# INTERNATIONAL TRAINING SERIES

# **SPENT FUEL ACADEMY**

NAC International (NAC) is proud to offer a unique virtual training experience: The Spent Fuel Academy. This three-day all-inclusive seminar provides comprehensive training and instruction by leading experts on the science, technology, and quality considerations underlying dry storage and transportation of spent nuclear fuel

#### LEARN FROM THE INDUSTRY'S LEADING EXPERTS

NAC and the seminar faculty bring their historical knowledge, experience and industry and technology expertise to provide

attendees a comprehensive understanding of spent fuel technology, licensing, operations and transportation issues.

Industry-leading experts in storage canister and

## NAC SPENT FUEL ACADEMY

A 3-day virtual event for industry professionals seeking key insights on dry cask storage and transportation of spent nuclear fuel

February 2-4, 2021

canister and transfer/transportation cask design, licensing, and operations will share their spent fuel management experience in

engineering and analysis regarding dry storage systems.

The benefits of attending this seminar include a comprehensive understanding of

- Spent nuclear fuel (SNF) management practices and experience
- Wet and dry SNF storage concepts
- Dry cask storage designs
- Regulations that govern SNF management
- Analysis and engineering that supports design efforts
- Quality program and manufacturing oversight



#### WHO SHOULD ATTEND?

Those who should attend the Spent Fuel Academy include spent fuel operations executives, managers and professionals; technical and quality oversight staff; and government and policy professionals. Prior attendees include representatives from the following U.S. and international companies:

Alliant-IES Utilities, Arizona Public Service, BNFL, Consumer's Energy, Dominion Generation, Duke Energy, Eagle-Pitcher Industries, EDF, EGL AG, Entergy, Exelon, GNS (Gesellschaft fur Nuklear-Service mbH), GPU Nuclear, Hitachi Zosen, INL, Kansai Electric Power Co., Kozluduy Nuclear Power Plant, MDM Engineering Corp., Mega-Tech Services, Nebraska Public Power District, Nuclear Waste Technical Review Board, Orano (formerly AREVA NC), PNNL, PSEG Nuclear, Rolls-Royce, Southern California Edison, Southern Nuclear, Talen Energy, TVA, UK Ministry of Defense, and WE Energies

#### FOR QUESTIONS, PLEASE CONTACT:

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#### SPENT FUEL ACADEMY CURRICULUM

The NAC Spent Fuel Academy is a comprehensive three-day informationpacked virtual training seminar on SNF storage and transportation systems covering design, licensing, engineering, fabrication, construction, operations, transportation, quality assurance (QA) programs and manufacturing oversight.

The first two days of the seminar are focused on technology, licensing, construction, and operations. The third and final day covers QA program considerations and performance-based manufacturing oversight of dry cask storage systems.

#### TWO-DAY TECHNICAL PROGRAM (Approximately 14 hours duration over 2 days)

Design, Licensing, Engineering, Fabrication, Construction, Operations, and Transportation

- Fundamentals of Spent Fuel Management
- Status of Spent Fuel Management in the United States and the World (quantities, wet and dry technologies, utility experience and plans for the future)
- Dry Spent Fuel Storage and Transportation Systems
  - Metal (Storage-only) Casks
  - Dry Cask/Multi-Purpose Canister Designs
  - Overview of Storage Facility Design
  - Loading Sequence for Dry Cask/ Canister Multi-Purpose Designs
  - Technological Differences Among Systems
  - Life Cycle Costs of Dry Cask/ Multi-Purpose Canister Designs
- Regulatory Requirements in the United States
  - Safety Analysis Report
  - General License
  - Site-Specific License
- Introduction to Engineering and Analysis Considerations
  - Thermal, Structural, Criticality, Shielding, and Confinement

- Overview of Canister
  Fabrication
- Transfer Cask Fabrication and Overpack Construction
- Dry storage Operations, Handling, and Transport Overview
- Background and Implementation of 10CFR72.48 Requirements
- Emerging Issues in Dry Storage Design, Analysis and Licensing
- Economic Analysis of Dry Storage and Life Cycle Costs

#### QA/OVERSIGHT PROGRAM (Approximately 6 hours duration on the final day)

Quality Program and Manufacturing Oversight

- The Quality Assurance Imperative in Dry Storage
- Summary of Key QC Tests and Inspections
- Performance-based Approach to Manufacturing Oversight
- Identification of Critical Attributes
- Graded Approach to Planning and Implementing Manufacturing Surveillance

#### ACADEMY FEES

3-Day Technical and Quality Program \$2800





### NAC SPENT FUEL ACADEMY

To register, please visit https://www.nacintl.com/seminars