



Darlington New Nuclear Project (DNNP)

BWRX-300 Construction Update



# ***Aecon***

**Greg Thede**

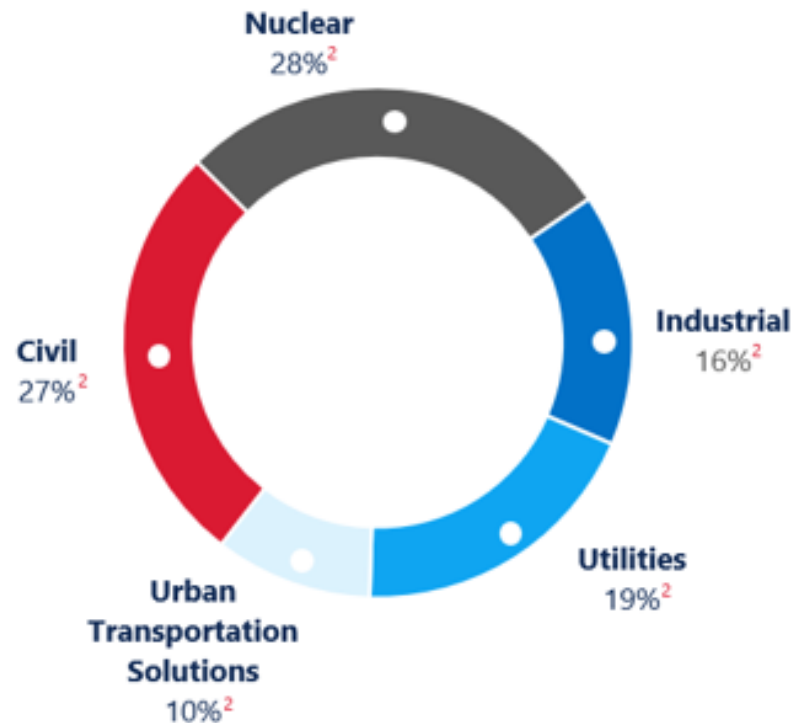
VP Nuclear Strategy, Business Development & Services

**Fermi Energia 7<sup>th</sup> Annual Conference**

February 11, 2026

# Aecon At-a-Glance

Aecon is a North American construction and infrastructure development company providing integrated turnkey solutions to private and public sector clients.



