

Paducah American Energy Hub

Rooted in America's energy legacy, the Paducah American Energy Hub helps strengthen the nation's competitive edge.

Project Overview

NextEra Energy Resources, together with Big Rivers Electric Corporation, Jackson Purchase Energy Cooperative, Paducah Power System and Brookfield Asset Management, have formed a strategic collaboration to develop and power the AI data center at the site of the former Paducah Gaseous Diffusion Plant owned by the U.S. Department of Energy.

Under the arrangement, Brookfield Asset Management would build and operate the data center while NextEra Energy Resources would build and supply the power required to serve the site. Big Rivers Electric Corporation would provide wholesale electric service to the site, with Jackson Purchase Energy Cooperative delivering retail service. Paducah Power System serves as a community supporter.

The energy infrastructure supporting the development is expected to include new natural gas generation and battery energy storage systems with the potential for additional advanced energy technologies in the future. These resources will be added over time in clearly defined stages, allowing the local community to welcome the opportunity without causing sudden strains on energy infrastructure.

Project Benefits

The Paducah American Energy Hub is designed to deliver long-term value for the region, while protecting existing customers.

- » Generates new tax revenue which can benefit local communities
- » Drives job creation during construction and operations
- » Drives the local economy by increasing demand for local goods and services
- » Spurs economic growth by attracting complementary industries
- » Supports improvements to critical infrastructure
- » Provides charitable contributions to local organizations
- » Strengthens the local electric grid

Project Basics

Location

McCracken County, KY

Footprint

Data Center – 600 acres

Natural Gas – 200 acres

Battery Energy Storage – 300 acres

Listed acreages represent total site area; infrastructure footprint will occupy only a portion of each site.

Commercial Operation Date

Data Center – As early as 2028

Natural Gas – As early as 2032

Battery Energy Storage – As early as 2028

Capacity

Data Center – Up to 1,800 MW

Natural Gas – Up to 2,000 MW

Battery Energy Storage – 2,600 MW



\$100B
Financial
Investment



8,000+
Construction
Jobs



600+
Operational
Jobs

Our Commitment to McCracken County

The project participants are committed to developing this project responsibly and thoughtfully, with a focus on transparency, reliability, and long-term community benefits.

✓ Protect Utility Rates

In alignment with the Ratepayer Protection Pledge, the project protects existing customers - including residents and small businesses - from additional rate impacts by ensuring the data center will cover the cost of new infrastructure and power needs. The natural gas generation is expected to provide capacity in excess of the data center's projected demand, creating a surplus that eases pressure on system-wide energy costs and enhances the reliability of the broader electric grid.

✓ Respect Natural Resources

The potential designs for the project reflect a responsible approach to water use that is expected to use less water than what the Paducah Gaseous Diffusion Plant was originally designed to use, which was up to 30 million gallons per day from the Ohio River. In particular, the data center uses a closed-loop system that reuses the same water over time with additional water only needed for small losses during operation. Between the natural gas facility and data center, the project is expected to use less than five million gallons per day or less than 20% of the plant's historic use. Beyond that, in potentially utilizing the existing water infrastructure at the plant, the project limits the need for additional development.

✓ Deliver Long-Term Value

Representing billions of dollars in capital investment, the project positions the region for long-term economic growth and competitiveness by attracting next-generation industries. Beyond strengthening the local tax base, it is estimated that both the energy generation and data center facilities could create approximately 8,000 construction jobs and more than 600 high-paying operational positions.

✓ Foster Open and Transparent Communication

While still in the early stages, the project participants are committed to working closely with the local community – sharing updates as plans evolve, listening to feedback and ensuring access to clear, timely information throughout the process.

✓ Enhances Grid Stability

The project adds more dispatchable energy capacity to the grid than the data center uses, benefiting the regional electric grid. The data center will use batteries to avoid straining the electric grid during times of peak local consumption.

✓ Preserve Quality of Life

The project is being designed with the surrounding community in mind. This means evaluating potential lighting and noise impacts through detailed acoustic modeling and implementing mitigation measures as needed to ensure compliance with applicable requirements and compatibility with surrounding land uses.

Meet the Project Participants

The project brings together a group of organizations with distinct roles – all coordinating to ensure a thoughtful approach that reflects local needs and priorities.

Brookfield, one of the world's largest investors in the AI infrastructure value chain, would build, finance, and operate the data center.

NextEra Energy Resources, the largest energy infrastructure builder in the U.S., would be responsible for building and supplying the energy infrastructure.

Big Rivers Electric Corporation would provide wholesale electric service to the site, with **Jackson Purchase Energy Cooperative** delivering retail service.

Paducah Power System serves as a community supporter.
