Salt Waste Processing Facility
Project Status and Path Forward

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SWPF Project Overview
Salt Waste Processing Facility (SWPF)

This critical facility will:

- Reduce radioactive waste volume requiring vitrification;
- Utilize the same actinide and cesium removal unit processes as Interim Salt Processing Facilities (Actinide Removal Project/Modular Caustic Side Solvent Extraction Unit);
- Process over 90% of Tank Farm liquid radioactive waste (~100 Mgal after dissolution); and
- Have a nominal design capacity of 7.2 Mgal/year (or better!)
Salt Waste Processing Facility

- Parsons is the contractor for the SWPF project (design, construction, testing & commissioning, and operations for one year)
- Current workforce of ~484
Testing & Commissioning Program: Safety Management Programs

- Conduct of Testing
- Conduct of Operations/Procedures
- Cognizant System Engr. Program
- Configuration Management
- Quality Assurance
- Maintenance
- Work Planning and Control
- Industrial Safety and Env. Protection

- Chemical Safety/Industrial Hygiene
- Fire Protection
- Training and Qualification
- Waste Management
- Performance Testing (w/simulants)

- Emergency Management
- Nuclear Safety (DSA/TSR/SER)**
- Radiation Protection

- Performance Testing
- Radioactive Shielding
- Removal Efficiency
- Waste Acceptance Criteria
- Environmental Testing

- MSA* - Management Self Assessment
- **DSA/TSR/SER Documented Safety Analysis/Technical Safety Requirements/Safety Evaluation Report
- *** MSA-3 and ORR include integration with LW Contractor

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Testing and Commissioning Approach

- **System Turnover**
  - **Calibration, Grooming and Alignment**
    - Component level verification, setup, and tuning to support SOTs
  - **System Operational Tests**
    - Confirmation of testable system attributes
  - **Integrated System Operational Tests**
    - Confirmation of integrated system performance requirements
  - **Integrated Water Runs**
    - Confirmation of plant performance requirements using water. Operations proficiency
  - **Cold Commissioning (CC) with Chemical Simulant**
    - Chemical processing confirmation of integrated system performance requirements. Design Capacity Performance and Off Standard Tests remaining
  - **Contractor and DOE Operational Readiness Reviews**
  - **Hot Commissioning**
    - Confirmation of processing using radioactive waste
  - **CD-4 (Project Completion)**

- **Completed Activities**
Next Steps

- Next Steps Include:
  - Complete CC phase and begin Operations Readiness Reviews

Note: The SWPF baseline CD-4 date of January 31, 2021 and the Total Project Cost of $2.3B approved by Deputy Secretary of Energy in August 2014 remains bounding.
Looking to the Future

The SWPF Project is poised for continued success:

- Continued commitment to protection of the public, the worker, and the environment
- No significant technical or regulatory issues
- Consistent and strong management team – both DOE, Parsons, and SRR
- DOE, Parsons, SRR, SRNS, and SRNL working very well together for an integrated solution
- Savannah River Site uniquely positioned for a complete LW clean-up solution – once SWPF is operational all pieces will be in place