

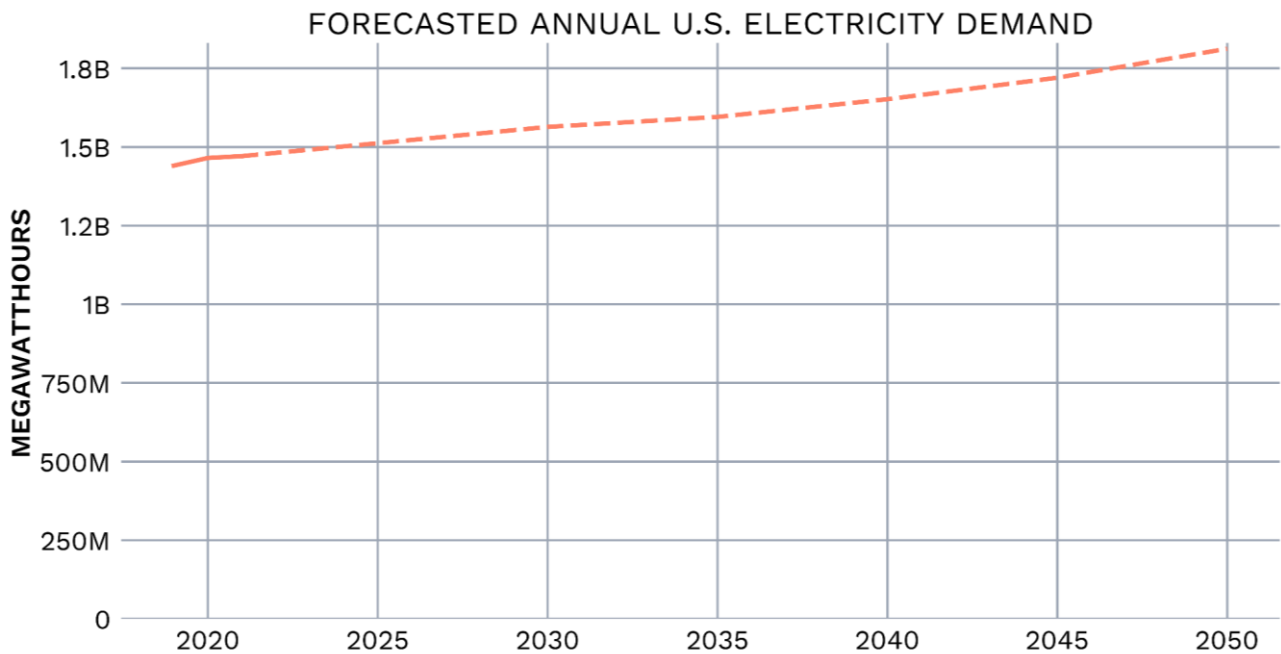
Study: The Impact of Federal Permitting Delays on
Montana's Energy Supply Chain



The Impact of Inflation on Energy: Rising Energy Costs

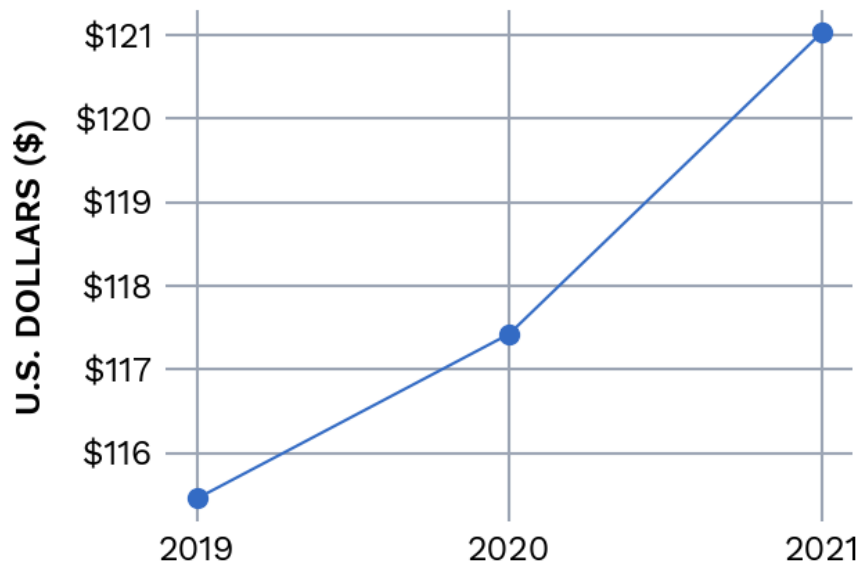
Across the country, America is having a difficult time grappling with inflation, and the cost of keeping the lights on is not exempt from these rising costs. The factors affecting these energy utility prices can vary depending on where you live and how your local energy system is set up. Generally, we 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 to increase 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 to consumers.
- ▶ **Upgrades to the energy supply chain:** Investments by private industry in new power plants, pipelines, transmission lines, and other energy infrastructure improvements can make the system more reliable and efficient, lowering prices.