**150+** YEARS OF HISTORY

**\$5.2B**

TOTAL REVENUE Q3 2025 TTM

**RECORD REVENUE**



**\$10.8B**

Q3 2025

**RECORD BACKLOG**

**10,000+** EMPLOYEES



# Aecon Presence

## Sites & Offices

### Canada

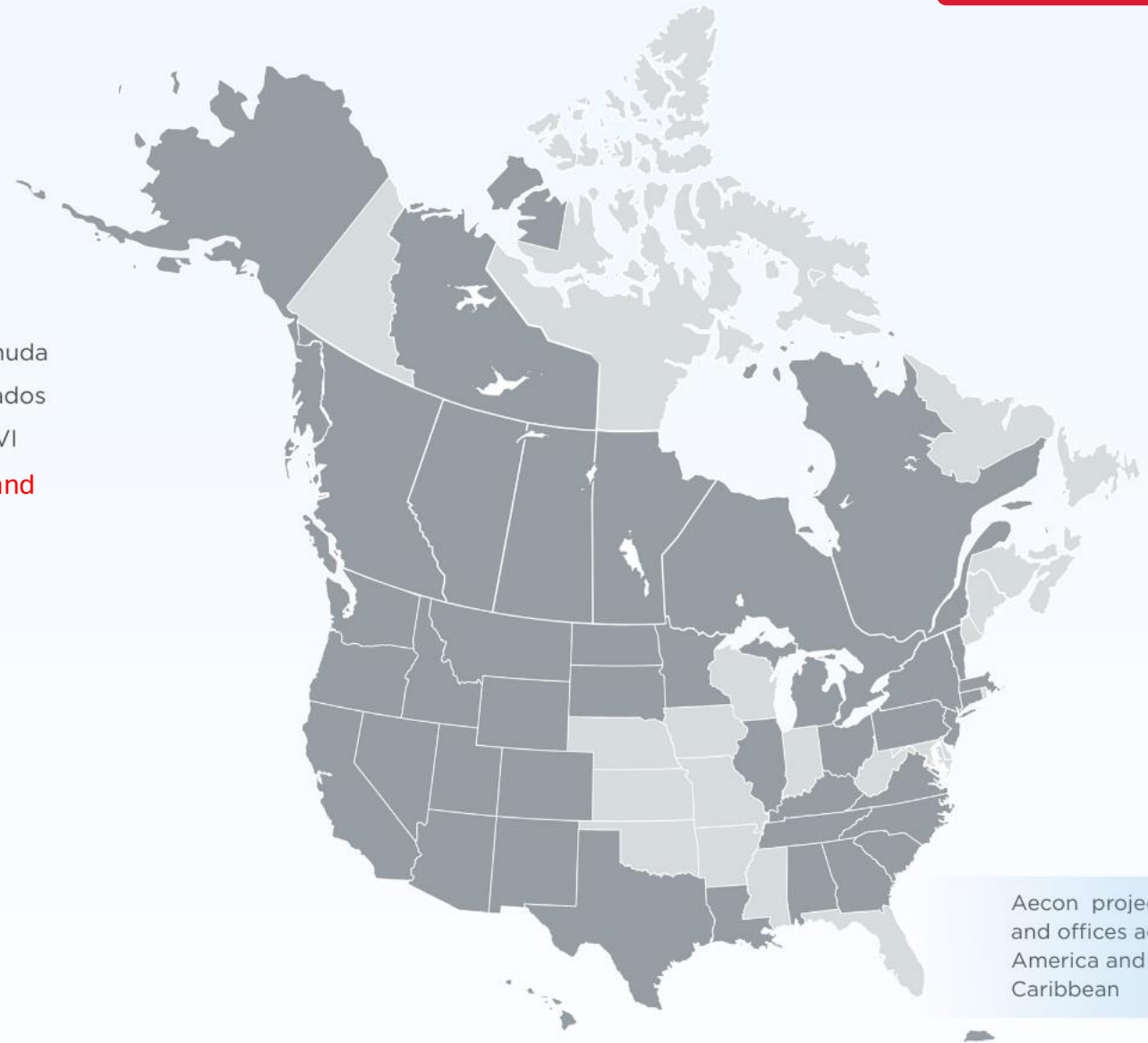
- Abbotsford, BC
- Brantford, ON
- Calgary, AB
- Cambridge, ON
- Edmonton, AB
- Medicine Hat, AB
- Montreal, QC
- Ottawa, ON
- Saskatoon, SK
- Sherwood Park, AB
- **Toronto, ON (HQ)**
- Vancouver, BC
- Vernon, BC

### U.S

- Bloomington, MN
- Beaumont, TX
- **Charlotte, NC**
- Dallas, TX
- Denver, CO
- Georgetown, KY
- Houston, TX
- Jackson, SC
- Kendall, IL
- LaPorte, TX
- Milford, MA
- Mt Laurel, NJ
- Phoenix, AZ
- Port Huron, MI
- Pueblo, CO
- Salt Lake City, UT
- Seattle, WA

### International

- Hamilton, Bermuda
- St. Peter, Barbados
- St. Thomas USVI
- **Warsaw, Poland**



Aecon projects, sites  
and offices across North  
America and the  
Caribbean



# NUCLEAR





# Leading the Way in Nuclear Construction

**Delivering a full spectrum of engineering, procurement, and construction services to support the new build, life extension, maintenance, decommissioning and fabrication required to power our nuclear future.**

Aecon Nuclear leverages its track record as a constructor of choice, with strong self-perform capabilities and an exceptional safety culture, to provide integrated solutions for new build and major life extension programs (fleet approach).

With more than five decades of extensive nuclear experience and technical knowledge, Aecon Nuclear is at the forefront and enabling the next generation of nuclear infrastructure, ensuring clean, reliable, and affordable electricity for decades to come.



**Major Life Extension Programs**



**Large Reactor & SMR New Build**



**Nuclear Fabrication & Modules**



**US Federal Government Programs**



**Maintenance Work in Operating Facilities**



**Engineering**

# New Nuclear Build Program

## EPC Project Delivery Experience - Technology Agnostic

For more than 50 years, Aecon has led in commercial operations, life extension projects, and the re-construction of large reactor technologies, while also playing a key role in advancing the emerging next generation of Small Modular Reactors (SMRs). Our people-focused, client-first approach, together with fleet program optimization, ensures the credibility and confidence needed to effectively integrate, plan, and deliver projects safely, with quality, on time and within budget.



