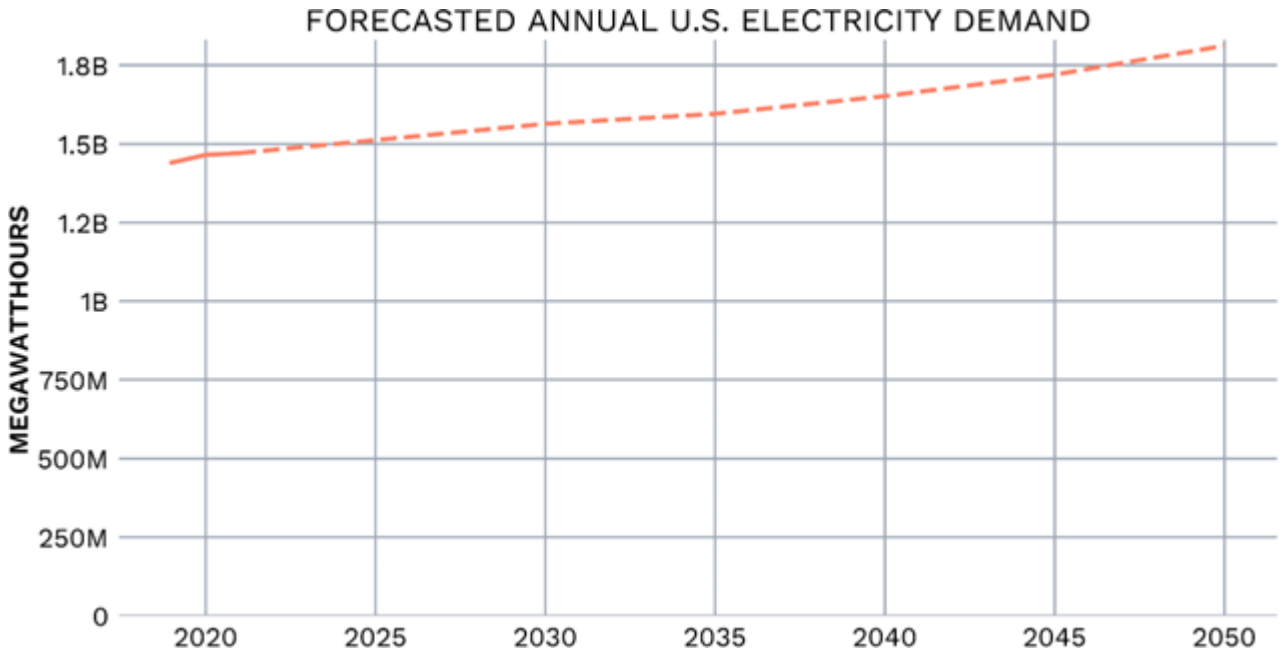
Study: The Impact of Federal Permitting Delays on Ohio's Energy Supply Chain

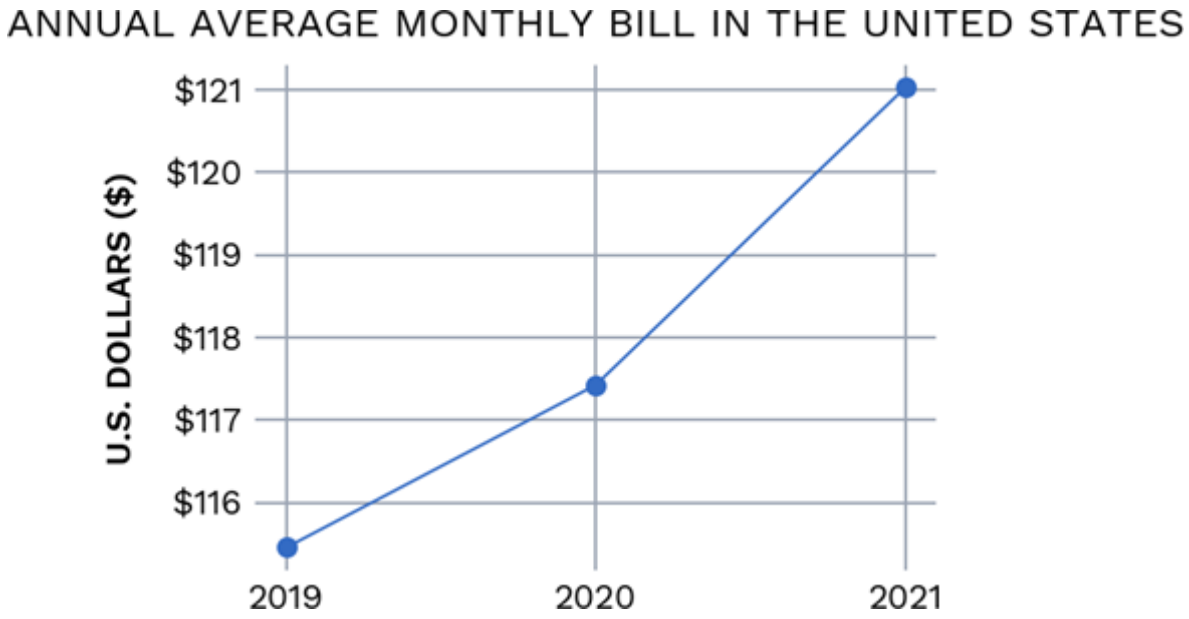
The Impact of Inflation on Energy: Rising Energy Costs

