

Vermont Yankee RWC Transport

2020 MRMTC Fall Virtual Meeting
Presentation

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Agenda

1. RWC Loading, Transport & Disposal
2. Lessons Learned

01

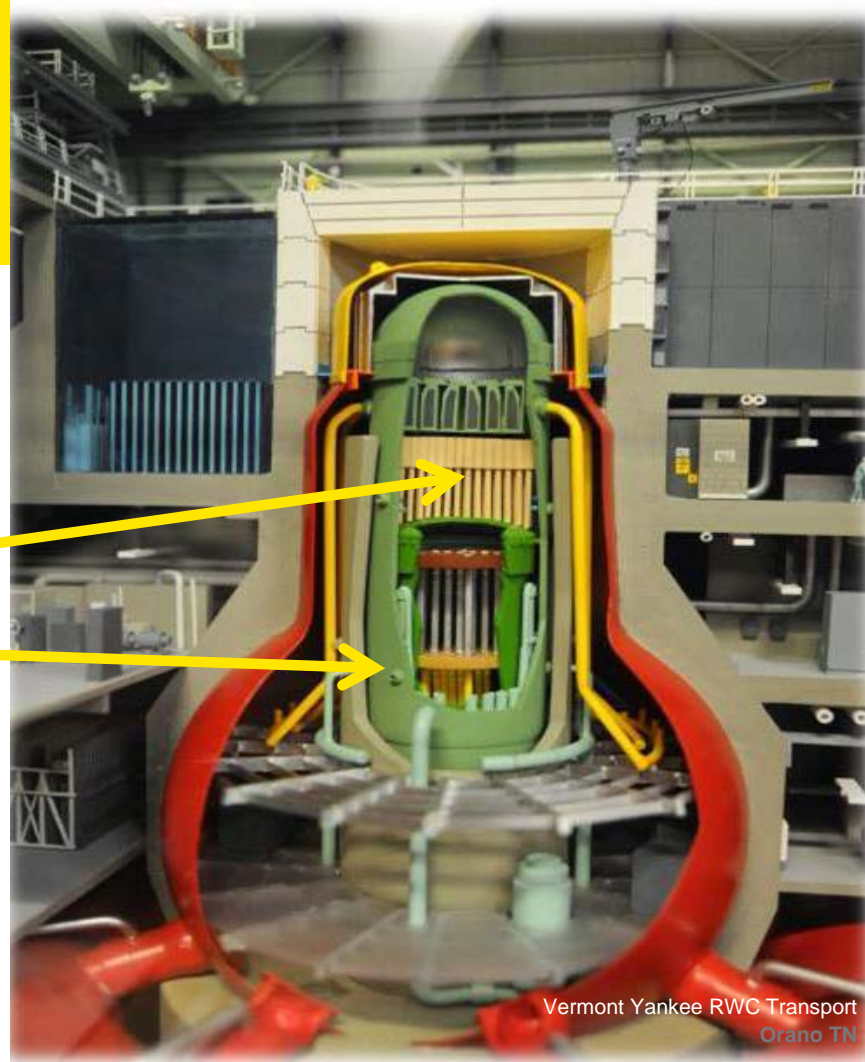
RWC Loading, Transport & Disposal

Orano's Mission

Support NorthStar Nuclear Decommissioning with the segmentation, packaging for disposal and transportation of:

