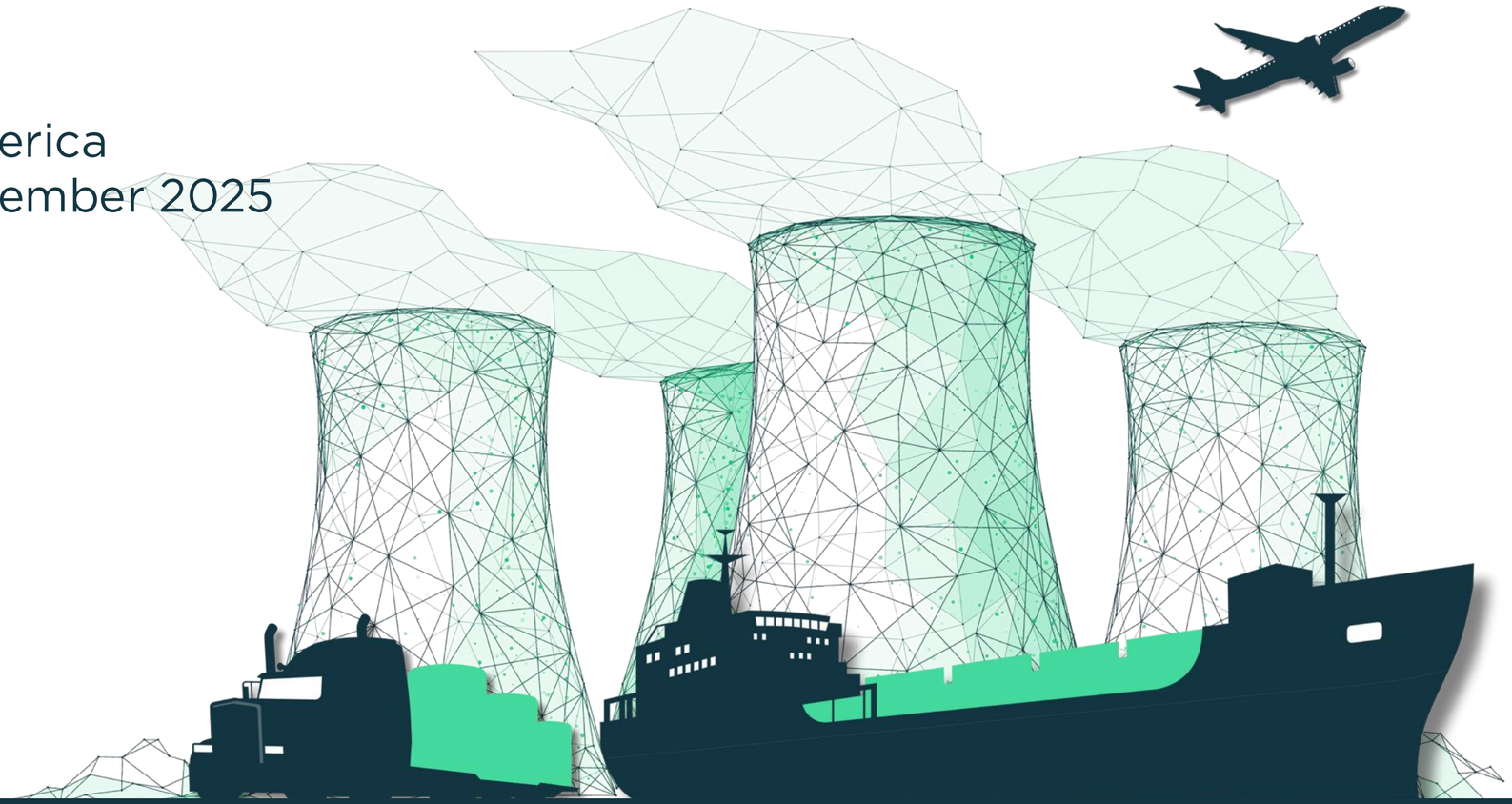
world nuclear transport institute

North American Update

Eileen Supko
Principal Representative, North America
WNTI Members Meeting, 20-21 November 2025



- U.S. Executive Orders impacting nuclear energy
- Canadian waste management activities
- NRC/DOT Rulemaking to harmonize with IAEA Transport Safety Standards
- NRC Rulemaking regarding increased enrichment
- Transportation package update – recent NRC approvals

