Hoytdale Energy Storage





AES' Hoytdale Energy Storage project is a planned battery energy storage project in Beaver County, Pennsylvania. We are committed to responsible clean energy development that creates long-term value and positive impact for both the environment and local communities.

The Hoytdale project is transforming a legacy mine site in Big Beaver Borough into a clean energy infrastructure asset that will strengthen grid reliability across Western Pennsylvania. This facility will remediate an abandoned surface mine while delivering critical energy storage capacity to meet the region's growing power demands. The facility incorporates AES advanced safety specifications – including redundant battery management systems, gas detection, and fire detection and mitigation measures.

Estimated project timeline

2026-2027	2027-2028	2029-2030	2030
Development, Siting, Permitting	Design and Procurement	Construction	Commencement of operations

About AES

Founded in 1981 and proudly headquartered in Arlington, Virginia, The AES Corporation (AES) is a Fortune 500 global energy company and leading renewable energy developer, delivering innovative and impactful solutions that are tailored to meet the energy needs of our customers and communities today and in the future.

For more information, visit:

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Project overview

150 MW peak power / 600 MWh battery energy storage (4 hour duration)

Capable of powering approximately 30,000 homes, charged and ready to dispatch during peak demand periods

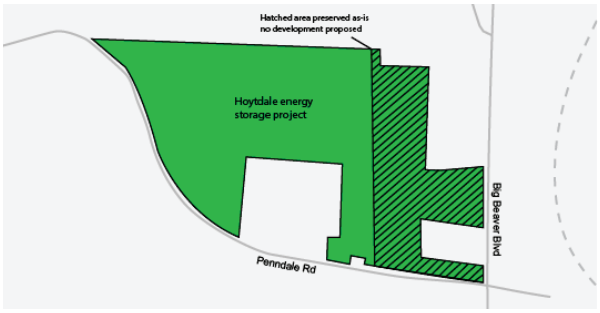
Approximately 60 people are expected to be employed during construction, and approximately 2 long term operations and maintenance positions

An estimated $250 million investment in the locality that is expected to generate over $21 million in economic activity leading to increased revenues through sales tax, real estate tax, and wages. This activity will directly benefit Pennsylvania Beaver County, Big Beaver Borough, and the Big Beaver Falls Area School District

Partnering with communities for the future of energy

At AES, we understand that our success as a company is only as strong as our partnerships with the communities where we operate. That's why we partner with communities, customers, state agencies, higher education, elected officials, and other key stakeholders to understand how we can best work together to support sustainable social and economic development that complements the local geography and unique culture, to improve lives and build stronger communities. We believe in being a good neighbor, ensuring responsible clean energy development that benefits both the environment and local communities without burdening existing infrastructure.

Project map



600 MWh

Hoytdale's planned capacity, enough to power approximately 30,000 homes

43 GW/US

Utility scale battery capacity at the end of 2025, up 60% from 2024 (U.S. Energy Information Administration, preliminary data)

13

U.S. states in PJM's grid territory – all of which benefit from more storage on the network

PJM has warned of growing capacity shortfalls in Pennsylvania.

Hoytdale is part of the solution

Understanding energy storage

A 101-guide – and what it means for western Pennsylvania

Why does our electric grid need storage now?

The U.S. electric grid was built several decades ago to produce and deliver power instantly, with no way to save the excess. Grid operators like PJM, which manages electricity for 13 states including Pennsylvania, are already flagging reliability shortfalls in the coming years as demand continues to rapidly expand; energy storage is one of the most affordable and efficient tools to address this quickly growing issue.

Energy storage isn't new technology – it's proven infrastructure. Hoytdale puts it to work cleaning up a legacy mine while keeping Western Pennsylvania's grid reliable for the long term.

Common concerns through facts

Concern:
"These batteries catch fire."

Research:
Like many energy technologies, battery storage carries risks that are taken seriously. Today's grid scale storage systems use lithium iron phosphate (LFP) battery chemistry, which is significantly more stable and less prone to thermal events than common household batteries. The Hoytdale facility is designed with multiple layers of safety, including gas detection, automatic fire detection, 24/7 remote monitoring, and coordination with the local fire department, including training prior to becoming operational.

Concern:
"It will hurt property values."

Research:
Research on energy storage facilities does not show a consistent pattern of negative effects on surrounding property values. At Hoytdale, the nearest residences are separated from the site by approximately 660 feet of mature tree canopy and a high-voltage transmission corridor, a very different condition from facilities sited next to neighborhoods. The site is an abandoned mine, and restoring it to productive use is the stronger driver of local property values, not a threat to them.

Concern:
"This will bring heavy traffic and industrial noise."

Research:
Once construction is complete, there is no ongoing industrial activity. No fuel deliveries, no trucks, no smokestacks. The facility is monitored remotely and staffed minimally. It operates more quietly than most light manufacturing already present in the region. It will be designed and operated to comply with Big Beaver Borough's noise ordinance.