RFP No. 24590-QL-MRA-PS00-00070

JUMPER FABRICATION

Pre-solicitation meeting

AUGUST 2025

WTCC WASTE TREATMENT COMPLETION COMPANY

BECHTEL

amentum

Agenda

- ❑ Culture Share – Andrea Riste
- ❑ Introductions – All
- ❑ HLW Project Manager–Mark Johnson
- ❑ Project Description/History
- ❑ Commercial – BAA
- ❑ Engineering
- ❑ Commercial Grade Dedication
- ❑ Questions & Answers - All

Culture Share

Effective collaboration: individuals or teams working together seamlessly to achieve a common goal.

Key Elements include:

- Clear goals and objectives
- Open and honest communication
- Mutual respect
- Effective Tools and processes
- CONTINUOUS EVALUATION

Introductions

- Bechtel Personnel
- Vendor Personnel

Project Overview – HLW Project Manager

- Introduction and Background
- Importance of Supply Chain Partnerships
- Project Schedule
  - On schedule to achieve 90% design completion in 2027
  - Early procurements in parallel
- Project Funding
  - ~ $600M per annum with $350M carryover
- Changes in Engineering Specifications to “Buy what they make”
- Engaging Supplier community early in specification development

History – Manhattan Project

Purpose: Secret U.S. project (1942–1946) to develop the World War II atomic bombs.

Key Sites:

Los Alamos, NM: Bomb design & assembly

Oak Ridge, TN: Uranium enrichment

Richland, WA (Hanford Site): Plutonium production

Hanford Site:

- Built in Richland, Washington -ideal for its isolated location & abundant water access.
- Home to B Reactor – world's first large-scale plutonium reactor.
- Produced plutonium for the Trinity Test and "Fat Man" bomb (Nagasaki).
- Massive, secretive workforce; major post-war nuclear contamination site.

Impact: Contributed to the ending of WWII, launched the atomic age, and triggered the Cold War arms race.

Waste Treatment and Immobilization Plant (VIT Plant) History

Lead Contractor: Bechtel National, Inc.

Project Inception: Bechtel contracted with DOE for the Waste Treatment Plant Project in 2000

Project Goal: Safely process and immobilize 56 million gallons of radioactive waste stored in aging underground storage tanks through a process called vitrification.

Vitrification: Mixing waste with glass-forming materials in high-temperature melters to create molten glass. When cooled, the liquid waste will solidify into glass logs for safe disposal.

- **Facilities:**
  - Pretreatment
  - High-Level Waste (HLW)
  - Direct Feed Low-Activity Waste (DFLAW)

Journey to Commissioning

What is Commissioning?

- A phased testing process ensuring WTP systems operate safely and efficiently—starting with non-radioactive materials and progressing to low-level radioactive waste.

Why It Matters:

- Confirms readiness, ensures safe operations, and sets the stage for long-term plant success.

