



Waste Treatment Plant Project



2016 WTP Nuclear Supply Chain Collaboration Event



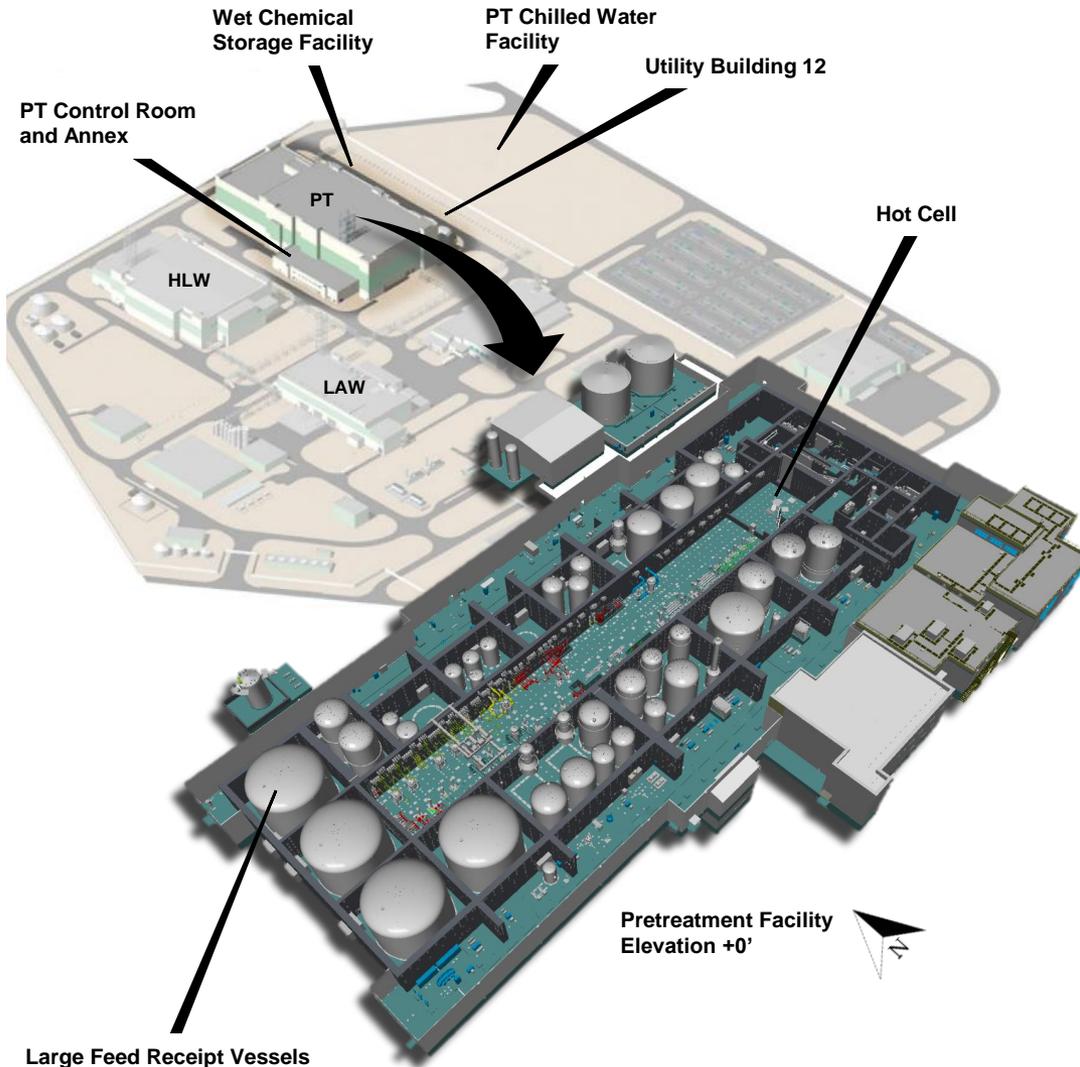
Felice Presti

Pretreatment Facility Area Project Manager

September 20, 2016



Pretreatment Facility Overview



Facility Overview

- 215' (w) x 540' (l) x 120' (h)
- Treat Tank Farm Waste (56M gal.)
- Process Two Waste Streams:
 - High Level Waste
 - Low Level Waste
- Key Processes:
 - Radionuclide Removal
 - Solids Separation
 - Reduce Water Content

