

Salt Waste Processing Facility Project Update

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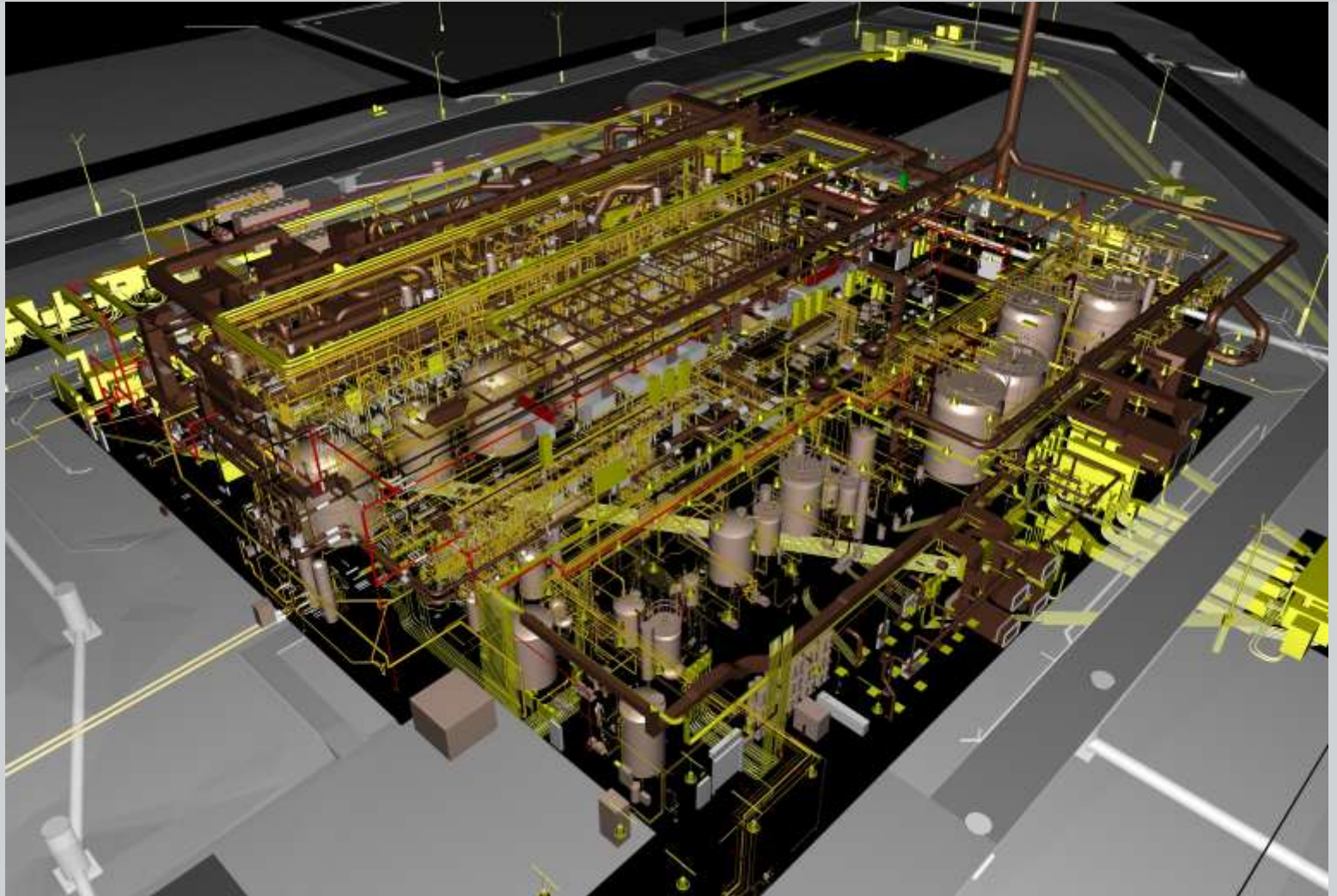