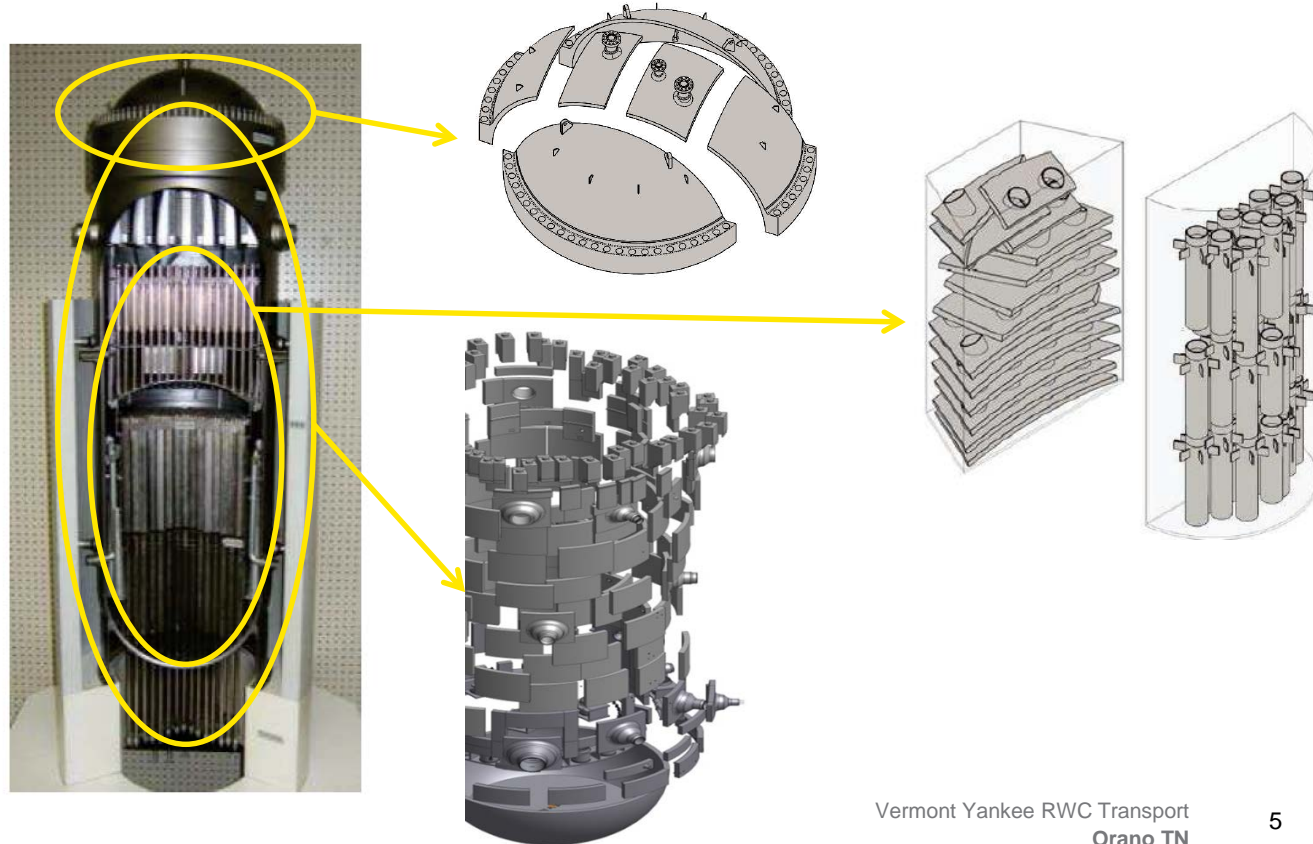
- Reactor Vessel Internal Structures
- Reactor Vessel

» The scope of work does not involve any packaging or transportation of used nuclear fuel



Reactor Vessel Segmentation

UNF assemblies have already been removed from the reactor and are currently in dry storage on site at VY

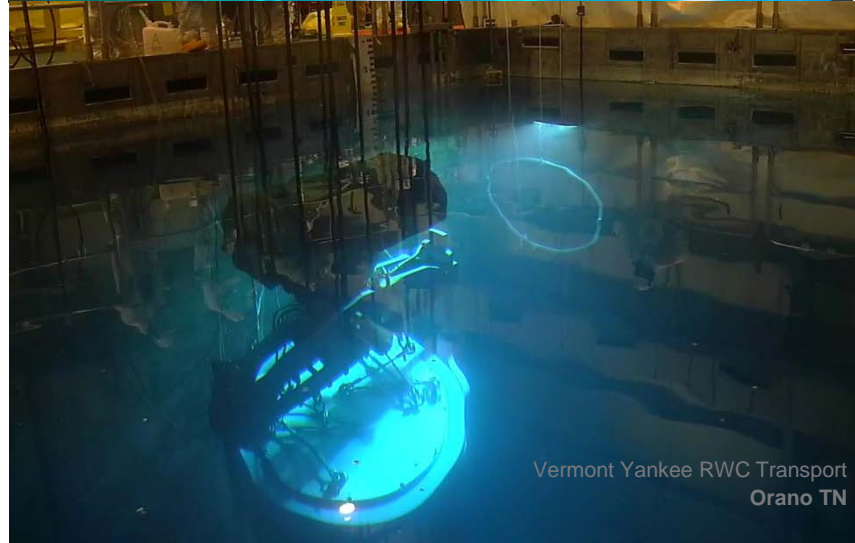
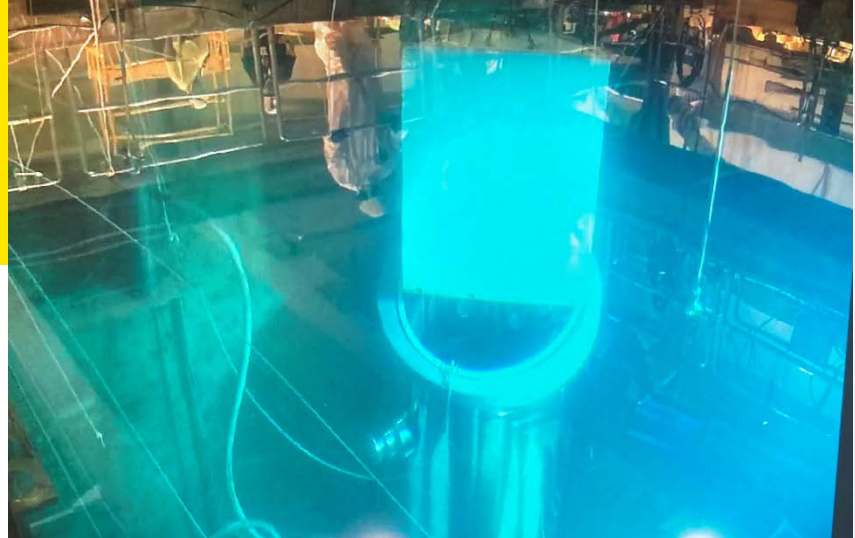


