Title: ASME III, ASME VIII, National Board Inspection Code NB-23 and ASME B31.1

Potential PDH: 32 **Code:** BTT037

Description:

Overview of the ASME B&PV Section VIII; Difference between Div.1-2-3 of Section VIII; Overview of NBIC NB-23 Code; NBIC State jurisdictional requirements; Overview of an NBIC-based vessel integrity program; Difference between NB-23 and Section XI; and Interface between NB-23 and Section VIII.

Outline:

NBIC Part 1: Installation Overview
NB-23 Part 1 provides requirements and guidance to ensure that pressure vessels are installed and function properly. Installation includes meeting specific safety criteria for construction, materials, design, supports, safety devices, operation, testing, and maintenance.

NBIC Part 2: Inspections with Examples
NB-23 Part 2 provides information and guidance needed to perform and document inspections for Section VIII vessels. This Part includes information on vessel inspections, tests, failure mechanisms, and methods for fitness for service assessments of degraded vessels.

NBIC Part 3: Repairs and Alterations with Examples
NB-23 Part 3 documents acceptable repairs or alterations to pressure vessels. Alternative methods for NDE, testing, and heat treatment of repairs are provided when the original code of construction requirements cannot be met.

Instructor:

Mr. George Antaki, PE, fellow ASME, chief engineer Becht Nuclear Services. Mr. Antaki has over 44 years of experience in the nuclear and process industries, starting as an engineer at Westinghouse in 1975. He is chairman of ASME III Working Group Piping Design, member of ASME III subgroup Component Design, and several ASME XI task groups. He was chairman of the Savannah River Site Pressure Equipment Protection Committee which implemented the National Board program for inspection and repairs of hundreds of vessels and relief devices. He is an ASME instructor and is the author of several textbooks on ASME components, including “Fitness-for-Service and Integrity of Piping, vessels, and Tanks” (McGraw-Hill), and “Nuclear Power Plant Safety and Mechanical Integrity: Design and Operability of Mechanical Systems, Equipment and Supporting Structures” (co-author, Elsevier).