Source: Energy Information Administration (EIA)

ANNUAL AVERAGE MONTHLY BILL IN THE UNITED STATES



Source: Energy 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. But permitting delays for new pipelines, refineries, and mining and drilling leases are needlessly raising utility bills and prices at the pump. Historically, fossil fuels have been a consistent and reliable source of energy. 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 cause significant 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 regulations can 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 extensive paperwork, 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.

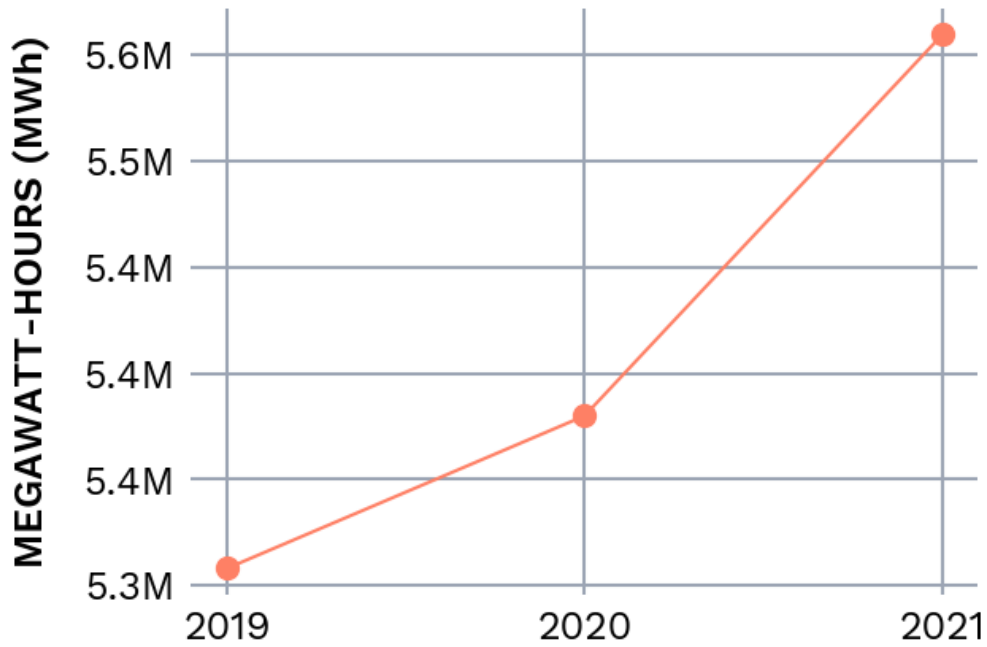
▶ **Limited innovation and investment:** Strict or overly burdensome regulations can deter energy innovation and investment. Complex or outdated permitting procedures and regulatory requirements for existing technologies discourage smaller or innovative energy companies from pursuing projects, leading 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 processes are 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 project can 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.

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

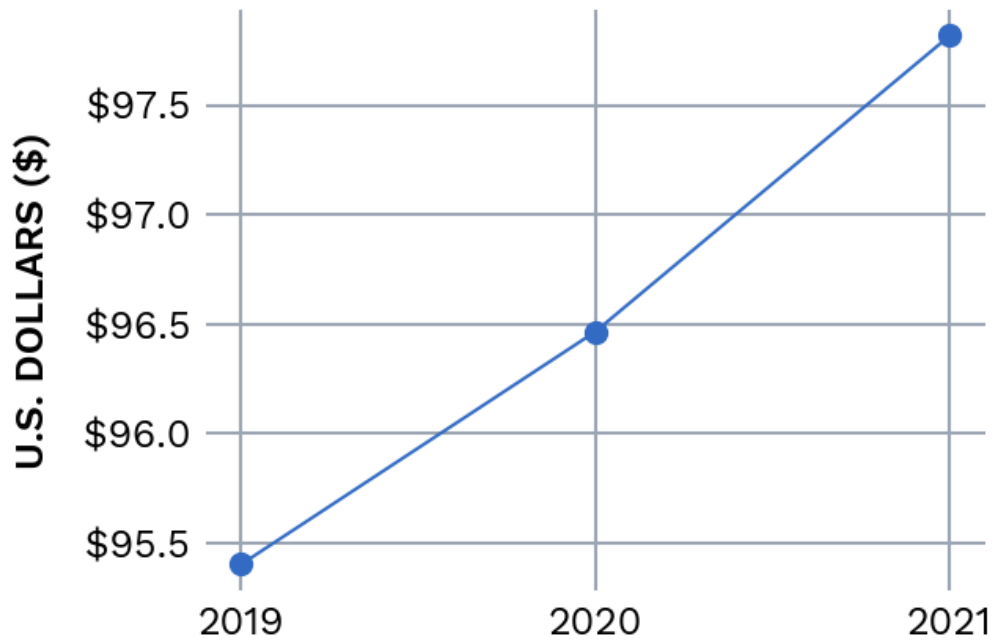
The easiest solution to alleviate the strain of these rising energy costs is upgrading our energy supply chains. The demand for electricity in the United States has been rising steadily, but would begin increasing much more quickly if the government continues to push for electrification instead of diversification. 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 Montana specifically, several of these projects that influence the price consumers are paying for energy utilities have been held up by these federal barriers. The charts below show the price of utilities over time for Montana. If more large projects increasing energy supplies in Montana were built, there would be more competition and prices would decrease.