Salt Waste Processing Facility Project



- Safety of our workforce is Parsons 1st priority
- Contractor for Salt Waste Processing Facility (SWPF) project [*design, construct, and operate for one year*]
- Process over 33 million gallons of stored high-activity radioactive salt waste, reducing a significant hazard to the public and environment at SRS
- Support DOE's highest SRS priority to close tank farms; reduce risk and complete the DOE EM cleanup mission
- December 2008: Final design completed and full construction of first-of-kind facility authorized by DOE
- December 2010: Set Cesium Removal Contractors

SWPF 3D Model



Salt Waste Processing Facility Project



Programmatic Requirements Summary

- Hazard Category-2 Non-Reactor Nuclear Facility to process ~37 Mgal of SRS Liquid and Salt Cake Waste
 - Design Life of 40 Years
 - Design Processing Throughput \approx 9.4 Mgal/yr
 - Operational in October 2015 (80% Confidence)
 - Hot Commissioning and 1 Year of Operations
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Construction Quantities

- 114 vessels, tanks, HXs, filters, engineered items
- Concrete: 45,600 yd³
- Structural Rebar and Steel: 5,500 tons
- Conduit: 115,000 linear feet
- Wire and Cable: 690,000 linear feet
- Piping: 120,000 feet
- 4600 Valves

Physical Design Summary

- 34 acre J-Area Site adjacent to SRS S-Area
- Facility size: 83,300 ft²
- Reinforced Concrete - 8 ft thick base mat for Central Processing Area (NPH Category PC-3)

SWPF Project Progression - SRS J-Area



SWPF Project Progression – Cont'd



August 2011

Walls to EL.154'



Operating Deck Over ASTA, Facing West

SWPF – Walls to 116' Elevation



Cesium Removal Contactors Arrival & Installation



Mechanical Installation



Room 131, North ASP Corridor, Facing South

SWPF – Walls to 139' Exhaust HEPA Filter Room



SWPF – Onsite Piping Fabrication Shop



SWPF – Onsite Fabricated Piping



SWPF – Construction Safety



SWPF Proven Technology and Performance



- **Proven Technology:** Removal of radioactivity from bulk of stored waste at SRS
- **Schedule:** Start radioactive operations July 2014 (early finish) – October 2015 (80% confidence)
- **Cost:** Total Project Cost projected below the DOE Performance Baseline of \$1.339 billion
- **Capacity Increases:** Likely with Additional Testing of Process Chemistry Improvements



Setting the Right Standards in Welding Performance Onsite and at Supplier Facilities

