



EPC Contractor Perspectives on Nuclear Supply Chain Considerations, Challenges, and Opportunities

Session on "Critical Links: Strengthening the Nuclear Supply Chain for Tomorrow's Reactors"

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Agenda

- Bechtel's background and history
- Nuclear power project experience
- Key considerations facing the nuclear industry supply chain from recent projects
- Actions being taken by Bechtel

Bechtel Corporation Overview

Bechtel's businesses are trusted engineering, construction, and project management partners to industries and governments across the globe. We align our capabilities to our customers' missions with safety, quality, ethics, and integrity.

Infrastructure HQ
London, United Kingdom



Manufacturing & Technology HQ
Virginia, United States

Nuclear, Security & Environmental HQ
Virginia, United States

Energy HQ
Texas, United States

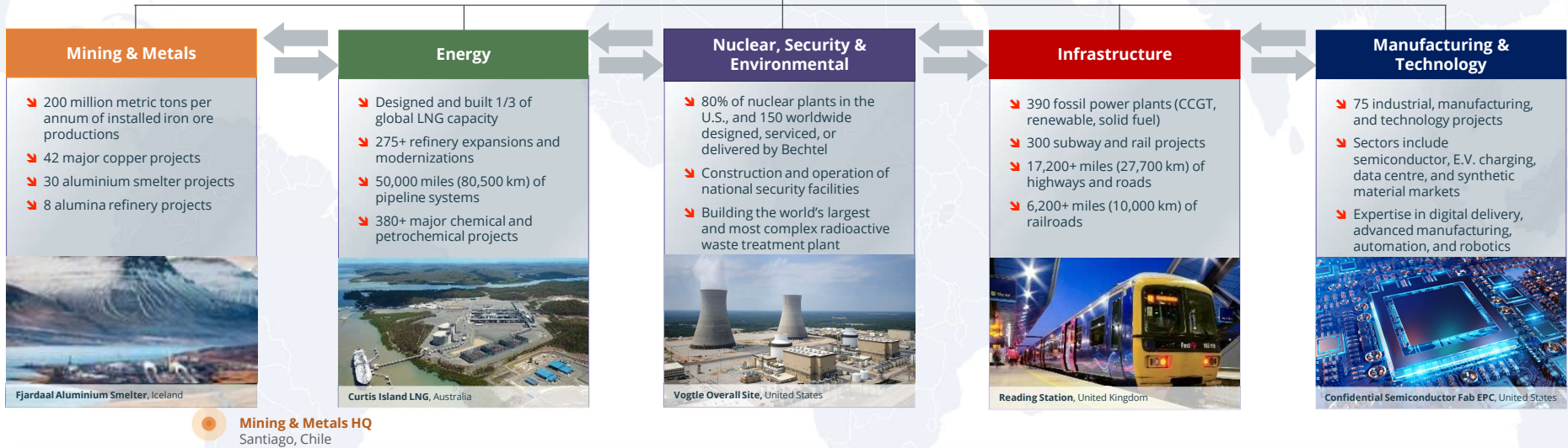
\$17
New work booked in billions of U.S. dollars