Bruce Power MCR Program  
OPG Darlington + Pickering

Ontario, Canada



Southern Company / Westinghouse  
Vogtle 3 and 4 VC Summer

South Carolina, USA



Darlington New Nuclear Project  
BWRX-300  
Ontario Power Generation  
Clarington, Ontario



Energy Northwest New Nuclear  
X-Energy, Xe-100

Washington State, USA





# New Nuclear Build: BWRX-300

First Grid-Scale SMR in the G7 Nations | First Of A Kind (FOAK)



**Owner/Developer & license holder:** maintaining overall project responsibility, including operations, commissioning, Indigenous engagement, stakeholder outreach and oversight as developer

## HITACHI

**Reactor technology developer & design authority:** delivering a 300-megawatt BWRX-300, responsible for design, procurement of major NSSS components, engineering, and support



**Architect/Engineer:** providing design, engineering, and procurement support

## AECOM

**Constructor:** including all fabrication & modules, including project management, procurement, Quality Assurance construction planning & execution



A photograph showing two construction workers in orange safety gear and white hard hats working on a large, cylindrical structure made of a dense grid of rusted steel rebar. The workers are positioned on the left side of the frame, with one worker using a long-handled tool. The background shows a construction site with green safety fencing and other workers. A bright green curved graphic element is in the top right corner.

# Building the G7's first Small Modular Reactor





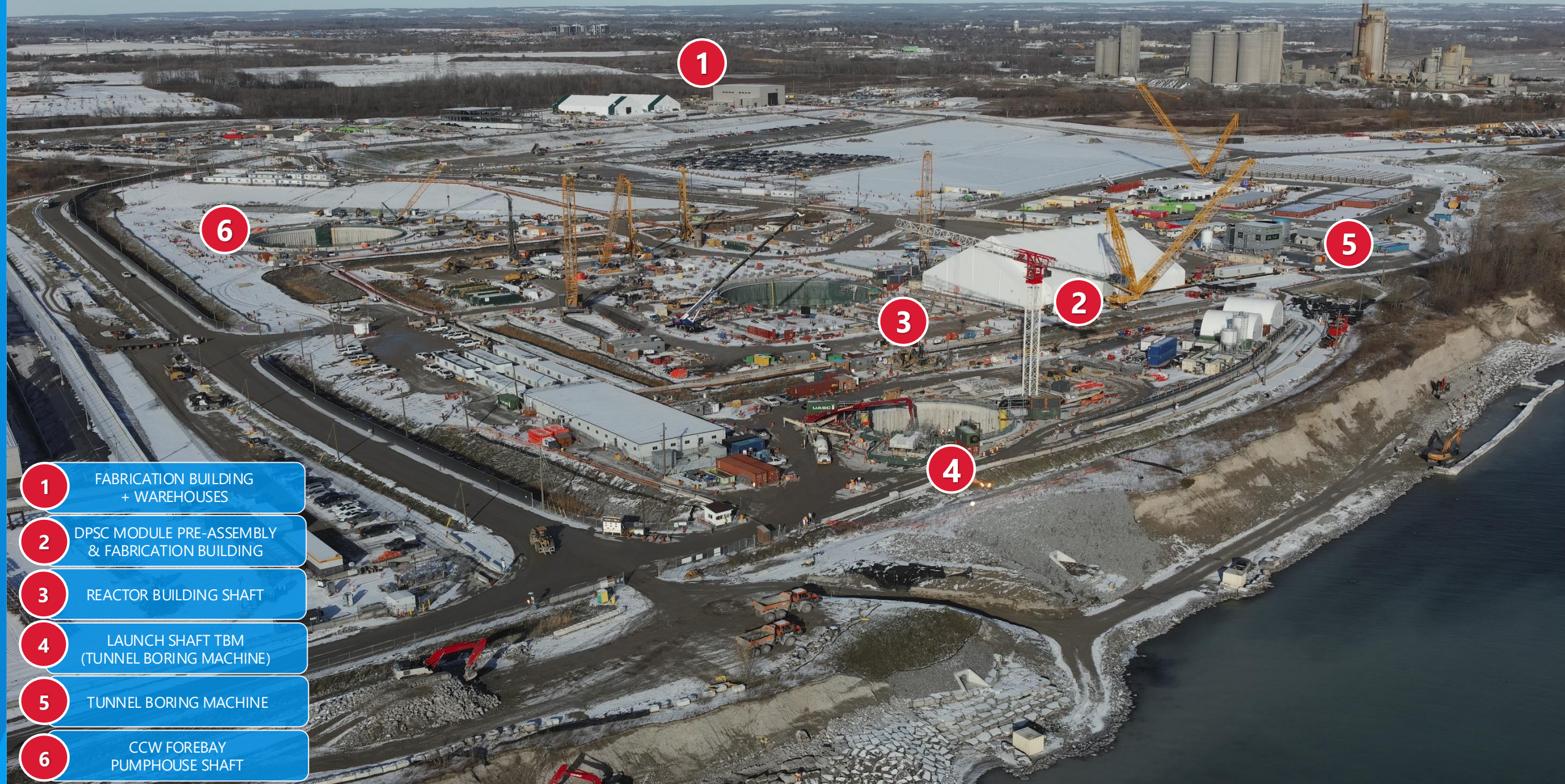






# BWRX-300 Darlington New Nuclear Site

**AECOM**



1

FABRICATION BUILDING  
+ WAREHOUSES

2

DPSC MODULE PRE-ASSEMBLY  
& FABRICATION BUILDING

3

REACTOR BUILDING SHAFT

4

LAUNCH SHAFT TBM  
(TUNNEL BORING MACHINE)