Key Quantities



Concrete
114K CY



HVAC
1.8M LB



Steel
17K TN



Conduit
524K LF



Pipe
540K LF



Cable / Wire
1.5M LF

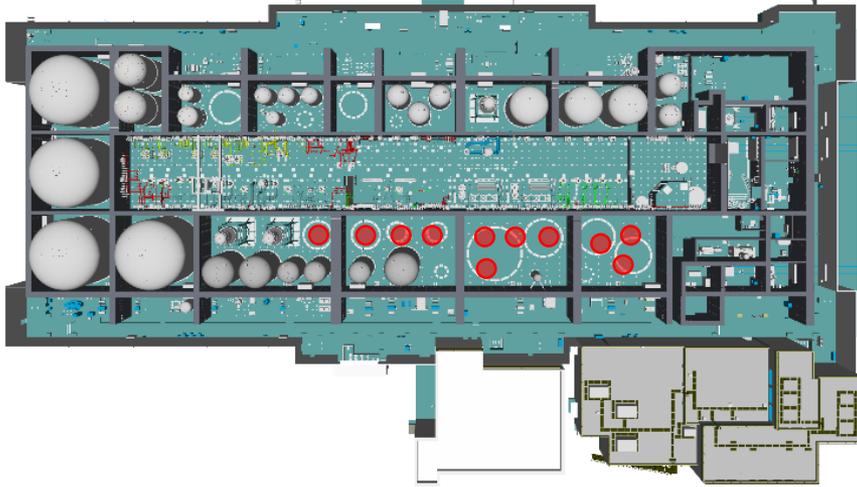
"World's largest radioactive chemical separations facility"

Why is the Pretreatment Facility Important?

All work suspended in 2012 ...why?

Technical Decisions

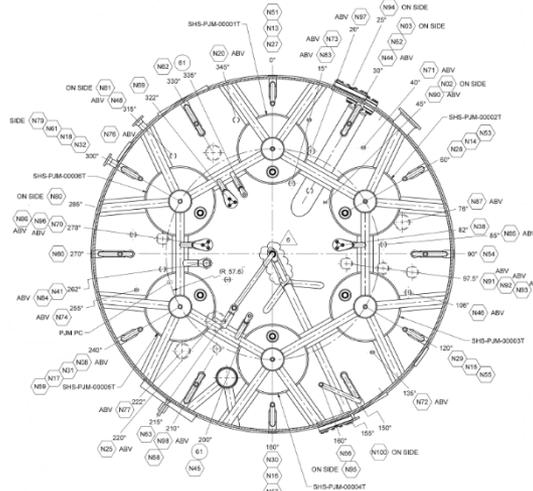
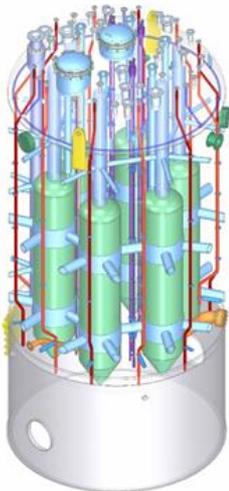
Optimization