100+
Nationalities

50,000+
Colleagues worldwide

\$23
Revenue in billions of U.S. dollars

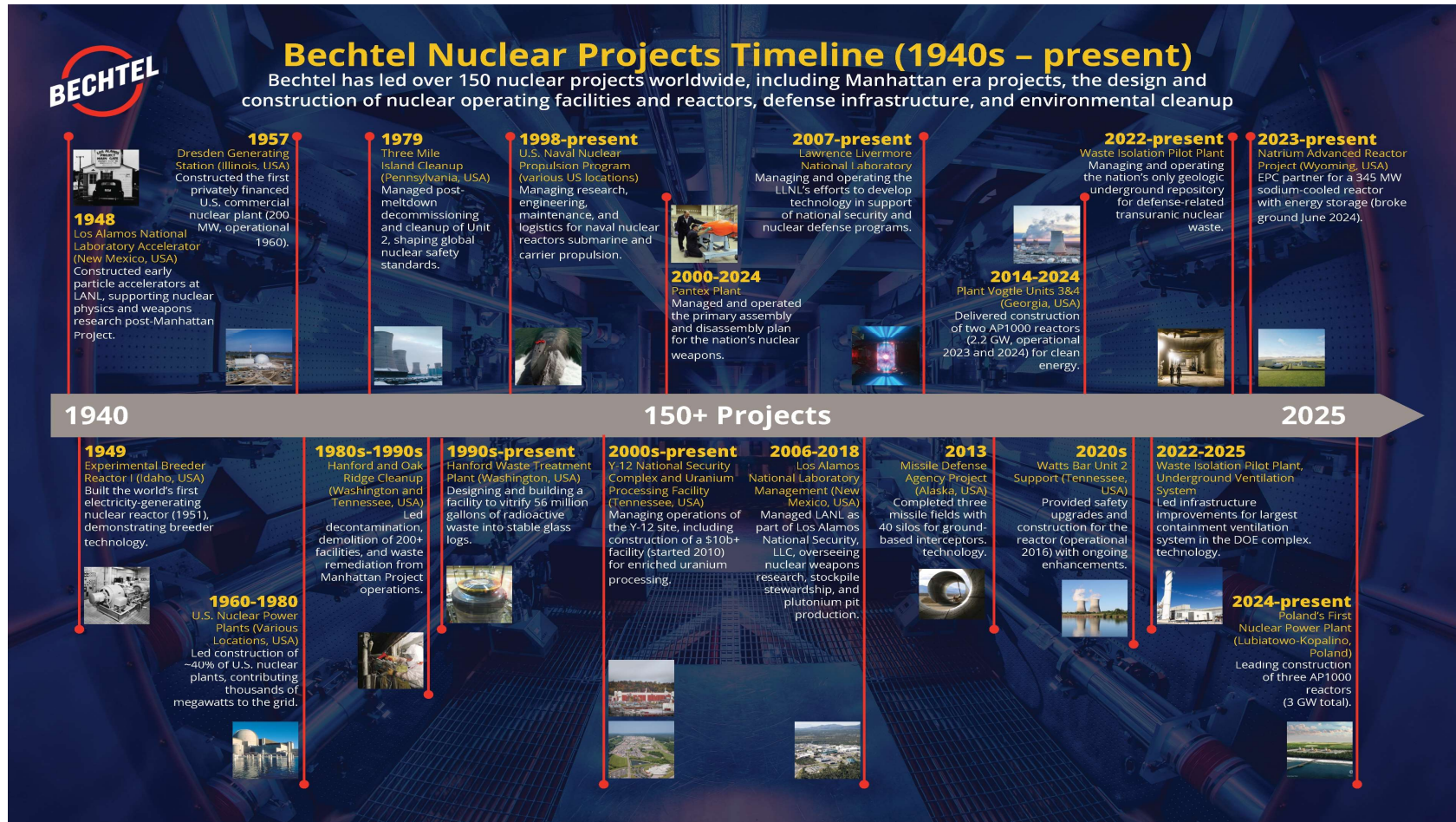
25,000+ extraordinary projects in **160** countries on all **7** continents.



Mining & Metals HQ
Santiago, Chile



Bechtel's Nuclear History



Leading Nuclear Energy's New Era

- Tomorrow's energy security starts today with Bechtel. As a zero-carbon, safe, and reliable source of baseload power, nuclear energy is playing a vital role in growing the world's supply of clean energy and meeting rising global energy demand
- Bechtel has designed, built, or provided services for 150 nuclear plants worldwide, bringing more than 76,000 megawatts of new nuclear generation capacity online
- Today, our role is not just historic — it's strategic. Bechtel delivers the projects that keep America — and the world — ahead, re-establishing U.S. leadership in nuclear at home and exporting U.S. expertise abroad



Plant Vogtle Units 3&4

- Bechtel hired to complete construction of Vogtle plant with two Westinghouse AP1000 units (1,100 MWe each), due to challenges encountered by previous contractors
- First new nuclear reactors to be built in the United States in more than 30 years
- U3 online in July 2023, U4 online May 2024 – the first Gen III+ reactors operational in the U.S.
- Largest construction project ever in State of Georgia, at peak over 7,000 workers on site (1,100 Bechtel professional staff and 6,000 union craft professionals) – over 73 million hours without a lost time accident (LTA)
- Bechtel also performed the plant’s licensing work, both Early Site Permit (ESP) and Combined License (COL) – the first licenses approved and issued under the U.S. Nuclear Regulatory Commission’s Part 52 licensing framework

Bechtel incorporation of lessons learned and constructability changes resulted in ~30% efficiency improvement of Vogtle Unit 4 compared to Unit 3.