- Ordering the Reform of the Nuclear Regulatory Commission, May 2025
  - Reorganization of NRC to focus on new reactor licensing and regulatory review
  - NRC to establish fixed deadlines for approval of reactor licenses and other licensing activities. This requires streamlining of hearing process

  https://www.whitehouse.gov/presidential-actions/2025/05/ordering-the-reform-of-the-nuclear-regulatory-commission/
- Reforming Nuclear Reactor Testing at the DOE, May 2025
  - Increases role of DOE in deploying new reactor designs; facilitates construction of "qualified test reactors."
  - DOE to take actions to ensure its regulations and policies enable deployment of a qualified test reactor within 2 years of an application.
  - DOE to establish a pilot program to approve at least 3 pilot reactors with a goal of achieving criticality in each of the reactors by July 4, 2026.
  - DOE to streamline National Environmental Policy Act implementing regulations
  - https://www.whitehouse.gov/presidential-actions/2025/05/reforming-nuclear-reactor-testing-at-the-department-of-energy/

- Deploying Advanced Nuclear Reactor Technologies for National Security, May 2025
  - Leverages the US military's energy needs to deploy new reactor technologies and to facilitate exports of US technologies abroad.
  - US Dept. of Defense (DOD) to create a program to use nuclear energy to power military installations.
  - DOD to deploy a nuclear reactor at a military base by September 2028.
  - DOE to identify U and Pu inventories to be used for nuclear fuel; to release 20 metric tons of HALEU for use by the private sector at a DOE site for powering AI infrastructure.
  - DOE/DOD to authorize siting, design, construction and operation of privately funded recycling, reprocessing and fuel fabrication at DOE/DOD sites.

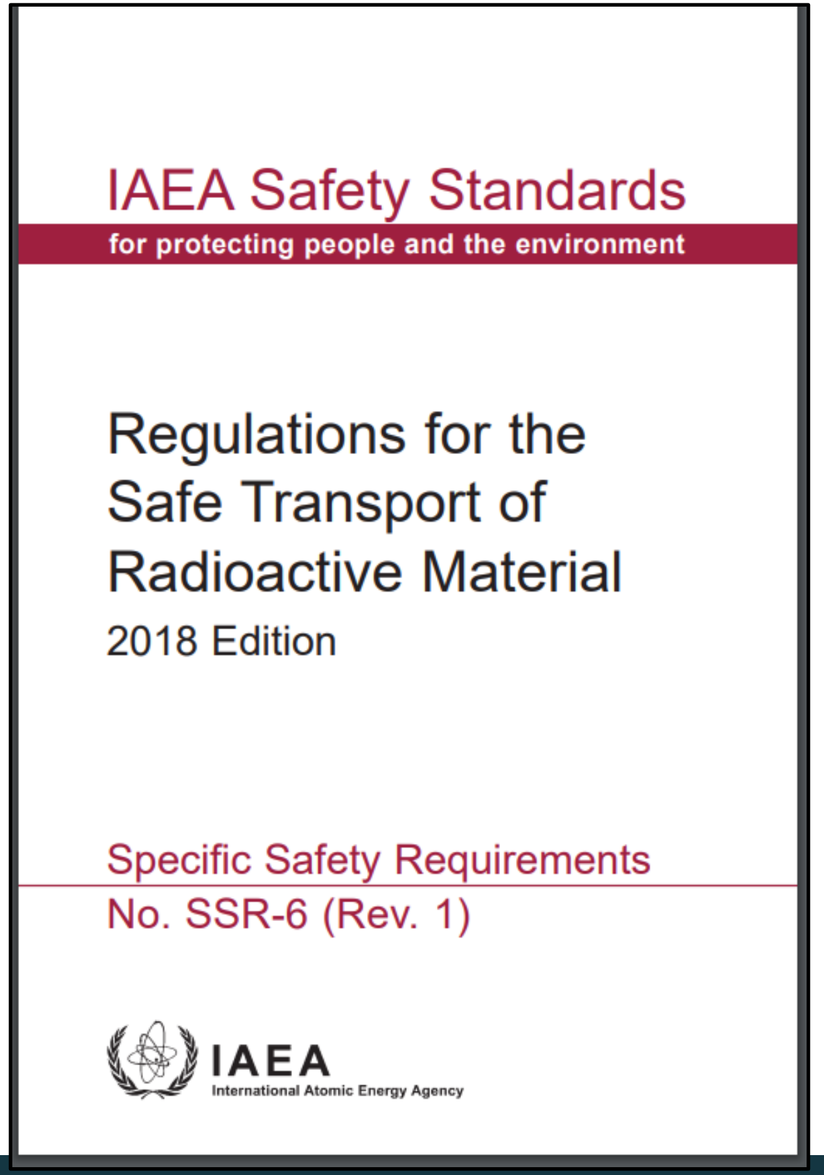
https://www.whitehouse.gov/presidential-actions/2025/05/deploying-advanced-nuclear-reactor-technologies-for-national-security/

