Fort Calhoun Station
Decommissioning Update
October 2020

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Agenda

• Major accomplishments
  – The year in photos
• Future activities preview
  – Timeline
• Performance
  – Opportunities
  – Successes
• Questions
Major Accomplishments

• Fuel moved
  – 30 canisters, 944 fuel bundles
    ▪ First bundle: Oct. 14, 2019 at 1156
    ▪ Final bundle: May 8, 2020 at 1355

• ISFSI Operations Facility built
  – Operational June 2020
  – Provides operation & security base for long-term fuel storage
Spent Nuclear Fuel Moved to Dry Storage
ISFSI Operations Facility
ISFSI Operations Facility
Major Accomplishments (continued)

• Legacy Large Components
• Temporary flood protection
• Diesel generators
• Building isolation & material removal
• Deconstruction power ring
• Containment tendon removal
• Site modifications
Legacy Steam Generator Shipment
Flood Protection
Diesel Generator Removal
Diesel Generator Removal
Building Abandonment
Building Abandonment
Transformer Abandonment & Recycling
Deconstruction Power System Installation
Containment Tendon Removal
Year in Photos – Preparing for DECON
Future Activities Timeline

By the end of 2021

• Containment ready for RVI* work
• RVI segmentation equipment on-site
• Rail & waste processing facility operational
• Several clean building demos complete
• License Termination Plan submitted to NRC

*RVI = Reactor Vessel Internal
Future Activities Timeline

- Phase one of clean building demo complete: mid 2022
- RVI segmentation complete: early 2023
- Additional building demo complete: mid 2023
- Reactor vessel segmentation complete: mid 2023
- Containment equipment removed: mid 2024
- Containment demo complete: mid 2025
- Substantially complete: late 2025
- License termination: late 2026
Fort Calhoun Station DECON Timeline

**Project Milestones**
- Transport OSG-A to Clive
- System Abandonment Complete
- Final Status Survey Complete
- Final Shipment of Rad Waste
- ISFSI License Renewal
- Real Bldg Demo Complete
- Clean Bldg Demo Complete

**Building and Infrastructure**
- Buildings Cold & Dark/Turnover
- Ready for Demo
- Building Demo Complete

**Large Components**
- Pre-RV Work
- Steam Generator
- Reactor Coolant Piping
- Reactor Coolant Pumps & Motors
- Pressurizer
- Reactor Head
- Reactor Vessel Head
- Tendon De-Tension/Removal
- Reactor Coolant Piping

**Rail/Tent**
- Erect Tent
- Demo & Removal of Rail Line & Tent
- GTCC on ISFSI Pad
- Post RV Finished
- Final Shipment of Rad Waste

**Rad Waste**
- Waste Shipments

**FSS**
- Large Components
- Reactor Coolant Pumps & Motors
- Pressurizer
- Reactor Head
- Tendon De-Tension/Removal
- Reactor Coolant Piping

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**Note:** This Color Graphic is a communication tool only. It is not a controlled document or schedule and subject to change.

- License Termination
- ISFSI ONLY June 24, 2020
- Project Complete 7/2024
- Final Shipment of Rad Waste
- Final Status Survey
- Final Shipment of Rad Waste
- ISFSI License Renewal
- Real Bldg Demo Complete
- Clean Bldg Demo Complete
- ISFSI Restoration Completed Nov 2024
- ISFSI License Renewal

**Development**
- Procedure Development
- Equipment & Change Control
- RV Segmentation & Removal
- RV Segmentation & Removal
- Event
- RV Segmentation & Removal
- Event

**Phases**
- Phase 4
- Phase 3
- Phase 2
- Phase 1

**SAF Turnaround**

**Building and Infrastructure**
- Buildings Cold & Dark/Turnover
- Ready for Demo
- Building Demo Complete

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Opportunities to Improve Performance

- Safety
- Oversight
- Adjusting to the deconstruction environment
Performance Successes

Safety
• No OPPD employee DART injuries since 2018
  • However, declining trend – 10 day work stoppage to correct path
• No challenges to environmental safety
• No challenges to nuclear or radiological safety

Schedule
• Critical path to license termination remains on-track

Cost
• End of year costs projected to be under budget
Performance Successes

- Great support from across the district
- Expanding project management skill across the district
- Embracing new roles at FCS & across the district
- Integrated OPPD/EnergySolutions project team
- Virtual career transition experience well received
Questions?