

Experience

Fluor is an industry leader in engineering and constructing state-of-the-art nuclear power generation facilities. We have performed power projects in over 20 countries and have built a successful track record in all phases of power generation facilities. We strive to give clients the benefits of cost reduction and schedule enhancement while maintaining a strong focus on safety, quality, regulatory compliance, technology, and project management expertise. With revenues exceeding \$15 billion per year, Fluor is one of the world's largest publicly owned engineering, procurement, construction (EPC), and operations and maintenance companies. We maintain 84 offices in countries across 6 continents and have a workforce of nearly 34,000 employees.

Range of Nuclear Services

- ▶ EPC for new nuclear power plant
- New nuclear construction
- Reactor operations and maintenance
- Non-reactor nuclear EPC

- Nuclear new build feasibility, licensing, and front end engineering design (FEED)
- Nuclear remediation



Hanford Canister Storage Building

Since 1946, we have designed and/or constructed numerous facilities in support of the U.S. and UK governments.

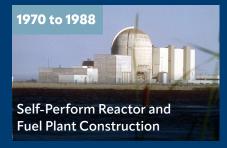
- Idaho reactors including advanced test reactor
- Hanford Plutonium Facility process modifications
- Las Alamos TA-55 Plutonium Facility
- Aldermaston A-90 Plutonium Production Facility (UK)
- Savannah River Pit **Production Facility**
- Savannah River Tritium Facility



Prairie Island Units 1 and 2

In 1974, we acquired Pioneer to enter the commercial nuclear AE business.

- Design-built Kewaunee
- Design-built Prairie Island Units 1 and 2
- Designed plant modifications for 15 plants



Wolf Creek

Our construction efforts were full scope standalone programs executed under Fluor's nuclear QA and ASME Code programs.

- J.M. Farley 1
- Nuclear Fuel Reprocessing Plant
- J.M. Farley 2
- V.C. Summer
- **Shearon Harris**
- Fermi 2
- Callaway
- Wolf Creek

РМ

Industry-Leading Safety Culture

Our priority is safety – for the worker, the public, and the environment. Consistently rated as one of the world's safest contractors, our safety culture is well-suited for work in nuclear environments. Innovative safety programs such as our Safer Together program, Human Performance Improvement program, and union safety programs have delivered some of the best safety

For more than 75 years, Fluor has provided EPC and maintenance services to the nuclear industry.

in the nuclear industry. In 2008, a Fluor nuclear project won the international Robert W. Campbell Award from the National Safety Council.

In addition to Fluor's extensive nuclear plant construction experience, we have worked more than 90 million hours in operating nuclear plants since 1977.

The Voluntary Protection Program (VPP) Star Status is the United States Government's highest award for health and safety and Fluor has been the recipient of seven VPP stars at nuclear sites we manage. At Dominion's North Anna and Surry Power Stations, 8.5 million hours were worked without a lost-time injury. At Comanche Peak Station, we achieved 7 million workhours without a lost-time injury.



Early Steam Generator Replacement (SGR) Services

Operating plant support services for 86 nuclear units.

- 90 million work hours
- First SGR Surry (1980)
- EPC Millstone SGR (1990 to 1992)
- High-density spent fuel rack installations
- Program manager for £1 billion of capital improvements for British Energy's 15-unit nuclear fleet



Comanche Peak 1 and 2

PM, C, QA/QC, and field engineering to support completion of 10 units at 5 stations.

- Vogtle (2 units)
- South Texas (2 units)
- Braidwood (2 units)
- Byron (2 units)
- Comanche Peak (2 units)



Maple Reactor - Radioisotope Hot Cells

Recent focus on non-reactor design-build, nuclear remediation, and nuclear renaissance projects.

- Uranium enrichment plant EPC
- Isotope production hot cells
- Used fuel storage facilities
- Small Modular Reactor (SMR) design (Romania and U.S.)
- COLA development (South Texas Project, North Anna-3, Carbon Free Power Project)
- New large NPPs (NuGen, Barakah, VC Summer, Vogtle)
- New nuclear plant feasibility studies

. 1990 20¹0 2000 2020 2025 COLA Quality Assurance **Combined License Application**

QC. Quality Control NPP **Nuclear Power Plants**



Nuclear Program Management

Fluor provides full life-cycle capability from feasibility and FEED through commissioning, operations, and decommissioning.

Our focus today is SMR and large reactor design, licensing, site selection support, procurement, quality management, construction management, and commissioning support. With more than 50 years of modular construction experience, our advanced modularization program provides modular solutions that improve schedule certainty and thus cost certainty.

Quality

Nuclear engineering and construction activities have been typically performed under Fluor's nuclear quality assurance program. Our quality program is certified to NQA-1 and 10CFR50, Appendix B requirements. Operating plant support services have typically been performed under the owner's quality assurance program. All of our activities at commercial nuclear facilities are regulated by the Nuclear Regulatory Commission. We hold several nuclear Certificates of Authorization issued by ASME, signifying that Fluor has been through a rigorous survey to verify the adequacy and effective implementation of our quality assurance program.

These nuclear Certificates of Authorization allow us to certify and stamp newly constructed components, parts, and appurtenances used at a nuclear facility with the Certification Mark in accordance with Section III of the ASME Boiler and Pressure Vessel Code.

Fluor is currently certified to stamp the following nuclear components:

- ▶ **N** Vessels, pumps, valves, piping systems, storage tanks, core support structures, concrete containments, and transport packaging
- NA Field installation and shop assembly of all items
- NPT Parts, appurtenances, welded tubular products, and piping subassemblies
- ▶ **NS** Supports

Fluor has worked 90 million hours in operating nuclear reactor facilities since 1977.

Contact us at **Power@Fluor.com** for more information.

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