5

TUNNEL BORING MACHINE

6

CCW FOREBAY  
PUMPHOUSE SHAFT



**AECON**

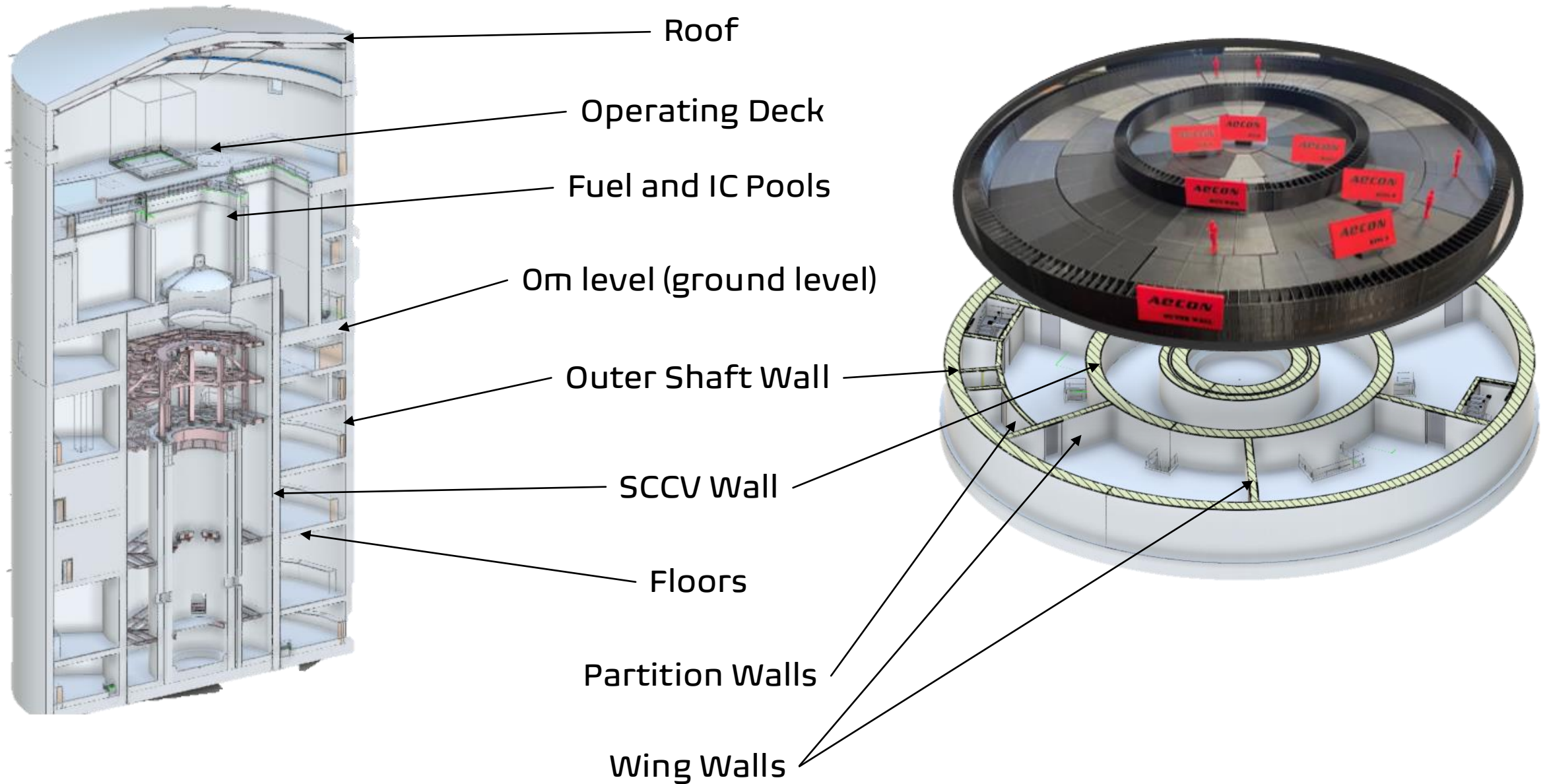




# BWRX-300 Reactor Building

## Configuration

**AECOM**



# BWRX-300: Process Flow

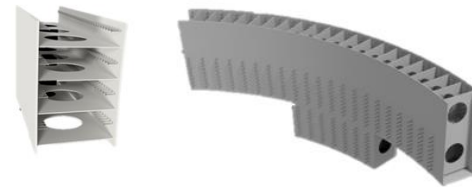
## 3 STANDARD OPERATIONS

OFF SITE  
ACTIVITIES



1

**FABRICATION  
SUB-ASSEMBLY**



TRANSPORT (OPTIONS):

