



# **NRC Workshop on Vendor Oversight for New Reactor Construction**

## **New Reactor Vendor Inspection Program**

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# Topics

- International oversight activities
- International cooperation
- Engineering design verification inspections

# International Oversight Activities

- Germany
  - AREVA GmbH
- Japan
  - Japan Steel Works
  - Mitsubishi Heavy Industries
- Korea
  - Doosan Heavy Industries
- Canada
  - B&W Canada
  - Velan

# International Cooperation: MDEP

## Multinational Design Evaluation Program (MDEP)

- Brought nuclear regulatory authorities together to share insights and experiences
- Participants from Canada, China, Finland, France, Japan, Russian Federation, South Korea, South Africa, United Kingdom, & United States
- Activities:
  - NRC inspector rotations in Finland and Taiwan
  - Meetings with the Japan Nuclear Energy Safety Organization (JNES)
  - Hosting foreign assignee from the Japanese Nuclear and Industrial Safety Agency

# International Cooperation: VICWG

- Vendor Inspection Cooperation Working Group (VICWG) established to enhance regulatory cooperation and information exchange
- VICWG objectives
  - Explore international regulators' vendor oversight requirements and programs
  - Apply lessons learned
  - Exchange vendor inspection insights
  - Identify areas where international cooperation can yield tangible benefits

# International Cooperation: VICWG

(cont'd)

- Activities
  - Observed United Kingdom Nuclear Installation Inspectorate (NII) and Environmental Agency (EA) interactions with General Electric and Westinghouse regarding reactor designs
  - Conducted vendor inspection of Korean based-vendor in parallel with Korean Institute of Nuclear Safety (KINS)
  - Observed KINS inspections at U.S.-based vendors
  - Observed French Autorité de Sûreté Nucléaire (ASN) inspections at France-based vendors

# Engineering Design Verification Inspection

- Inspection of process used for the accurate “translation” of high-level certified or approved design information into lower-tier engineering documents
- Design details that would be used in the actual fabrication and construction
- Assessment of the design control processes implemented by Engineer-Procurement-Constructor (EPC) entity

# Engineering Design Verification Inspections (cont'd)

- Most effective when conducted before key component fabrication and construction begin
- Results will inform ITAAC closure process
- “Bridge” to modular and in-situ design and construction activities



# Summary

- Rigorous vendor oversight remains crucial to success of new reactor construction
- There's no substitute for effective licensee oversight: **Licensees will continue to be held responsible for the quality of work performed for them by vendors**
- Role and responsibility of EPC must be clearly established and integrated within licensee's quality assurance program "umbrella"