- Reinvigorating the Nuclear Industrial Base, May 2025
  - Improve domestic fuel cycle infrastructure, including uranium enrichment and conversion as well as recycling and waste disposal.
  - Fund nuclear power plants and develop a robust nuclear work force.
  - DOE, NRC and Office of Management and Budget must develop a plan to expand uranium conversion and enrichment capacity to meet domestic needs.
  - Make surplus Pu available for use as nuclear fuel.
  - DOE must seek voluntary agreements with nuclear energy companies under the Defense Production Act to procure LEU, HALEU, including materials for US government national security purposes.
  - DOE Loan Office to facilitate 5 GW of power uprates for existing reactors, and ensure that 10 new large reactors are under construction by 2030.
  - Dept of Education and Dept of Labor to prioritize nuclear education pathways and apprenticeships and establish new training programs.

https://www.whitehouse.gov/presidential-actions/2025/05/reinvigorating-the-nuclear-industrial-base/

- NWMO selected a site for a Canadian deep geologic repository for spent fuel in November 2024.
  - Selected Township of Ignace and Wabigoon Lake Ojibway Nation, Northern Ontario
  - Both confirmed willingness to move forward with site selection process.
- In May 2025,NWMO selected vendors, which will perform infrastructure design and engineering, construction planning, mine design and construction, management activities.
- In October 2025, NWMO shared conceptual designs for a Centre for Expertise that it will build in Ignace.

- On September 12, 2022, NRC issued a proposed rule to amend 10 CFR Part 71 to harmonize with the IAEA's SSR-6 (2018 Edition).
- U.S. DOT also issued a proposed rule to harmonize 49 CFR parts 107 and 171–180 with the 2018 Edition of SSR–6.
- Final Rule is expected to be published on February 17, 2026 – a schedule delay of one year over the past year.



- September 2023, NRC published a Regulatory Basis Document for Increased Enrichment of Conventional and Accident Tolerant Fuel Designs for Light-Water Reactors
  https://www.nrc.gov/docs/ML2329/ML23299A162.pdf
- Rulemaking would reduce exemption requests for use of enrichments >5.0 wt.% U-235.
- The Regulatory Basis document addressed:
  - NPP accident source terms, criticality accident requirements
  - Uranium fuel cycle environmental requirements for increased enrichments
  - Fissile material packaging requirements (10 CFR 71.55(g))
  - Fuel dispersal during NPP accident conditions
- Proposed rule was expected to be published in October 2025 – this did not occur.
- Final Rule is still scheduled for March 2027, but likely to slip given that proposed rule was not published on time.

- NAC International, Model No. Volunteer, CoC 71-9403/B(U)-96
  - Package is certified to transport irradiated hardware; vitrified HLW, Tritium-Producing Burnable Absorber Rods (TPBAR), which are components used in PWRs to generate tritium.
  - Package was approved by NRC with less than 1 year of review. https://rampac.energy.gov/docs/default-source/certificates/1019403-R0.pdf
- Gesellschaft fur Nuklear-Service mbH (GNS), Model No. CASTOR, geo69, CoC 71-9383/B(U)F-96
  - Package is certified to transport up to 69 BWR fuel assemblies
  - https://rampac.energy.gov/docs/default-source/certificates/1019383-R0.pdf
- TN Americas LLC, Model No. TN Eagle SC, TN Eagle LC, CoC 71-9382/B(U)F-96
  - Spent fuel canisters for PWR fuel (EOS-37PTH, 32PT, 32PTH1, 24PT4, 24PT1) and BWR fuel (EOS-89BTH)
  - https://rampac.energy.gov/docs/default-source/certificates/1019382-R1.pdf

world nuclear transport institute

Thank You!

To find out more about the World Nuclear Transport Institute or discover how Membership could benefit your organisation, please scan the QR code:

SCAN HERE