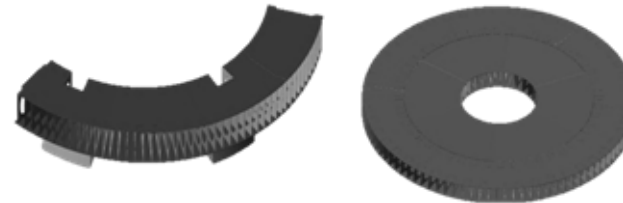


ON SITE  
ACTIVITIES

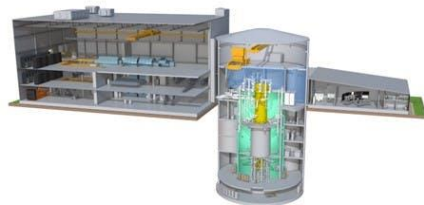


2

**FABRICATION &  
MODULARIZATION**



PIT SIDE CONSTRUCTION

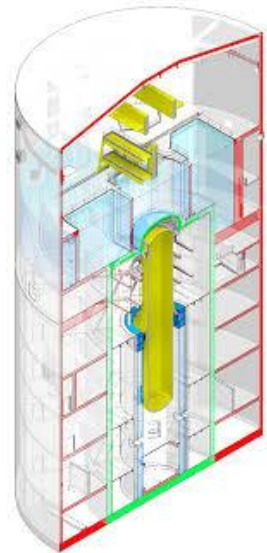


3

**REACTOR BUILDING  
CONSTRUCTION**



IN PIT CONSTRUCTION





# BWRX-300 Reactor Building

## Off Site Nuclear Fabrications

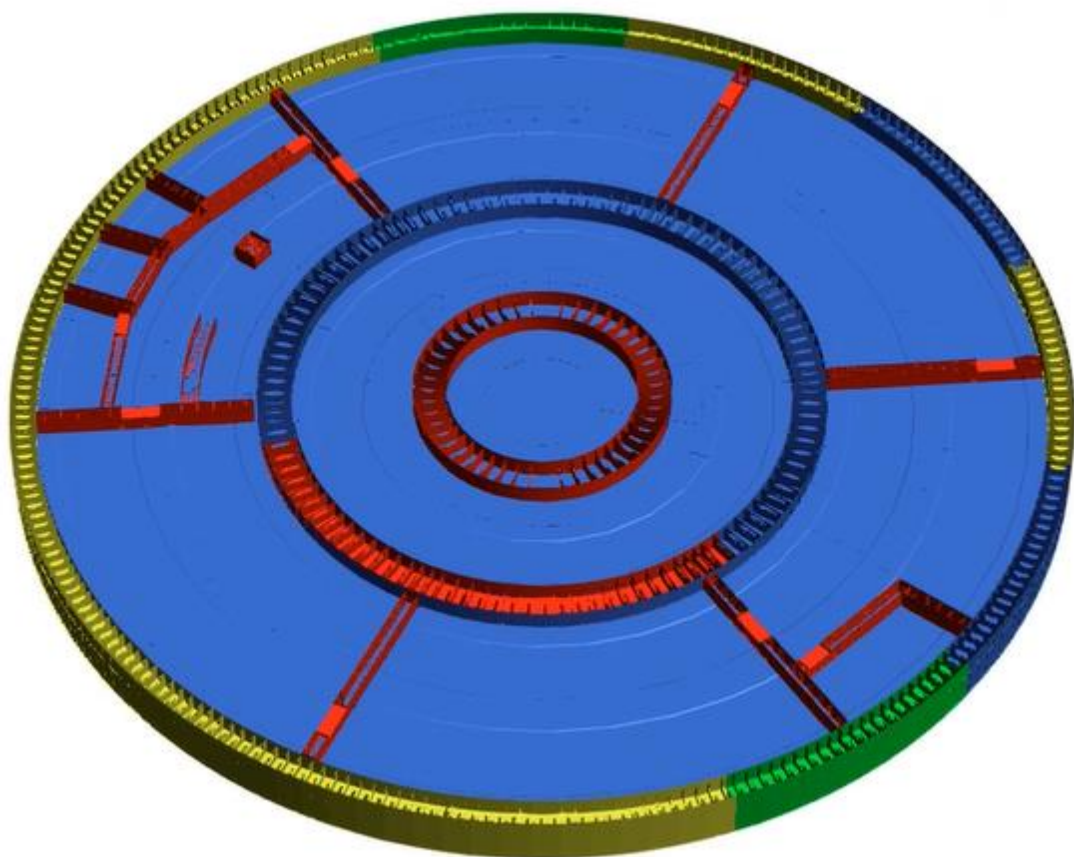
**AECON**





# BWRX-300: Basemat Progress

OFF SITE FABRICATION (SUB-ASSEMBLY)



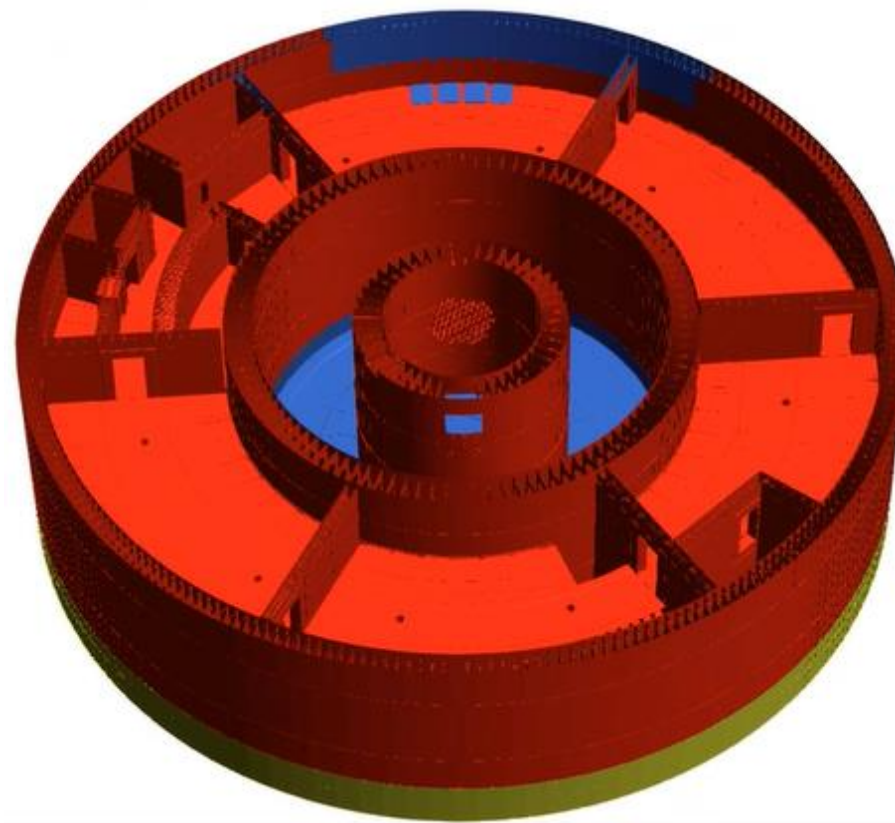
- Fabrication Not Started
- Fabrication In Process
- Fabrication Complete
- Ready for Shipment / Shipped

Ring	Percent Completion
Puck	100%
Ring D	100%
Ring C	100%
SCCV Stub	100%
Ring B	100%
Ring A	100%
OSW Stub	87.5%



# BWRX-300: Level 1

## OFF SITE FABRICATION (SUB-ASSEMBLY)



- Fabrication Not Started
- Fabrication In Process
- Fabrication Complete
- Ready for Shipment / Shipped