Across the country, America is having a difficult time grappling with inflation, and the cost of keeping the lights on is not exempt from these rising costs. The factors affecting energy utility prices can vary depending on where you live and how your local energy system is set up. Generally, we can group the cost impacts to energy utility prices into a few categories:

- **How the energy is made:** Different ways of producing energy, like using coal, natural gas,wind, solar, or water, have different costs. Changes in the cost of the fuel used to generate energy such as electricity for your home or gas for your stove can affect prices.
- **How much energy is needed:** When a lot of people are using energy at the same time, like during hot summer days or busy periods, the demand for energy goes up. This can lead to higher prices.
- **Getting the energy to your home:** There are costs involved in transmitting and delivering energy to your home. This includes maintaining pipelines, power lines, transformers, and other equipment. These costs can affect the prices paid, and these costs are expected toincrease as wind and solar grow in the energy mix.
- **Environmental regulations:** Regulations and policies aimed at reducing pollution and ending carbon emissions can affect energy prices. For example, power plants that produce a lot of pollution may face additional costs, which are typically passed on toconsumers.
- **Upgrades to the energy supply chain:** Investments by private industry in new power plants, pipelines, transmission lines, and other energy infrastructure improvements canmake the system more reliable and efficient, lowering prices.



Source: Electricity Information Administration (EIA)



Source: Electricity Information Administration (EIA)

Upgrading the Energy Supply Chain: Federal Permitting Delays

Upgrading our energy supply chain is a critical step for America to maintain reliable, efficient, and low cost energy. Historically, fossil fuels have been a consistent and reliable source of energy. But permitting delays for new pipelines, refineries, and mining and drilling leases are needlessly raising utility bills and prices at the pump. As a mix of innovation and government mandates increase the role of renewable generation sources, there are concerns about what will happen when the weather conditions are not favorable for sun and wind-powered generation. A number of the most impactful projects have been held up or canceled because of federal permitting delays. Balancing the need for streamlined and efficient energy systems with environmental stewardship is an ongoing challenge. Striking the wrong balance can lead to delayed projects, which harms energy consumers and the environment.. When projects are held up by permit delays or litigation, it can cause companies to face a decision to abandon critical projects that would increase energy abundance with little or even positive environmental impact.There are a number of ways this happens:

- **Delays in permitting:** All energy infrastructure projects must obtain some degree of permitting from either the state or federal permitting authorities. In particular, natural gas pipelines that cross state lines require approval from both the federal government and each state where the project will be constructed. Federal regulations and bureaucratic procedures often add delays to this process. There have been several cases where litigation has resulted from the permitting process, posing a barrier to projects even after regulators sign off. These lawsuits are exceptionally time consuming and causesignificant delays. This can extend timelines for project completion, causing uncertainties for developers and potentially increasing costs.
- **Increased costs:** Compliance with federal regulations often requires additional resources, including time, personnel, and documentation. These compliance costs are significant and are passed on to energy developers and, ultimately, consumers. The complexity of the regulatory requirements also leads to millions of dollars in additional legal and consulting fees, which also get passed to the consumer to pay.

- **Uncertainty and risk:** Excessive red tape and regulatory complexity can introduce uncertainty and risk into energy permitting. Unclear or constantly changing regulationscan make it difficult for developers to plan and navigate an unpredictable permitting process, resulting in project delays and significant financial risks.
- **Administrative burden:** Meeting federal regulatory requirements often involves extensivepaperwork, environmental assessments, impact studies, and public hearings or other consultations. The administrative burden associated with these processes is time- consuming and resource-intensive for both energy developers and regulatory agencies, detracting from their ability to serve customers and protect the public.
- **Limited innovation and investment:** Strict or overly burdensome regulations can deter energy innovation and investment. Complex or outdated permitting procedures and regulatory requirements for existing technologies discourage smaller or innovative energycompanies from pursuing projects, leading to a less diverse and less competitive energy market. Since innovation historically has made even “dirty” sources cleaner, permitting barriers to innovation also result in negative environmental consequences.
- **Environmental protection and public safety:** Federal regulations and permitting processesare designed to ensure environmental protection and public safety. The assumption is that government must assess and mitigate potential risks associated with energy projects, such as pollution, habitat destruction, or public health concerns before a projectcan be built. Oftentimes, these precautionary measures can be overly burdensome and become a reason for significant delay of these projects, even when there are more effective and efficient ways of addressing environmental concerns.