Bechtel's Active Nuclear Power Plant Projects



Lubiatowo-Kopalino Units 1-3, Poland (Westinghouse AP1000® Technology)

- Westinghouse-Bechtel consortium delivering 3-AP1000 units for Polish utility PEJ – recent loan agreement with U.S. EXIM for direct financing
- Initial FEED in 2021/2022 funded by U.S. & Polish governments to develop cost, schedule, and execution approach
- Engineering Services Contract issued in 2023 – now completing conceptual design, permitting, geotech, site prep, construction planning, and procurement (extensive Polish supplier engagement, steam turbine and generator set awarded January 2026)



Kemmerer Unit 1, Wyoming (TerraPower Sodium® Technology)

- Since 2020, Bechtel is EPC partner to TerraPower for initial Sodium technology deployment, part of DOE's Advanced Reactor Demonstration Program (ARDP)
- CPA submitted to NRC in March 2024 (first for commercial advanced reactor), favorable EIS from NRC in October 2025, CPA approval expected soon
- Site groundbreaking/mobilization in June 2024 – non-nuclear works (Test & Fill Facility, Training Center) construction underway with supplier awards ongoing



Clinch River, Tennessee (GE Vernova-Hitachi BWRX-300 Technology)

- From 2011, Bechtel performed initial ESP Application and NRC RAI support bounding multiple technologies (NRC approved in 2019); supported BWRX-300 specific updates in 2023
- From 2023, supported TVA in construction planning & constructability
- In 2024 Bechtel selected by TVA to be its Construction Contractor for Clinch River SMR – December 2025 TVA awarded DOE Gen III+ SMR “first mover” federal cost-share grant

Key Considerations from Recent Project Experience



Supply Chain Constraints

- Nuclear construction is ramping up again, and we now have a real opportunity to rebuild the specialized supply chain that once made the industry a global leader
- By expanding the pool of qualified manufacturers and investing in modernized production capacity, we can shorten lead times and bring greater cost certainty to projects
- Streamlined quality processes, digital documentation, and closer partnerships with suppliers will help keep projects moving even as demand accelerates



Workforce Challenges

- A retiring generation of experienced personnel across all functions and craft creates an opening to train and inspire a new wave of skilled professionals
- With targeted vocational programs, apprenticeships, and industry-education partnerships, we can build a workforce ready to deliver the next era of nuclear projects
- By elevating the trades and offering clear, rewarding career paths, we can compete effectively for talent and ensure projects are delivered on time and at scale

Strengthening Our Supply Chain

- Bechtel's global supply chain spans 7,000 suppliers across 70 countries — allowing us to remain resilient and flexible for our customers, while meeting their expectations around quality, cost, and schedule
- When we build nuclear power projects successfully, it sharpens the industry's expertise and grows the supply chain for all future reactor deployments
- Bechtel's Evaluated Supplier List (ESL) maintains qualified nuclear suppliers through triennial audits, annual evaluations, and in-process assessments, also leveraging our Nuclear Industry Assessment Corporation (NIAC) membership whenever possible to onboard new partners efficiently
- Suppliers can become NQA-1 compliant by developing a nuclear-grade QA program and completing qualification audits with Bechtel or another NIAC member



Bechtel Global Supply Chain by the Numbers in 2025



Empowering the Workforce of Tomorrow

- Bechtel is expanding programs that support career advancement for craft professionals, partnering with universities and unions to develop local talent pipelines
- Bechtel has proven large-scale workforce mobilization before – we hire and train tens of thousands of craft professionals on the Gulf Coast for LNG projects
- We bring that same capacity to nuclear – at Vogtle, we trained 9,000 craft workers to work at the highest levels of quality and meet nuclear-grade standards
- Moving experienced teams from one unit to the next builds a “flywheel” of expertise and suppliers, driving down cost and schedule



America's Nuclear Energy Moment Is Here – Let's Seize It

- Bechtel's success bringing new reactors online in the U.S. and supporting nuclear builds abroad proves that we can rebuild a strong, standardized supply chain capable of delivering projects faster, more efficiently, and with greater certainty
- As this momentum grows, we can also expand and energize the skilled workforce behind it, elevating the trades, strengthening training pipelines, and showing that the U.S. is fully capable of leading a new nuclear era