***Investment in automation and advanced manufacturing Quality, Capacity / Delivery & and Cost***

*Confidential and Proprietary*

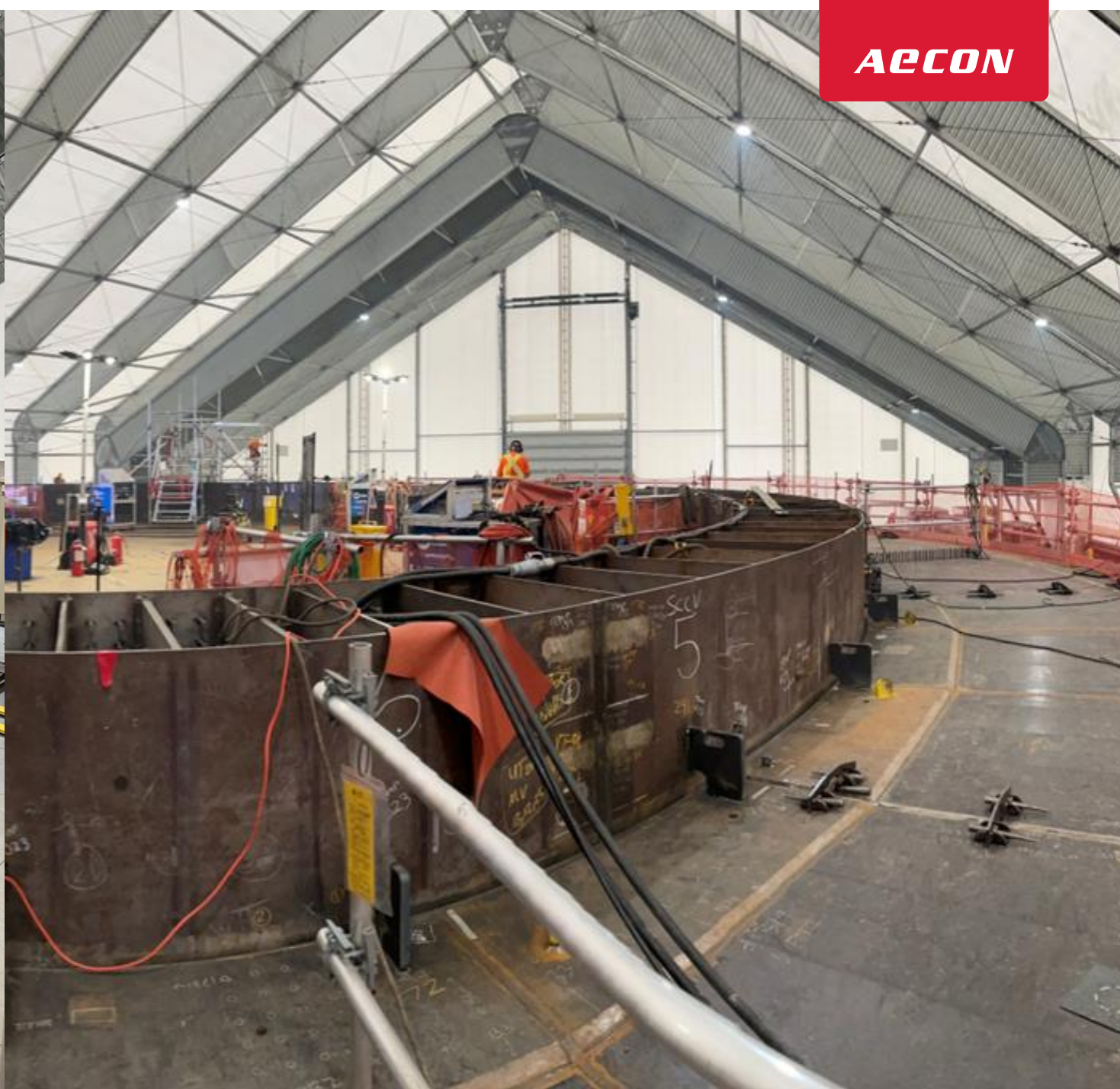
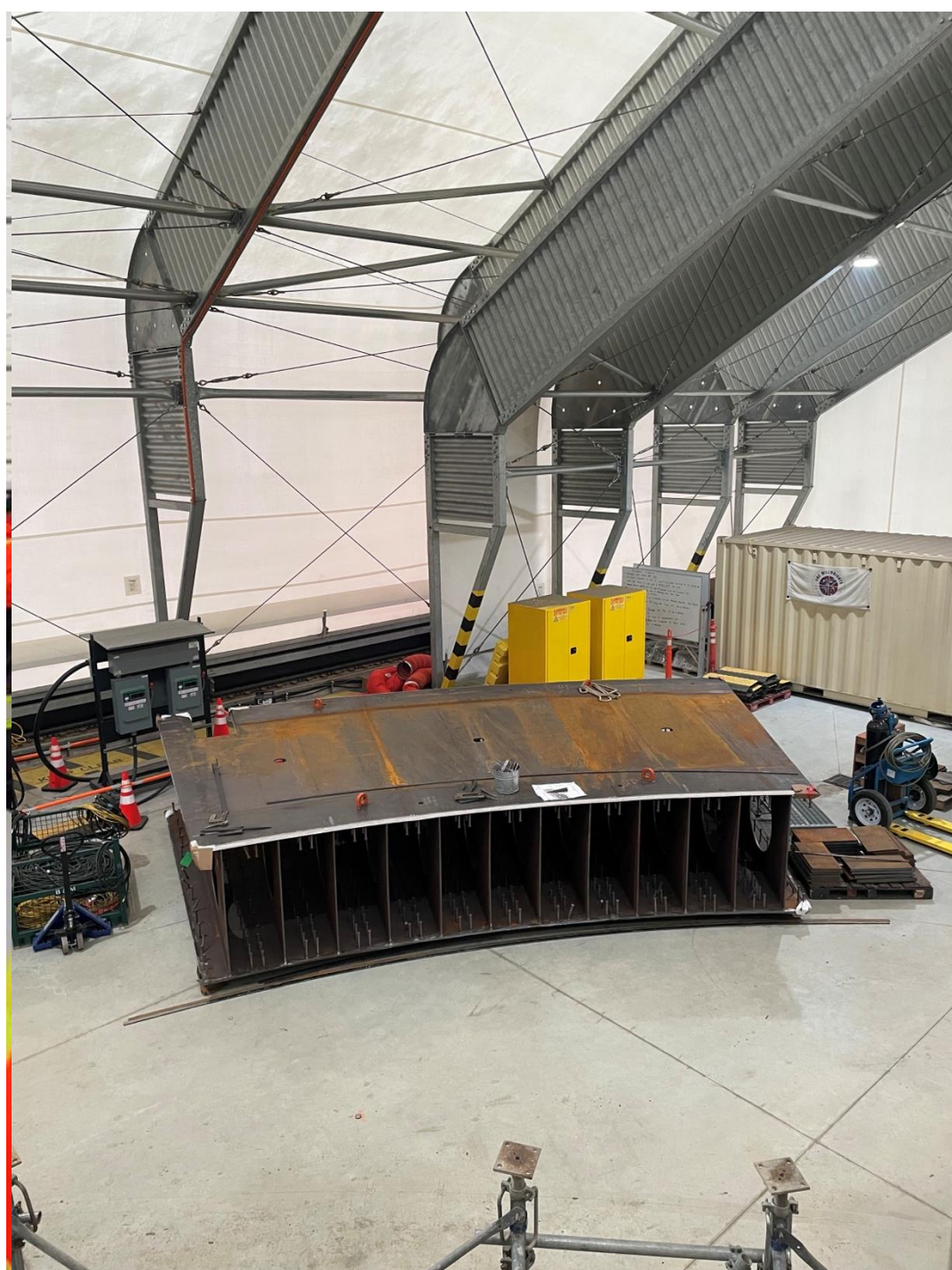




