



OPPD's Fort Calhoun Station About the Plant

In June 2016, OPPD leadership decided it was in the best financial interests of the utility and its customer-owners to decommission Fort Calhoun Station (FCS), its nuclear power plant. FCS is located on the Missouri River, 19 miles north of Omaha.

FCS safely generated electricity from August 1973 until the reactor was permanently shut down on Oct. 24, 2016. FCS accounted for 31.3 percent of OPPD generation during the plant's operating life.

The plant was designed with a series of redundant safety systems, which greatly reduce the chance of an accident that could affect the health and safety of the public. In addition, the plant's design includes a "defense-in-depth" system of barriers to prevent the escape of radioactivity to the environment in the unlikely event of an accident.

Safety will remain the number one priority throughout the decommissioning process. During decommissioning, OPPD continues to cool and protect the used nuclear fuel assemblies in the plant's spent-fuel pool.

Important Features

Containment Building – Constructed of steel-reinforced concrete, with walls nearly four feet thick. A one-fourth-inch-thick carbon steel liner on the inside of the Containment Building ensures leak-tightness. This structure houses the FCS reactor, which has been safely defueled.

Auxiliary Building – This building houses the reactor auxiliaries, including waste-treatment facilities, certain safety components, the control room, emergency diesel generators, and fuel-handling and storage facilities. The Auxiliary Building is a heavily reinforced concrete structure that forms a "U" around the Containment Building and is designed to withstand tornadoes and seismic events.

Turbine Building – The turbine generator, condensers, condensate and feedwater pumps, feedwater heaters and other turbine heat cycle components here. A structural steel superstructure enclosed with resin wall paneling, the Turbine Building also has a reinforced concrete basement.

Service Building – Office space attached to, and of the same construction as, the Turbine Building. This building is no longer occupied.

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Intake Structure – Houses the equipment that formerly pumped cool river water into the plant for use in condensing steam leaving the turbine. The building, which is seismically designed, consists of a structural steel frame enclosed by resin wall panels similar to the Turbine Building. The intake structure is made of heavily reinforced concrete below the 1,014-foot elevation and extends over the Missouri River.

Security Access Facility – Serves as the main entrance to and exit from the plant. Highly trained security officers employ specialized equipment to ensure that only authorized personnel may access the site's Protected Area.

Switchyard – Houses equipment that was connected to the main generator at Fort Calhoun Station.

Administration Building – Houses administrative offices. Completed in 1991.

Training Center – Includes a 100-seat auditorium and laboratories, including ones dedicated to pressure equipment, chemistry, radiation protection, instrumentation and control, general maintenance, and environmental monitoring. Completed in 1989.

Radioactive Waste-Processing Building – OPPD personnel use facilities in this building to sort, compact, decontaminate and store (short-term) low-level solid and liquid radioactive waste. In this building, contaminated waters, valves, metals and other objects can be cleansed of radioactive contaminants. The Radioactive Waste-Processing Building has a rigid steel framework to support the precast concrete panels of its exterior. It is seismically designed for strength and rigidity so it will not adversely affect the adjacent Auxiliary Building in the event of an earthquake or tornado.

Warehouse – All material shipments to the plant are processed through this building. Material, spare parts and equipment are received, inspected, stored and issued from the 40,000-square-foot facility.