements
  - Individual piping component design requirements
  - Design a simple Class 1 piping system
  - “Non-Code” but related nuclear piping design issues
- Module 5: Related Nuclear Piping Design Issues
  - Miscellaneous Topics
    - Test loads, flanges and bellows
    - Flexible hoses and other items
    - Integral welded attachments
    - Support design - Subsection NF
  - Noncode Issues
    - Break locations
    - Depressurization loads, jet impingement and pipe whip
    - Functional capability and other issues
- Module 6: Class 1 Piping Design by Analysis (NB-3200)
  - Class 1 piping design by analysis methods
  - Design a simple Class 1 piping component
  - Differences between Class 1 piping design by rule and Class 1 piping design by analysis
- Summary and Closure