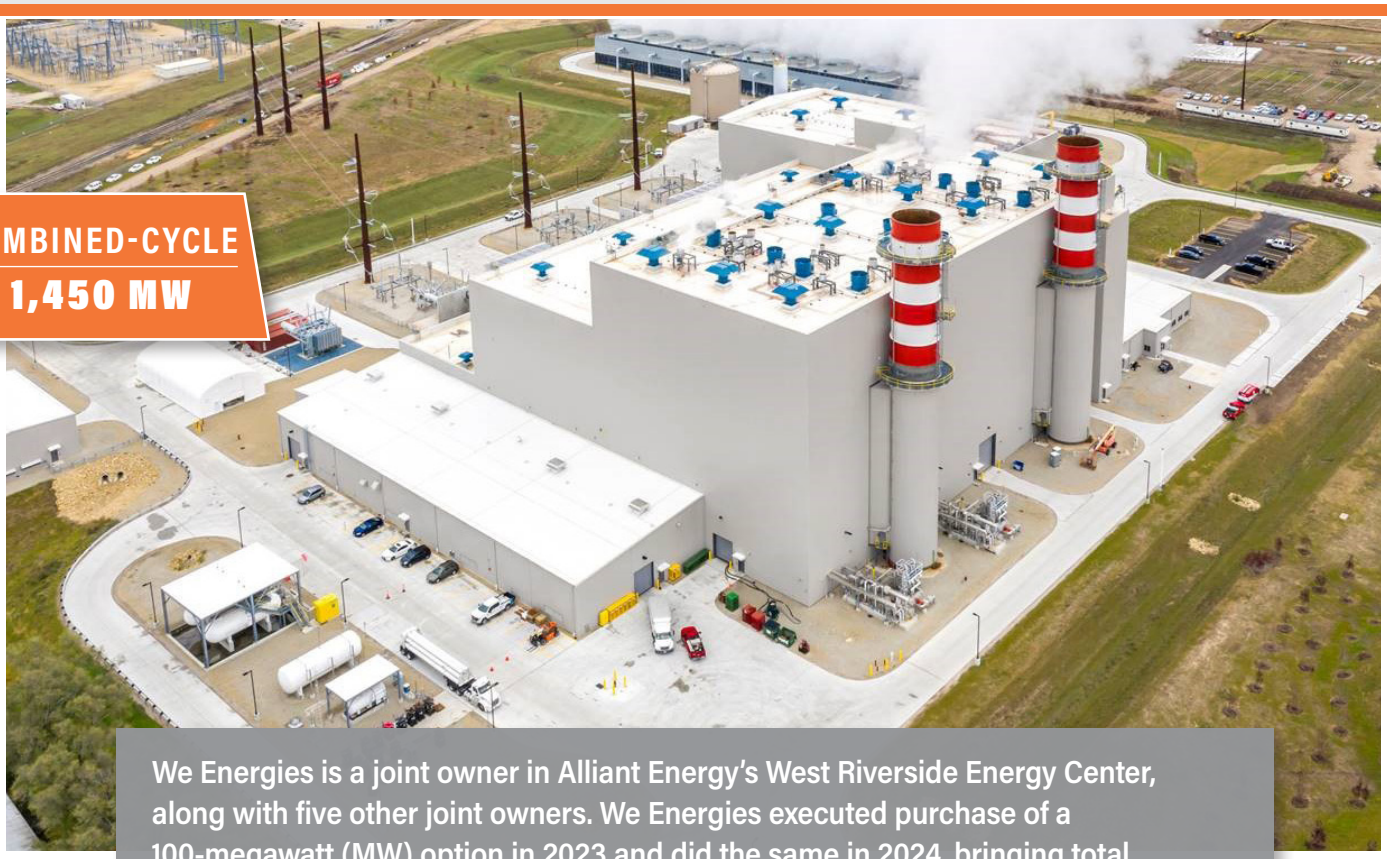
We Energies

West Riverside Energy Center



We Energies is a joint owner in Alliant Energy's West Riverside Energy Center, along with five other joint owners. We Energies executed purchase of a 100-megawatt (MW) option in 2023 and did the same in 2024, bringing total ownership for We Energies to 200 MW, or approximately 27% of nameplate capacity.

Location: This plant occupies 49.5 acres of land in Beloit, Wisconsin.

Type of plant: 2-on-1 combined-cycle generating station including a 4-MW solar field for auxiliary load

Initial cost: $200 million for 27.50% ownership

Ownership:

- We Energies 27.5%
- Wisconsin Power and Light 56.6%
- Madison Gas and Electric 6.9%
- Adams-Columbia Electric Cooperative 4.5%
- Rock Energy Cooperative 3.7%
- Central Wisconsin Electric Cooperative 0.8%

Units: 2 blocks

Year in service: 2020

Total net generating capacity:
Block 1: 727.2 megawatts
Block 2: 723.2 megawatts

Turbine manufacture:
(2) General Electric 7F.05 combustion turbines
(1) General Electric D602 steam turbine

Fuel: Natural gas

Fuel handling: Lateral ANR Pipeline

Average fuel use: 120,000 dekatherms daily

Heat recovery steam generator
One per gas turbine
Height: 110 feet
Steam temperature: 1,050 degrees Fahrenheit
Steam pressure: 2,600 pounds per square inch, 2600 PSIG 2X1 with the advanced firing curve

Chimneys
Two 185-foot stacks — one for each unit

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Air quality control system: The plant uses a continuous emissions monitoring system (CEMS) to monitor nitrogen oxide (NOx), carbon dioxide (CO2) and dioxygen (O2) emissions. NOx emissions are controlled by using a selective catalytic reduction (SCR) system with aqueous ammonia injection.

Cooling system: A cooling tower is used to cool water coming into the plant. The cooling tower is a counter-flow, 10-cell forced-air unit, with two-speed axial flow fans. The source of water for the tower is from a well.

Control room: All major functions in the plant are controlled by operators with computer support to continuously monitor and report on pressures, temperatures, flow rates, etc. In addition, the computer aids in start-up, shutdown, load adjustments and information for future reference. The plant control systems use GE Mark VIe and Emerson Ovation technology for plant functions.

Safety: The facility has safety and monitoring features that minimize risks to the public and meet federal, state, local and industry standards.