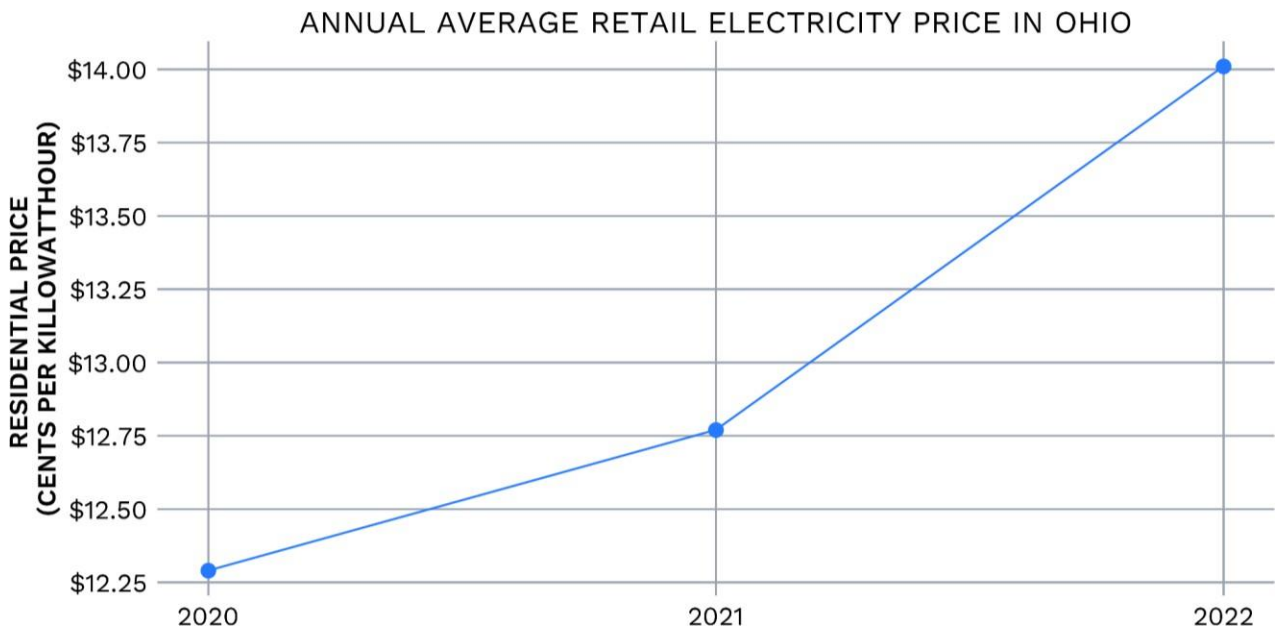
PJM

PJM Interconnection is a regional transmission operator that coordinates the movement of electricity through all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, **Ohio**, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia. In this region, PJM operates the wholesale electricity market and manages the transmission grid to ensure reliable electricity to the more than 65 million Americans that live and work in this area of the country. In PJM’s service region and Ohio in particular, there is expected to be a large increase in demand for electricity. Because of a combination of government mandates and permitting barriers, fossil fuel-fired plants are also expected to closeat rates faster than new renewable generation will be added. This combination has the potentialto cause high energy costs and unreliable electricity for Ohio’s residents and industry.

An Easy Solution to Lower Costs: Ohio’s Obstructed Projects

The easiest solution to alleviate the strain of these rising energy costs is upgrading our energy supply chains. The demand for electricity in the United States has been rising steadily but wouldbegin increasing much more quickly if the government continues to push for electrification instead of diversification. If more cars are built with electric engines and homes switch to electric heating and cooling, the price of energy will rise significantly in the near future if the supply of energy does not increase with similar speed. There have been a number of energy projects that are either currently delayed or have been completely canceled because they have

been caught up in unnecessary federal government permitting. In Ohio specifically, several of these projects that influence the price consumers are paying for energy utilities have been heldup by these federal barriers. The charts below show the price of utilities over time for Ohio. If more large projects increasing energy supplies in Ohio were built, there would be more competition and prices would decrease.