RWC Loading

RWC within the OS197L transfer cask is loaded in SFP

RV segments (often in baskets) are loaded in the RWC

RWC lid is placed and transfer cask is removed from the SFP for evacuation & drying



RWC Transfer to HTS



RWC Shipments

RWC-A and RWC-B have been delivered to WCS

RWC-E deferred to 2021 to avoid Christmas holidays

VY transport of low-level decommissioning waste for disposal



RWC Disposal at WCS



02

Lessons Learned

Challenges (1/3)

Ambiguity in DOT's Hazardous Material Regulations

- VY (the licensee) planned to implement 49 CFR 172.514(c)(3) *Exceptions* to put placards on two opposite sides rather than radioactive labels
 - Idea was that for White-I or Yellow-II shipments that do not require placards, the placards would be better for hazard communication
- FRA disagreed with this approach suggesting that Type B radioactive material packages cannot be considered bulk packages
 - The reality is that it's not clear how the exception would be communicated on paperwork and inspectors would not understand any rationale for "missing" labels

Data loss in electronic BOL system

- Despite entering information directly in NECR's eBOL system in order to generate the rail BOL, we found that information that was transmitted to CSX was inaccurate and incomplete

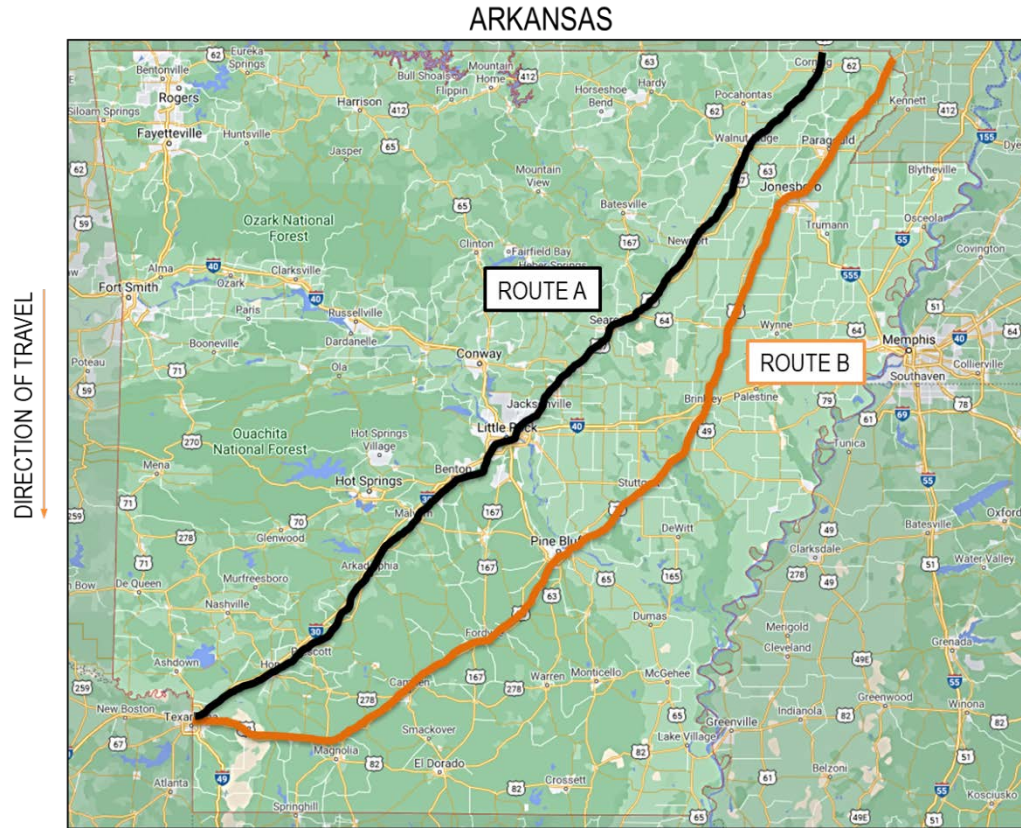
Challenges (2/3)

Railroad routing changes

- Unexpected changes made by railroads based on schedule and operations optimization
- Impacted Arkansas most significantly (see next slide)
- Will need to monitor closely and ensure (to the best of our ability) routing prior to Category 1 shipments

Weather and other network disruptions have impacted our shipment schedule, but it has been manageable

Challenges (3/3)



Successes

No delays due to transportation events or incidents

FRA has been very open and helpful in ensuring that shipments are prepared and executed in accordance with regulatory requirements

Feedback on the GPS tracking system has been positive

WCS has performed unloading without difficulty



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Giving nuclear energy its full value