ASME Section III Div.1 Rules for Construction of Nuclear Facility Components Overview

Potential PDH: 16

Description:

This course provides an overview of ASME III Div.1 rules for construction of nuclear power plants. The overview includes an understanding of the requirements, but also their technical basis, and their historical context.

Outline:

The course covers the following 20 modules:

1. Overview
2. NCA Scope
3. NCA-2000 Classification
4. NCA-3000 Responsibilities
5. NCD-2000 Materials
6. NCD-3000 Design
7. Loads
8. NCD-3100 General design
9. NCD 3300 Vessel Design (1)
10. NCD-3300 Vessel Design (2)
11. NCD-3400 Pumps
12. NCD-3500 Valves
13. NCD-3600 Piping
14. NCD-4000 Fabrication
15. NCD-5000 Examination
16. NCD-6000 Testing
17. Class 1 Differences, Materials
18. NB-3000 Cl.1 Design
19. NB-4/5000 Cl.1 Fab./Exam.
20. NX-7000 Overpressure Prot.

Subject Matter Expert (SME):

George Antaki, Fellow ASME, has over 40 years of experience in nuclear power plants and process facilities, in the areas of design, safety analysis, startup, operation support, inspection, fitness for services and integrity analysis, retrofits and repairs. George has held engineering and management positions at Westinghouse and Washington Group International, where he has performed work at power and process plants, and consulted for the Department of Energy (DOE), the Nuclear Regulatory Commission (NRC) and the Electric Power Research Institute (EPRI). He also is an instructor of failure prevention, inspection and equipment integrity courses for ASME, and has done teaching assignments for the Department of Energy as well as many other private organizations. Mr. Antaki has authored several articles, publications and two textbooks on design and mechanical integrity of plant systems and components. George serves as a member of several committees including:

- ASME/API Joint Committee on Fitness for Service Member
- B31 Mechanical Design Technical Committee Vice Chair
- Post Construction Subcommittee on Repair and Testing (PCC) Member
- Pressure Technology Post Construction Committee Member
- Pressure Technology Post Construction Executive Committee Member
- Subgroup on Dynamic Qualification Member
- Task Group on Impulsively Loaded Vessels (SC VIII) Member
- Working Group on Piping (SG-D) (SC III) Chairman