Non-Proprietary

TN Osprey Dual-Purpose Metal Cask

Part 71 Licensing

Pre-Application NRC/Orano TN Americas Meeting

Non-Proprietary Section

October 2025

orano

TN-Osprey Dual-Purpose Metal Cask Presentation

- This meeting will mostly focus on the licensing of the TN-Osprey dual-purpose metal cask for **transportation** under NRC regulations 10 CFR Part **71**
- The TN-Osprey is a modified version of the TN-Eagle transport cask (licensed under Docket 71-9382)
  - The modification is such that the TN Osprey cask can be used for the wet loading of bare fuel assemblies from the spent fuel pool considering US crane limits (whereas the TN Eagle is meant for horizontal dry loading of a Dry Shielded Canister (DSC) from an HSM exclusively)
  - The TN Osprey cask retains the same general features as the TN-Eagle so that it can be shipped offsite at the end of the storage period

TN-Osprey General Features

- The TN-Osprey retains most of the features of the TN-Eagle transport cask licensed in the US under Docket 71-9382, such as
  - Forged containment body
  - Shielding rings containing neutron and gamma shielding materials
  - Will be fitted with impact limiters of the same design as the TN-Eagle's for offsite transportation
- Some TN-Osprey features deviate from the TN-Eagle transport cask
  - Some shielding rings may feature fins on the outside to reject more heat and maintain resin temperatures below the limit
  - Weight under hook during loading < 125 tons (150 tons for long PWR fuel version)
  - Has two bolted closure lids (instead of one for the TN-Eagle) with double metallic seals on each lid
  - Is a bare fuel cask (no canister), fitted with either a PWR or BWR basket (unlike the TN Eagle, which is loaded with DSCs)

End of the Non-Proprietary Section of the Meeting