

ASME PRESSURE VESSEL CODE FOR NUCLEAR TRANSPORT AND STORAGE

June 20–24, 2016



TO REGISTER
www.ne.anl.gov/training/asme/

The U.S. Department of Energy (DOE) Packaging Certification Program (PCP), Office of Packaging and Transportation (EM-33), is sponsoring a training course at Argonne National Laboratory, Argonne, IL.

What Does the Course Cover?

The objective of this 4.5-day course is to help participants gain an understanding of the regulatory basis, current design practice, and engineering rationale for applying the ASME Boiler & Pressure Vessel Code to the packaging and transportation of radioactive material and the storage of spent nuclear fuel and high-level waste. Course highlights include lectures on the following:

- Overview of federal regulations that govern (1) packaging and transportation of radioactive material and (2) dry cask storage systems for spent nuclear fuel
- DOE Orders and NRC guidance documents, including standard review plans, regulatory guides, and NUREG reports
- DOE/NRC lessons learned from certifying transportation packages and licensing dry cask storage systems
- Discussion of the ASME Code, with emphasis on Section III, Division 3, *Containments for Transportation and Storage of Spent Nuclear Fuel and High Level Radioactive Material and Waste*, and discussion of Section III, Division 1; Section VIII, Division 1; and Sections II, IX, and XI

- Code and non-Code materials, containment loadings, design considerations with emphasis on design-by-analysis rules, design of internal support structures, and buckling analysis
- Fabrication, welding, examination, quality assurance, test requirements, design qualification by physical testing, and containment/confinement requirements for leakage rates
- Structural, thermal, containment/confinement; shielding and criticality safety analysis considerations
- Aging management programs and time-limited aging analyses
- Inspection and monitoring technologies

Course Activities

- Lectures/Discussions
 - In-class exercises/Homework
 - Facility tours/Final exam
- Participants who successfully complete this course and pass the exam may be eligible for college credit at the University of Nevada, Reno. For more information, see www.unr.edu/degrees/nuclear-packaging/certificate

Who Should Attend?

The course has been designed for DOE and its contractors and other agency and industry personnel who are responsible for designing, fabricating, or evaluating Type B and fissile material transportation packages and spent fuel storage casks, as well as for preparing or reviewing the associated safety analysis reports. Utility personnel may benefit from additional lectures on aging management for extended long-term dry storage of spent fuel. The number of participants is limited to 24.

Faculty

Faculty will include subject matter experts from U.S. National Laboratories; DOE, NRC, and other agencies; academia; and utilities.

Tuition/Registration

The tuition for the training course is \$1,495 (\$1,395 if registered before **May 20, 2016**). Registration and payment must be received by **June 6, 2016**. The participant list is subject to approval by DOE.

Cancellation policy: A processing fee of \$100 will be charged for cancellation until/on **June 14, 2016**.

For More Information

Sharon Ryan
Argonne National Laboratory
Phone: 630-252-3754
E-mail: ryans@anl.gov

Photo Caption: Independent Spent Fuel Storage Installation (ISFSI) at the shutdown Connecticut Yankee site. Photo courtesy of Connecticut Yankee