# **On-Site Fabrication & Modularization**

## **Basemat Fabrication**







# Reactor Building Shaft

**AECOM**





# New Nuclear Development Phased Approach



## Project Set-Up, Delivery Model & Development

- Class 5 Estimate
  - Level 1/2 Schedule
  - Construction Execution Strategy
  - Digital Strategy & Delivery incl. 3/4D
  - Construction Risk Register
  - Design Constructability & Modularization Support
  - Site Planning
  - Local Supply Chain Assessment
  - Project Controls Framework
- 
- Commercial Strategy & Agreement / Contract Establishment
  - Project Delivery Models & Roles of Parties (Owner, OEM, A/E, Constructor)

## Detailed Pre-Execution Planning & Validation

- Class 4/3 Estimate
- Level 3 Schedule
- Detailed Construction Strategy
- Digital Delivery incl. 3/4/5D
- Project Management Plans
- Project Execution Risk Register
- Detailed Design Constructability & Modularization Support
- Site Specific Engineering & Planning
- Local Supply Chain Building

## Execution

- Construction Execution
- Turn-Key Reactor Building Fabrication & Installation (Aecon TKS)
- Project Controls Execution Plan / Actual Monitoring (Cost, Schedule & Risk)
- Digital Delivery Incl. 4-5D Sequence
- Execution Risk Register
- Detailed / Site Specific Design Constructability & Modularization
- Supply Chain Management



# Recognized Leader in Nuclear

## Reactor Technology Firms



## New Nuclear Development Firms



***AECON*** will continue to deploy our people, experience and resources to invest further in nuclear EPC capacity to enable and partner in key markets enabling nuclear to thrive.

***We are committed to deliver value with our clients and partners to deliver custom solutions.***







**BUILDING WHAT MATTERS  
TO ENABLE FUTURE  
GENERATIONS TO THRIVE**

**Thank You!  
Suur aitäh!**