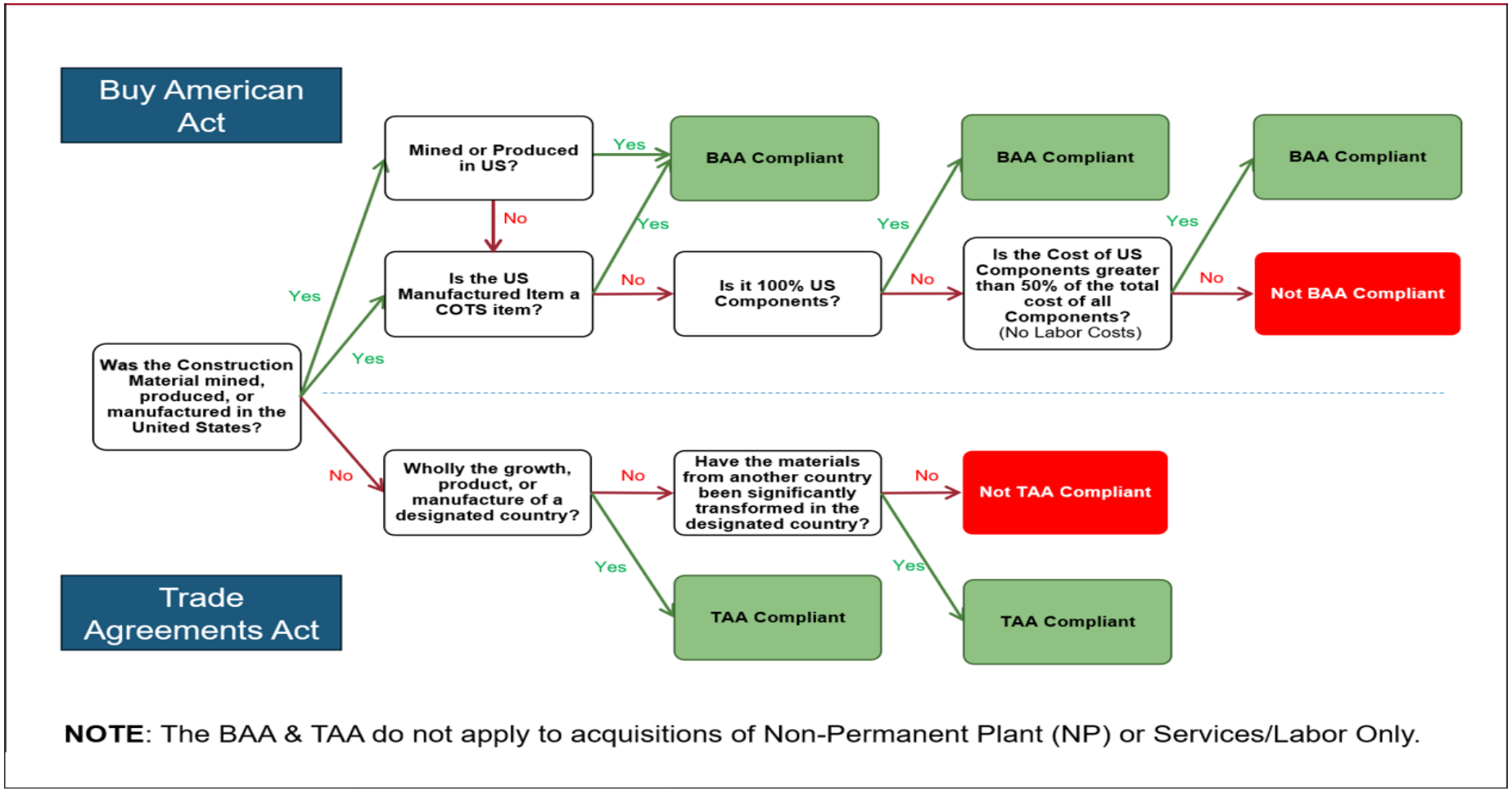
Recent Progress:

- DOE authorized **hot commissioning** after all pre-starts were completed. We're now executing our Startup Plan and final regulatory steps, including dual melter operations.

Jumper Fabrication -Commercial Highlights

Buy American Act -FAR 52.225-11 - Buy American Act –Construction Materials under Trade Agreements

SELLER agrees to complete and submit to BUYER the provided Buy American Act and Trade Agreements Act –Material Conformance Statement form (Part 3 Commercial Requirements Attachment D), prior to shipment of any construction materials to the WTP jobsite.

