

# WASTE TREATMENT PLANT PROJECT REQUEST FOR INTEREST

## HLW Switchgear Building

Requisition Number: TBD  
Submit Interest By: November 30<sup>th</sup>, 2024  
Quality Level: CM  
Award Type: Firm Fixed Price

**ESTIMATED SCHEDULE** F/C Delivery 12/1/27 (30 Months ARO)

Issue Request for Proposal: 1/31/25  
Award and Notice to Proceed: 5/21/25

### PROJECT DESCRIPTION AND LOCATION

The Hanford Tank Waste Treatment and Immobilization Plant (WTP) is a complex of radioactive waste treatment processing facilities designed and constructed by Bechtel National, Inc. for the Department of Energy (DOE). The facility will process the Hanford Site tank waste and convert the waste into a stable glass form.

The Project site is located in the 200 East Area of the Hanford Reservation near Richland, Washington, along the Columbia River. The site elevation varies from 662 to 684 feet above mean sea level. Ambient temperature range is -23 degrees F minimum to 113 degrees F maximum, with relative humidity of 5% minimum to 100% maximum. The project design life is 40 years.

### SCOPE OF WORK

The HLW Switchgear Building is a freestanding metal or concrete pre-fabricated structure, mounted on piers to allow incoming and outgoing cabling to be installed under the building. Scope includes the design and fabrication of the following items:

- Pre-fabricated building (26'x80' and shipped as 2 13'x80' substructures) with all equipment pre-installed
  - Flashing, weatherproofing, connection hardware and external appendages shall be supplied for BUYER to install on-site
- Two 13.8kV Type 2C arc-resistant switchgear lineups, each with A and B assemblies.
  - 3000A Main Bus
  - 11 feeder breakers and 6 spares in each lineup
  - 480V backfeed to control system
- 125 VDC Control Power System
- Uninterruptible Power Supply System
- Hydrogen Mitigation System
- One 480V – 208/120V Distribution Transformers
- Two 480V Distribution Panelboards
- Control cabinets and workstation for local and remote control of circuit breakers, and monitoring of breakers, switchgear and hydrogen.
- Raceway internal to and under the building
- All cabling except incoming and outgoing feeders
- Lightning protection
- Fire Protection Water System utilizing BUYER's underground firewater supply loop
- Fire Detection and Alarm System
- Eyewash Station, instant hot water heater and collection basin

Foundations, stairways, railings, landings and platforms will be provided by the BUYER. All site installation will be performed by BUYER. Buyer will provide and install cables, devices and outlet device boxes associated with communications systems using SELLER-installed raceway.

## QUALITY ASSURANCE (QA) REQUIREMENTS

Programmatic Quality Assurance (QA) requirements for subcontracts or purchase orders performed in the WTP Jobsite will be:

<input type="checkbox"/>	Non-Permanent or Temporary Work - Generally no QA program required
<input checked="" type="checkbox"/>	Commercial Quality - Based on DOE Order 414.1C
<input type="checkbox"/>	Nuclear Level Quality - Based on ASME NQA-1 2000

Bechtel may require, as an element of bidder pre-qualification, submission of a representative sample QA Program or Table of Contents copy. For Nuclear Level Quality subcontracts, the successful bidder's QA Program must be approved prior to award of the subcontract or purchase order.

## CODES

- IBC 2021, International Building Code
- IFC 2021, International Fire Code
- National Fire Protection Association (NFPA) 101, Life Safety Code
- NFPA 70, National Electrical Code (NEC)
- Uniform Mechanical Code (UMC)
- Uniform Plumbing Code (UPC)

## STANDARDS

- ANSI 360, Specification for Structural Steel Building
- AWS D1.1/D1.1M, Structural Welding Code – Steel
- AWS D1.3/D1.3M, Structural Welding Code – Sheet Steel
- IEEE C37.20.2, Metal-Clad Switchgear
- NEMA PE1, Uninterruptible Power Supplies
- UL 508A, Standard for Safety – Industrial Control Panels

## BIDDER REGISTRATION AND PRE-QUALIFICATION

The BNI Acquisition Services Subcontracts/Purchasing group is responsible for collection, evaluation, and internal publication of potential bidders' information for the purpose of pre-qualifying them to bid on any particular subcontract or purchase order.

As part of this process, BNI requires all potential offerors to register at the Supplier and Contractor Portal at: <https://www.Bechtel.com/supplier/>

If your company has registered previously, then only supplemental information should be sent to the Bechtel National, Inc. representative noted below.

Information to be provided by potential bidders must include:

- Dun and Bradstreet Number
- Company Name
- Company Address
- Contact Phone Number
- Contact Person
- Email Address
- Safety Data and Information
- Applicable Work Experience and Projects
- Size of Business (Small, Large)

**WTP BACKGROUND**

Information about the WTP Project can be found on <http://www.hanfordvitplant.com>

**CONTACT**

Bechtel National, Inc.  
450 Hills Street  
Richland, WA 99354  
Attn: Katie Valencia  
Phone: 509-371-5998  
Email Address: [kavalenc@bechtel.us](mailto:kavalenc@bechtel.us)