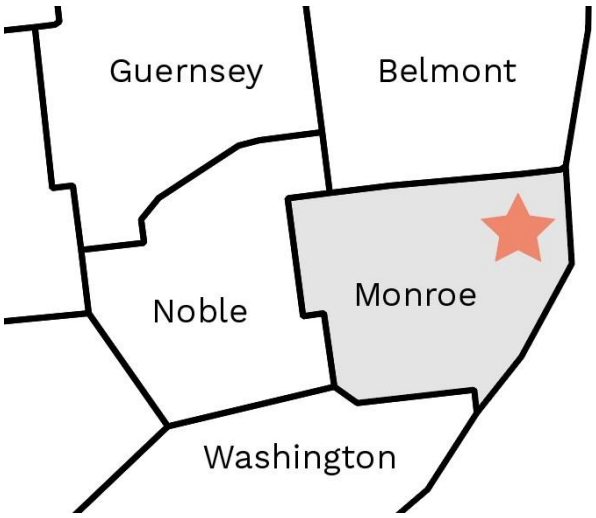


Source: Energy Information Administration (EIA)

Want to learn more? Here are the details on key Ohio energy projects blocked by federal permitting laws:

Ohio Valley Connector Expansion Project (Ohio)Status: Construction delayed

The Ohio Valley Connector Expansion Project is a natural gas pipeline project that will provide 350,000 dekatherms per day (Dth/day). The project is a $161 million effort with proposed facilities in Ohio, Pennsylvania, and West Virginia (for information on the West Virginia portion ofthe project, see the West Virginia chapter). In Ohio specifically, the project will add an additionalcompressor unit at the Plasma Compressor Station in Monroe County, Ohio and also add a small amount of related pipeline in the region.



- **January 2022**: Application filed with the Federal Energy Regulatory Commission
- **January 2023**: Final Environmental Impact Statementissued
- **June 2023**: Project formallyapproved

The project officially filed an application with the Federal Energy Regulatory Commission (FERC) in January 2022, with the goal of commencing construction in March 2023. FERC issued a Final Environmental Impact Statement for the project in January 2023, but did not formally approve the project until June 15, 2023, which is a much longer time to approval than is typical.

Sweden Valley Project Status: Canceled

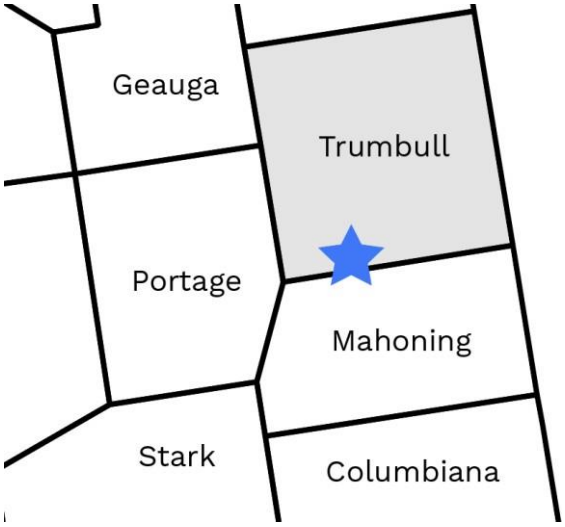
The Sweden Valley Project was a proposed $48 million natural gas pipeline project from Dominion Energy that included modifications at an existing compressor station, new metering and regulation facilities, as well as 4.9 miles of pipeline connecting to Dominion Energy's existingnatural gas transmission system. The project would have supplied enough natural gas on a singlewinter day to about 110,000 households and was expected to create 125 jobs in Ohio during construction.

- **Early 2018**: Applicated filed with the Federal Energy Regulatory Commission
- **August 2018**: Environmental review completed
- **July 2019**: Application withdrawn from the Federal EnergyRegulatory Commission

Dominion submitted an application with the Federal Energy Regulatory Commission (FERC) at the beginning of 2018 and underwent an environmental review that was completed in August 2018. The Commission never brought the project to a vote to approve, so Dominion withdrew its application in July 2019, citing FERC's inaction as the reason for withdrawal.