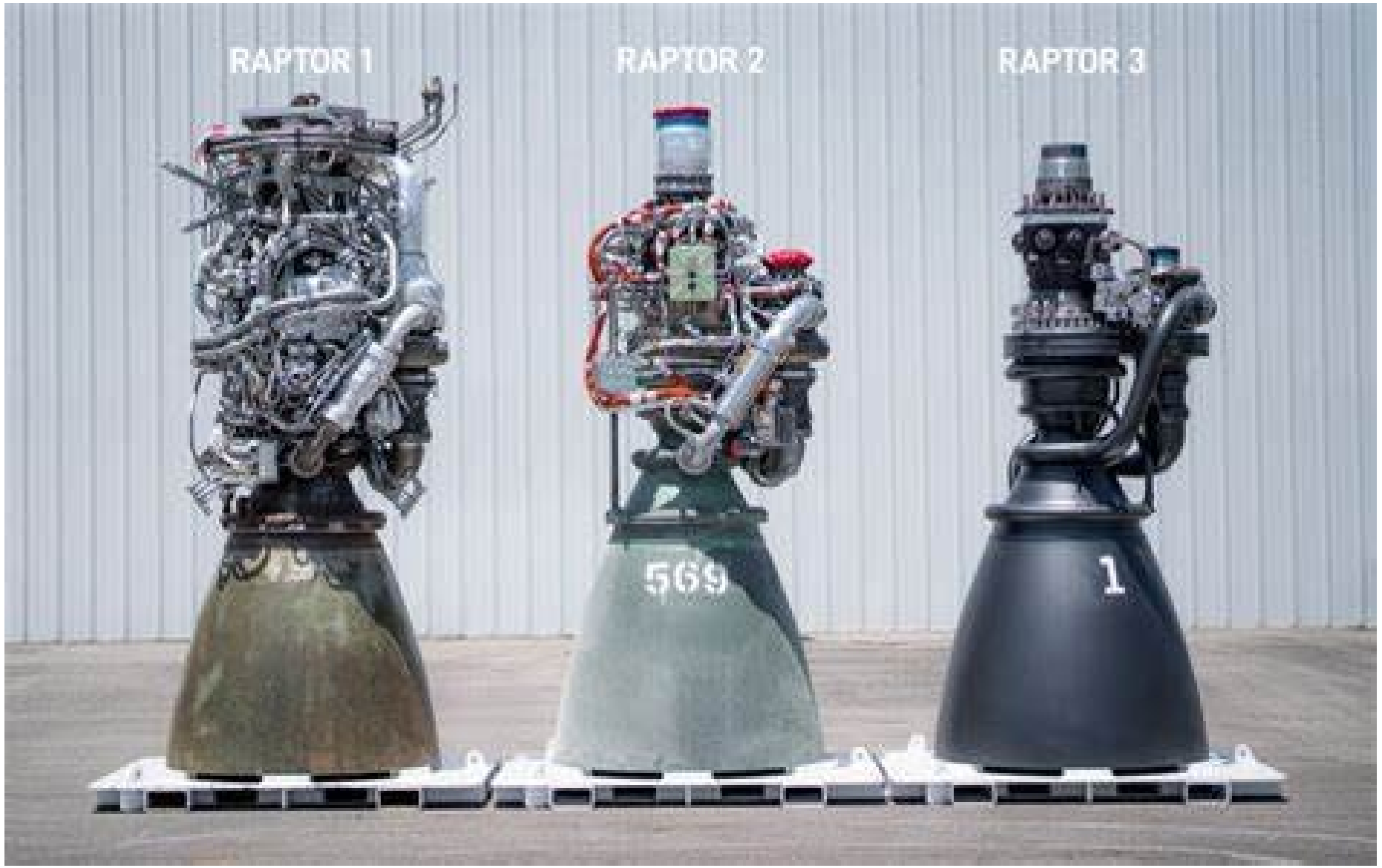


JUMPER FABRICATION –Specification Optimization

Specification Simplification Improvement Effort

JUMPER FABRICATION

What is Specification Optimization ?



Fit For Purpose Specifications

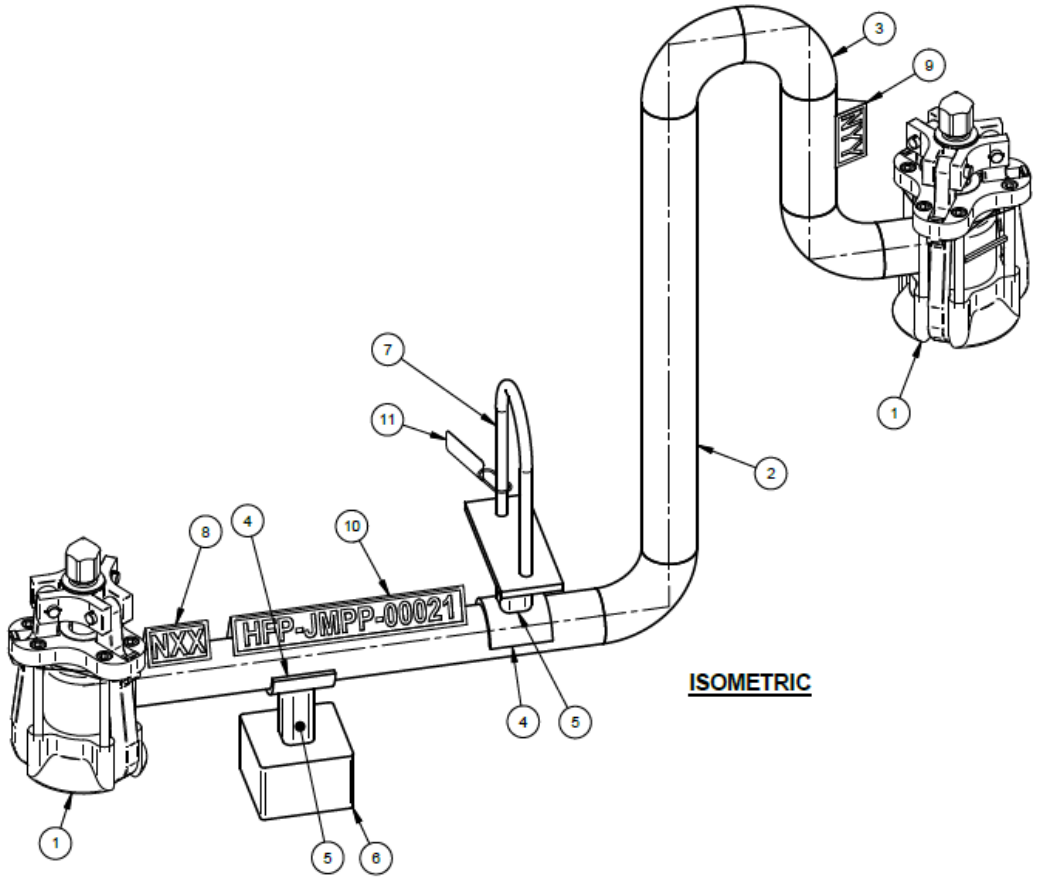
- We recently completed a Six-Sigma effort to provide recommendations to have fit for purpose specifications, e.g. simplified and *buy what they make*