CSSX/CFF Full Scale Integrated Test Operation



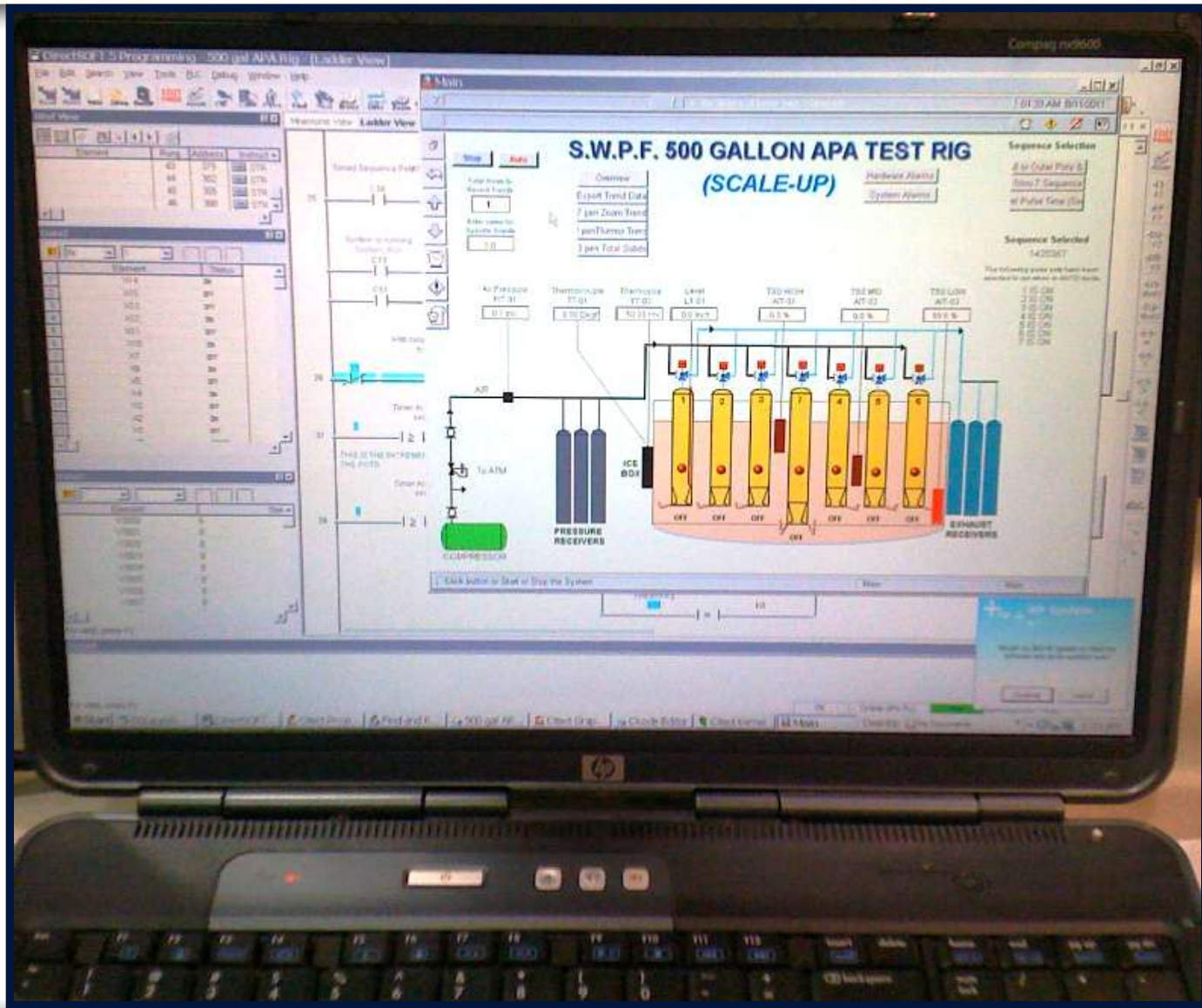
- Contract Testing Complete – Demonstrated 100% Capacity and Exceeded Cesium Removal Decontamination Factor
- Robust Operating Envelope Developed to Provide Flexibility of Operations
- Developing Enhanced Chemistry Testing to Improve Throughput



1/5th-Scale APA Test Tank and Support Systems



APA PLC Control Station





- **Supplier Oversight Plans In Place:** Full-time Parsons oversight in supplier facilities for SWPF critical components ensures safety and quality standards are met
- **Active Construction And Engineering Team:** Engineering proactively working real- time in support of constructability reviews; engineered equipment fabrication to meet construction's needs
- **Early Operations Involvement:** Full-time involvement from start of design and participation in constructability, maintenance, operations, and commissioning reviews
- **Pipe Welding:** Onsite pipe fabrication facility in full operation.
- **HVAC Installation:** Set HEPA Filters and Large Exhaust Fans

Parsons Delivering Results at SRS 2011 – 2012 SWPF Goals



- **Continue construction facility walls, decking and support areas**
- **Fabricate and install construction engineered equipment**
- **Continue with piping fabrication and installation**
- **Continue HVAC installation**
- **Prepare for startup, which advances SRS EM cleanup and risk reduction goals**

