

Progress Energy Spent Fuel Transportation Using IF-300

August 25, 2004



Progress Energy

Discussion Topics

- **Transportation Experience**
- **IF-300 Overview**
- **Spent Fuel Management Strategy**
- **Transportation Program Status**
- **Plan for Continued Use of IF-300**
- **Additional Topics**

Transportation Experience

- 183 shipments
- 4,200 spent fuel assemblies transported
- Over 30,000 miles
- All using IF-300 spent fuel shipping casks



Transportation Experience

- **First Shipment – 1977**
- **Active transportation program since 1989**
- **12 to 15 shipments per year**

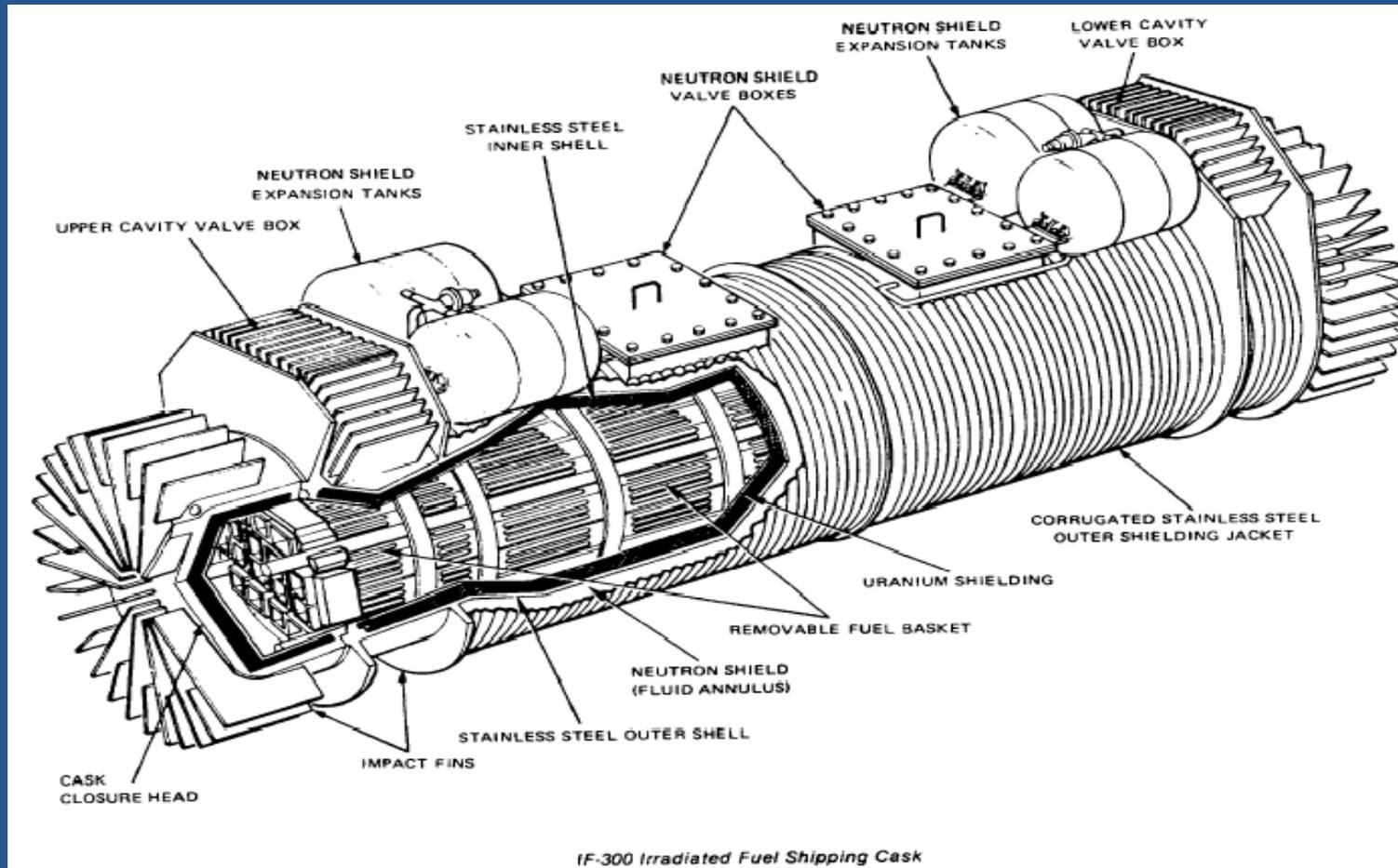


IF-300 Spent Fuel Shipping Cask



- All four IF-300 casks owned and operated by Progress Energy
- Used only for Progress Energy shipments
- Progress Energy owns and maintains railcars, cabooses, yokes and all support equipment

IF-300 Spent Fuel Shipping Cask



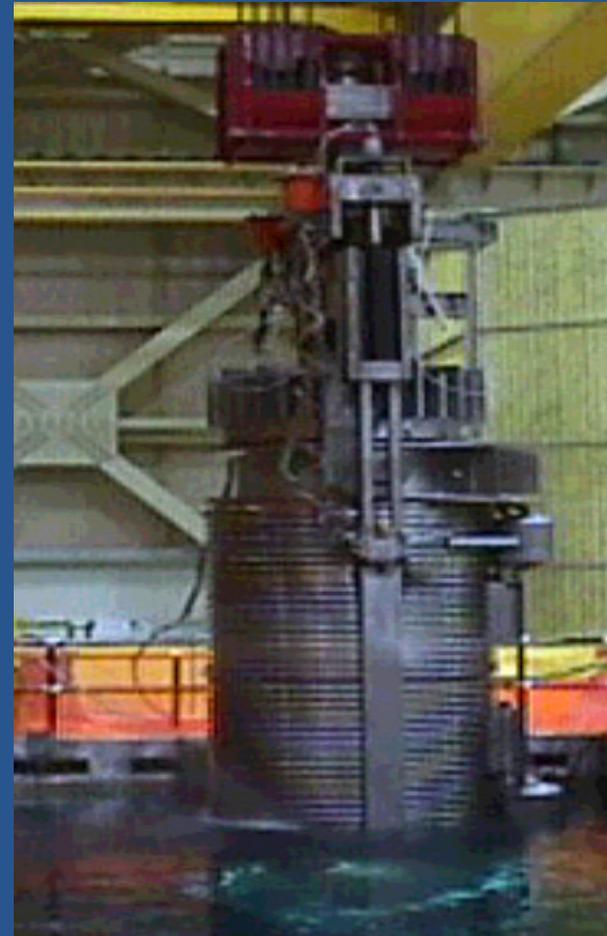
IF-300 Spent Fuel Shipping Cask



- 70 tons
- Stainless steel inner shell
- Depleted uranium shielding
- Stainless steel outer shell
- Water annulus for neutron shielding
- Stainless steel outer jacket