- CM HVAC pilot specification simplification effort resulted in;
  - A reduction of 14 of 18 referenced specifications
  - Tailoring of 2 of the 4 specifications as appendices in the parent HVAC specification
  - 2 of 4 general specifications used in entirety as the were 100% applicable to the scope
  - Overall reduction of 500 + pages from the Material Requisition
  - Overall reduction of ~ 60 submittals

- We are in the process of simplification of the Jumper fabrication specification
  - This meeting is an effort to partner with the supply chain and get common understanding of simplification and “buy what they make” to the extent practicable

Scope

- Work to Include
  - Purchase of Piping Bulk Material (1/2 NPS – 4 NPS, up to 10 NPS)
    - Stainless Steel, AL-6XN, Inconel, Hastelloy
  - Welding
    - Valves, Inline components, PUREX Blocks
    - NDE of welds (RT)
  - Supply and Weld Structural Shapes
    - Lifting Bail, HSS, Plate steel, Counterweights
  - Assembly of PUREX Connectors
  - Cold Bending of Pipe



Scope (cont.)

Work to Include (cont.)

- Store Jumper in shop up to twelve months pending Buyer's final nozzle locations
- Temperature controlled area for fabrication and final dimensional measurements
- Designated area to demonstrate Jumper stabilization and operability
- Package and ship jumper assemblies to Buyer
- Document and submit necessary testing results (Material, welding, NDE, etc) to the Buyer

Supplied by Buyer

- Jumper assembly drawings
- Connection components (PUREX Nozzle/Connectors and Grayloc Assemblies)
- Inline components (Control Valves and Specialty)
- Final nozzle coordinates for fabricating and inspecting Jumpers
- Testing and Documentation Requirements (pressure hydrostatic/pneumatic, NDE, Material, Temperature monitoring, etc)

Scope (cont.)

Codes and Standards

- ASME B31.3 – Current Version
- ASME B16.9, MSS SP-95, and MSS SP-97
- ASME Y14. 5 – Dimensioning and Tolerancing

Commercial Grade Dedication - VCGD

- Supplier must be audited or surveyed by WTP project to the requirements of the procurement
- Items that have a safety function (Q) of pressure boundary require CGD
  - CM items do not require CGD
  - GFE items (valves, Purex connectors) do not require CGD
- Items with a safety function for pressure boundary require the following:
  - Dimensional inspections per MSS or ASME.
  - Coupons from each type of material (pipe, flanges, nozzles) to be cut and sent to accredited ISO17025 laboratory for full chemical and mechanical properties
  - Weld filler material to be sampled and sent to ISO17025 laboratory for full chemical properties per ASME/SFA

Open Q&A

Questions:

- Temperature controlled environment – Is the requirement clear?
- Designated area to demonstrate Jumper Stability – Is the requirement clear?
- Any concerns with testing using accredited ISO17025 test facility?
- Open for additional questions