

FOR IMMEDIATE RELEASE

Burns & McDonnell Completes Fort Dodge Station Unit 4 Synchronous Condenser Project Ahead of Schedule

KANSAS CITY, Missouri – Engineering, procurement and construction (EPC) contractor Burns & McDonnell successfully achieved substantial completion of the Fort Dodge Station Unit 4 Synchronous Condenser project for Sunflower Electric Power Corporation. This project allows Sunflower to operate Unit 4 — a 150-megawatt steam turbine driven by a gas-fired boiler — in both generation and synchronous condenser (SynCon) modes on demand, providing enhanced grid stabilization.

What Is a Synchronous Condenser?

A synchronous condenser is a rotating electrical machine that provides reactive power support to the electric grid. It can either absorb or generate reactive power, helping to regulate voltage levels and maintain grid stability. As more renewable energy sources replace conventional power plants, synchronous condensers are becoming critical for grid stability to offset the loss of system inertia, provide voltage stability and reactive power support, correct poor power factors and support weak grid connections.

Adaptive Planning Leads to Project Completion Ahead of Schedule

The project overcame many challenges, including extended lead times on equipment and critical construction sequencing. Among the complex work: Reinstalling the generator rotor, after removing it for transportation and modification off-site. Through adaptive planning and execution, the Burns & McDonnell team completed the project several weeks ahead of schedule.

“This project commercial operation date was driven by a preapproved outage window,” says Ken Sabourin, PE, senior generation engineer, Sunflower Electric Power Corporation. “The Burns & McDonnell integrated EPC team provided detailed planning and communication of lockout/tagout, keeping personnel and the facilities safe, yet accessible.”

AZCO, a Burns & McDonnell subsidiary, self-performed the balance of plant (BOP) services. AZCO was involved during preconstruction and applied brownfield plant experience in off-site steel and pipe fabrication and on-site mechanical, piping and electrical installation.

Collaboration with key subcontractor ElectroMechanical Engineering Associates (EME), which carried out detailed design and modifications to the SynCon system played a critical role in the success of this project.

“The completion of this project adds another successful chapter to the ongoing story of Sunflower and Burns & McDonnell working together successfully, specifically on complex projects,” says Travis Fucich, a vice president in the Power Group at Burns & McDonnell. “I applaud Sunflower for taking on this innovative project that is among the earliest conversions of existing generating resources in the SPP footprint and will help meet the challenges of the rapidly changing grid.”

The project was completed safely, with nearly 30,000 hours worked and zero recordable incidents.

About Burns & McDonnell

Working from more than 75 offices around the world, Burns & McDonnell designs and builds critical infrastructure. Our family of companies — driven by engineers, construction professionals, architects, planners, technologists and scientists — delivers projects grounded in safety and a desire to make a difference as we make our clients successful. Founded in 1898, Burns & McDonnell is 100% employee-owned. Learn more at <https://www.burnsmcd.com/>.

About AZCO

AZCO is a heavy industrial construction and prefabrication solutions provider building the critical infrastructure that keeps communities and industries thriving. Part of the Burns & McDonnell family of companies, we work with union craft labor across the country, using an integrated approach to deliver more advanced controls and predictable outcomes. Learn how we are designed to build at azco-inc.com.

About Sunflower

Sunflower Electric Power Corporation is a regional wholesale power supplier operating a system of solar, wind, natural gas, and coal-based electric generating plants and approximately 2,400 miles of electric transmission infrastructure. The focus of Sunflower's

400+ workforce is supplying reliable energy at the lowest possible cost to its seven members who serve electric consumers living in central and western Kansas. Visit Sunflower's website at sunflower.net.

Sunflower's member cooperatives include Lane-Scott Electric Cooperative, Dighton; Pioneer Electric Cooperative, Ulysses; Prairie Land Electric Cooperative, Norton; The Victory Electric Cooperative Association, Dodge City; Western Cooperative Electric Association, WaKeeney; and Wheatland Electric Cooperative, Scott City, Kansas. Southern Pioneer Electric Company is also a member of Sunflower.