

Non-Proprietary

TN Osprey Dual-Purpose Storage and Transportation Metal Cask

Pre-Application NRC/Orano TN Americas Meeting
Non-Proprietary Section

June 2025



orano

TN-Osprey Dual-Purpose Metal Cask Presentation

- This meeting will focus on the licensing of the TN-Osprey dual-purpose metal cask for vertical storage under NRC regulations 10 CFR Part 72
- The TN-Osprey is a modified version of the TN-Eagle transport cask (CoC 71-9382)
 - It has been modified so that it can be used for the wet loading of fuel assemblies from the spent fuel pool considering US crane limits
 - It 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 CoC 71-9382, such as
 - Forged confinement body
 - Shielding rings containing neutron and gamma shielding materials
 - May be fitted with impact limiters similar to the TN-Eagle's for offsite transportation
- Other 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 < 125 tons (150 tons for long PWR fuel)
 - It has one bolted closure lid with double metallic seals (like the TN32B-HBU, TN68, TN40, TN40HT dual-purpose casks...)
 - It is a bare fuel cask (no canister), fitted with either a PWR or BWR basket

End of the Non-Proprietary Section of the Meeting

