



## ORIENT ENERGY CENTER

# SIMPLE-CYCLE COMBUSTION TURBINE PROJECT

As MidAmerican Energy prepares to serve its customers' future energy needs, additional generation resources will be required to ensure reliability. In its recently filed resource evaluation study (RES), MidAmerican proposed a long-range generation portfolio to meet Iowa's projected economic growth and increasing demand for electricity in a rapidly evolving energy landscape. As proposed, the portfolio provides customers with continued reliability and affordable, low-cost energy over the next 20 years, according to study projections.

In the short term, over the next several years, the RES's recommended portfolio proposes expanding solar energy capacity in several stages and adding natural gas-fired, simple-cycle combustion turbines (CTs).

### Tried and true technology

Simple-cycle, natural gas-fired CTs can cost effectively generate energy when customers need it the most. Natural gas is used to power a combustion turbine connected directly to a generator that produces electricity. **CTs can start quickly to provide power during periods of high demand.** They serve as "peaker" resources, only generating energy occasionally when demand is high and other forms of energy are not available to meet that demand. These generation facilities complement renewable energy resources — such as wind and solar — that are more variable and intermittent in nature. MidAmerican already has a track record of safely and successfully operating natural gas-fired CTs for decades — there are 28 units across seven sites already in its existing portfolio. It is a key addition to MidAmerican's **all-of-the-above generation strategy.**

### Preliminary timeline

- **SUMMER 2025**  
Public Informational Meeting
- **SUMMER 2025-  
SPRING 2026**  
Regulatory review (Iowa Utilities Commission, Iowa Department of Natural Resources)
- **SPRING 2026**  
Start of construction
- **DECEMBER 2027**  
Construction substantially complete
- **SPRING 2028**  
Orient project operational

## Proposed project

To serve its customers' growing energy needs, MidAmerican is proposing to construct a simple-cycle natural gas combustion turbine (CT) project, generating up to 465 megawatts, in rural Adair County.



The facility is expected to operate less than 10% of the year but will be critical to generating energy when customers need it the most.

The proposed project site is owned by MidAmerican and already equipped with the necessary infrastructure, minimizing landowner impacts. The proposed \$600 million project would create approximately **400 construction jobs** and approximately **five permanent local jobs with a salary range of \$100,000 to \$125,000**, creating a significant economic impact both during the two-year construction timeline and beyond.

## Regulatory approvals and project timeline

MidAmerican will begin seeking regulatory approvals to begin construction in 2026, with a projected in-service date of 2028.

The Iowa Utilities Commission is responsible for ensuring the project is properly sited and necessary to serve energy demand. The regulatory process includes air quality permitting to ensure the proposed facility does not harm the environment. The Iowa Department of Natural Resources will review the permit application and establish requirements that ensure that the proposed project will not cause an exceedance of the U.S. National Ambient Air Quality Standards that are established by the U.S. Environmental Protection Agency.

The Orient project would have two combustion turbine generators. Each one has an exhaust stack that is about 120-150 feet tall, which is about the height of a grain elevator. The footprint of the project is about 20 acres for the plant and 8 acres for the substation that connects the plant to the electric grid.