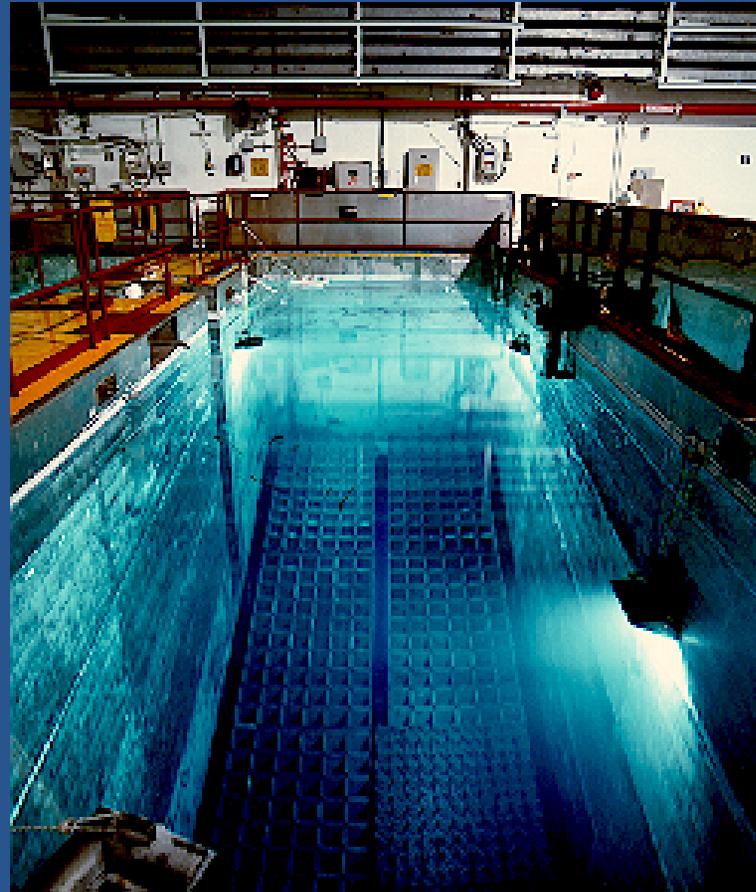
Well Maintained Equipment

- Dedicated maintenance staff
- Pre-shipment inspections and leak checks
- Annual preventive maintenance and inspections



Spent Fuel Management Strategy

- Maintain operating reserve at all units
- Shipping program to reduce inventories at Brunswick and Robinson
- Maximize use of Harris spent fuel pools
 - Two additional pools activated in 2001

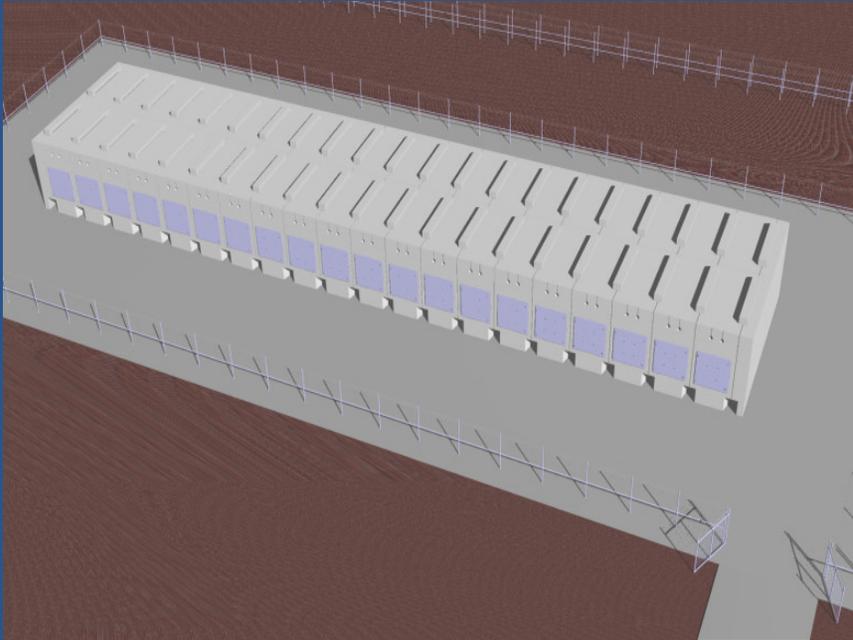


Transportation Program Status



- IF-300 Certificate of Compliance No. 9001 expires September 30, 2005
- Current limits:
 - ▶ 4.25% enrichment
 - ▶ 45,000 MWd/MTU Burnup

Transportation Program Status



- Shipments from Robinson have been completed
 - ▶ Plan to load ISFSI (TN 24PTH) in mid-2005 to maintain full core offload capability

Transportation Program Status



- Brunswick inventory available to ship beyond 2005
 - ▶ No enrichment or burnup increases required
 - ▶ Spent fuel for 27 shipments (59 casks)
 - ▶ Can defer Brunswick ISFSI (TN 61BT) need date from 2008 until 2010 with additional shipments

Plan for Continued Use of IF-300



- **Extend Certificate of Compliance until October 1, 2008 with no enrichment or burnup increases**

Additional Discussion Topics

- Limitation on Group III fuel in IF-301 and 302
- Neutron + gamma dose limit
- Options considered but not being pursued at this time
 - ▶ BWR enrichment increase
 - ▶ Exemption from 10CFR71.19(3)