Trumbull Energy Center
Status: Delayed

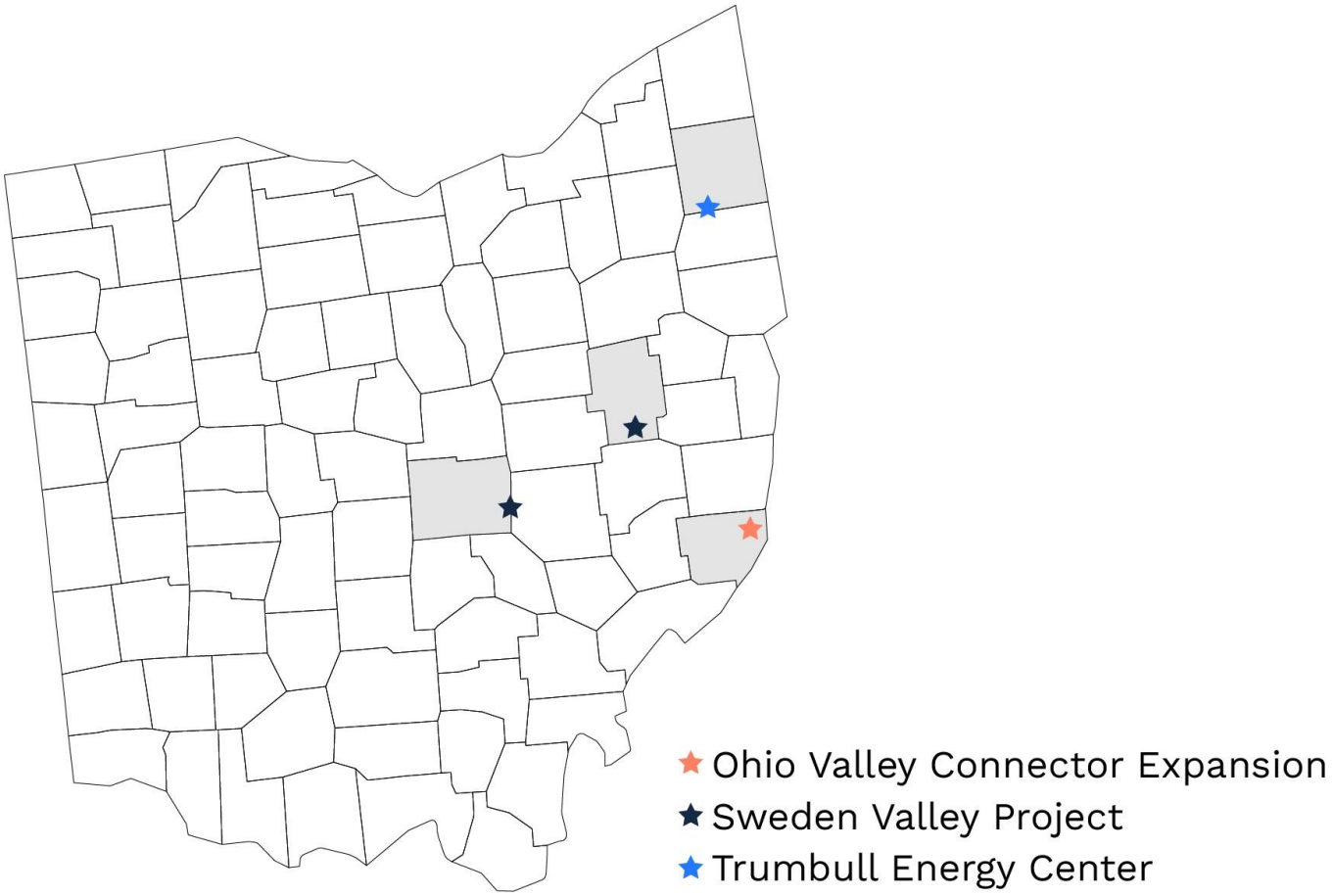
The Trumbull Energy Center is a proposed $1.2 billion 950 megawatt (MW) natural gas-fired power plant located in Trumbull County, Ohio. The project is estimated to create more than 600temporary jobs during construction and $14.9 million in additional state and local tax revenues. After the project is complete, the power plant will employ 22 full-time workers.



- **February 2017**: Application filed with Ohio Power Siting Board
- **April 2023**: Construction begins
- **Early 2026**: Targetedcommercial operation

The project formally filed an application with the Ohio Power Siting Board in February 2017 and originally intended to go into service in 2020 but faced delays in property acquisition followed by the pandemic. The project was able to officially break ground in April 2023 and it is planned to go into commercial operation in early 2026.

The Big Picture



In Ohio, there were at one point three major natural gas projects that can have the potential tomake a difference in the average citizen's lives. The Federal Energy Regulatory Commission's (FERC) inaction caused the Sweden Valley Project to completely withdraw itself from consideration and has already caused delays to the construction timeline for the Ohio Valley Connector Expansion Project. This approval was necessary, due to the fact that the plant's majority owners are from overseas, to determine their effect on national security. Overall, federal permitting can make or break these infrastructure projects. If these projects are not complete, it has the potential to negatively impact the citizens of Ohio.