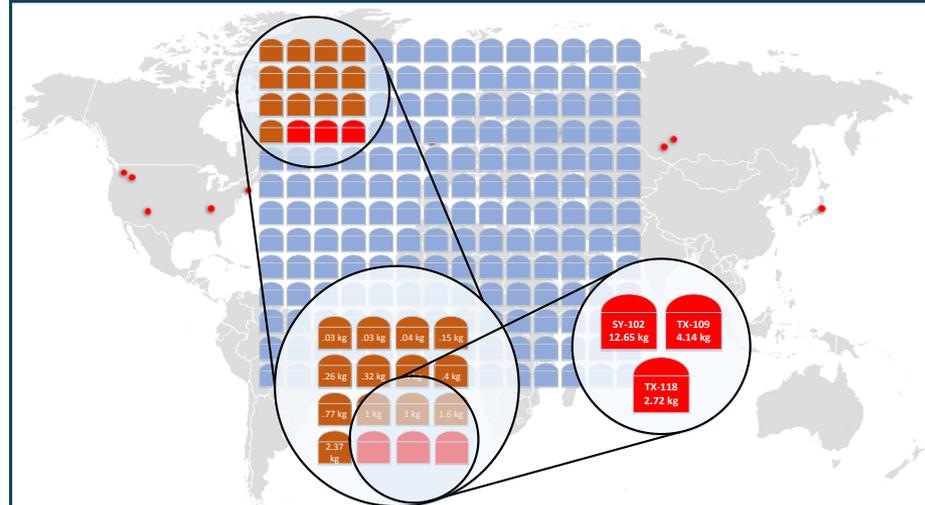
Pulse Jet Mixing



Hydrogen Gas Release and Controls

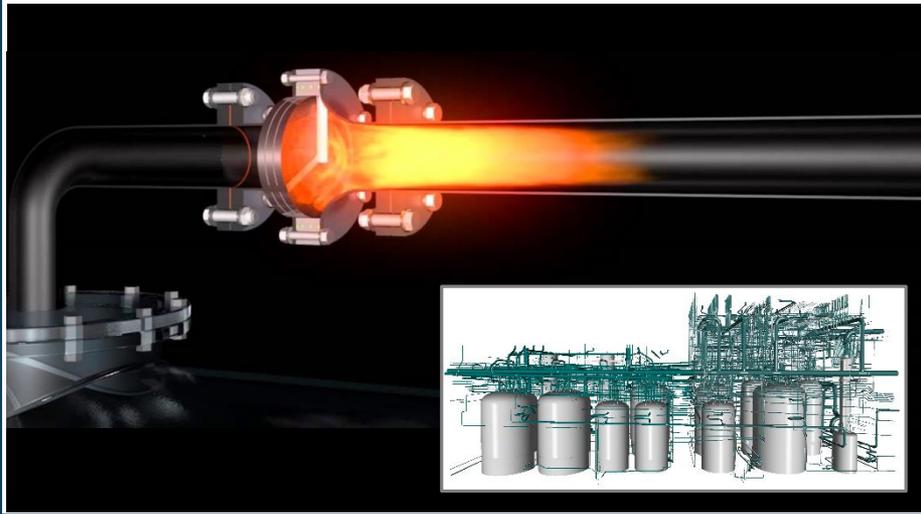


Criticality

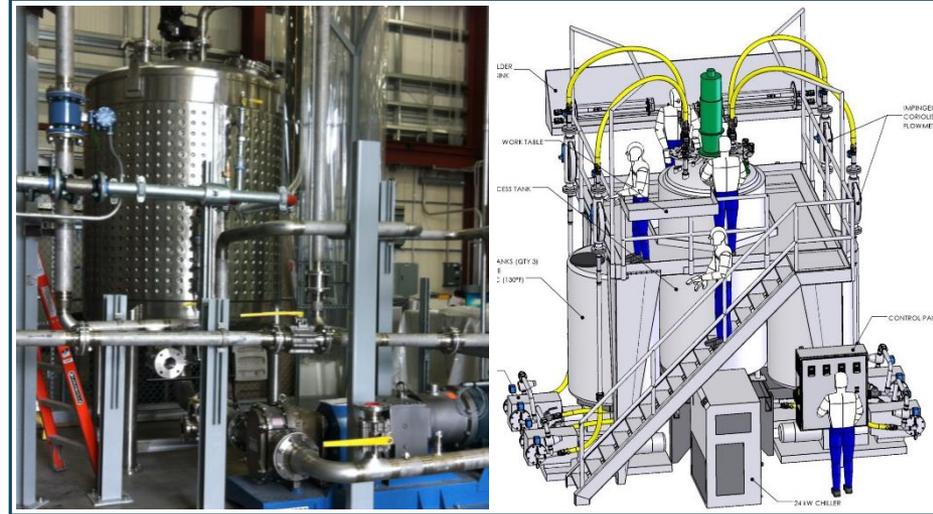


Technical Decisions (continued)

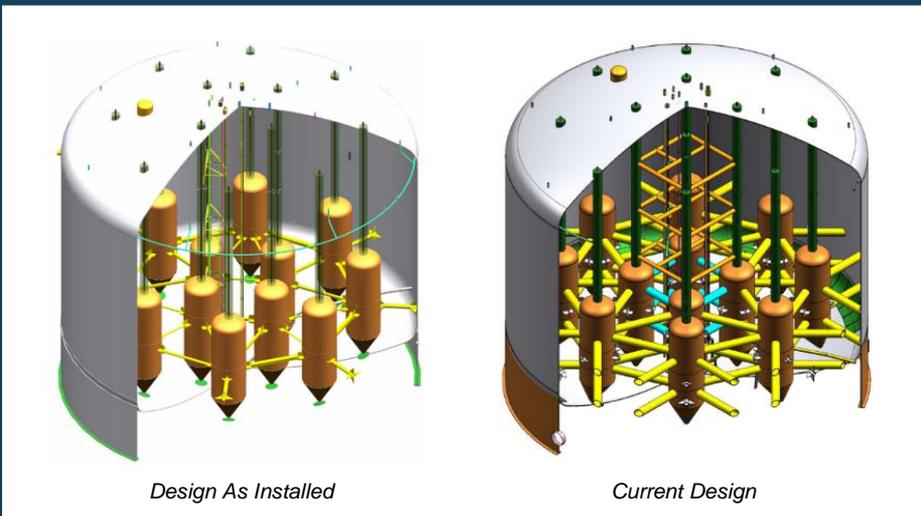
Hydrogen in Piping and Ancillary Vessels



Erosion / Corrosion



Vessel Structural Integrity



Facility Ventilation



What next?

Major Procurements To Go

Communication System

Valves

Remote Operated Dampers

Safe Change Filter Housings

Vessels

Jumpers

Instrumentation

Auto Samplers

Remote Change Filter Housings

Racks and Frames

Pipe

Ion Exchange Columns