ANNUAL ELECTRICITY DEMAND IN MONTANA



Source: Energy Information Administration (EIA)

ANNUAL AVERAGE MONTHLY BILL IN MONTANA



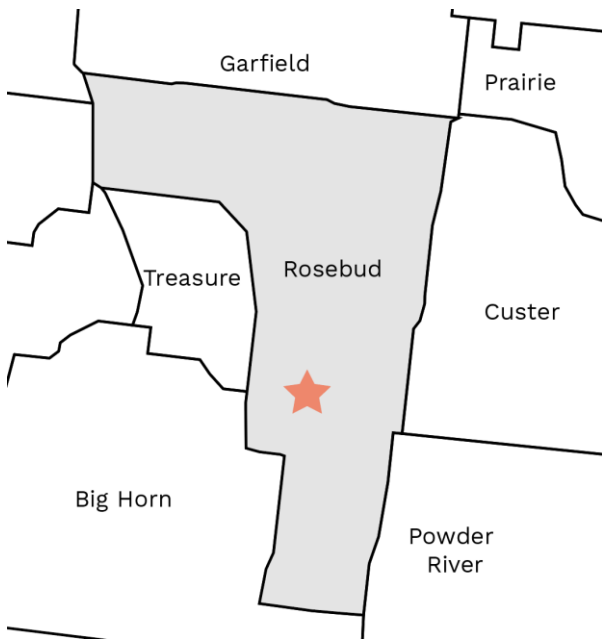
Source: Energy Information Administration (EIA)

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

Rosebud Coal Mine Expansion

Status: Delayed

The Rosebud Coal Mine Expansion project is a proposed expansion of Rosebud’s existing coal mine that would mine over 2,100 acres of coal across a nearly 6,800-acre permit area. The coal from the expansion would be almost exclusively used to power the nearby Colstrip power plant.



- ▶ **2019:** Application approved by Office of Surface Mining
- ▶ **October 2022:** Federal judge rules that project must complete an Environmental Impact Statement

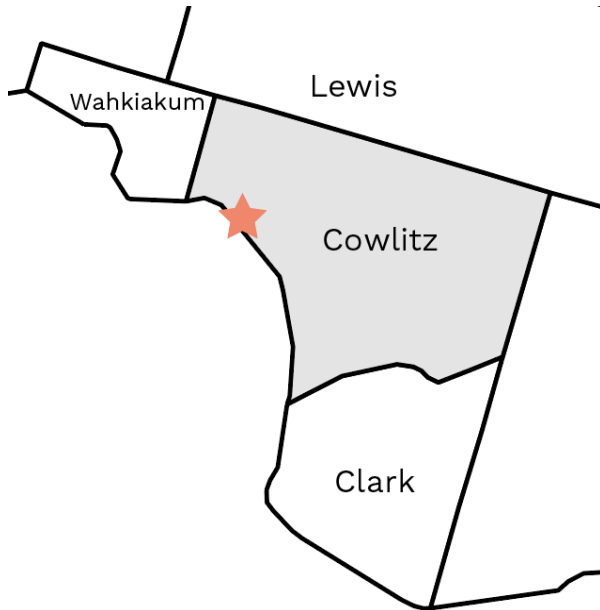
The expansion project was initially approved in 2019 by the federal Office of Surface Mining. After the project was approved, a number of opposition groups sued, claiming that the government failed to sufficiently analyze the project’s greenhouse gas emissions and water impacts. In October 2022, a federal judge ordered the Department of the Interior to conduct a more extensive analysis of the project and complete an Environmental Impact Statement under the federal National Environmental Policy Act. This process is ongoing and construction of the mine expansion remains on hold.

Millennium Bulk Terminal Project

Status: Canceled

Montana has approximately one-third of the country’s total recoverable coal reserves, and, as a result, supplies coal for relatively affordable, reliable power to other nearby states like Washington and Oregon as well as markets abroad. The Millenium Bulk Terminal project was a

proposed \$680 million coal export facility located in Washington state that would have connected Montana’s coal production to new markets abroad. The project was designed to export 5 million metric tons of coal per year, and would have created 91,712 job years (equivalent to one full-time job for one year) and 300 full-time jobs during operations. The project also would have brought in over \$40 million in annual state and local tax revenue once operational.



- ▶ **February 2012:** Permit applications filed
- ▶ **Late 2013:** Targeted construction start date
- ▶ **2015:** Targeted commercial operation
- ▶ **2017:** Washington state denies applications for an aquatic lands lease, a water quality permit, and shoreline permits
- ▶ **June 2021:** U.S. Supreme Court declines to hear the State of Montana’s challenge to the denial of the Clean Water Act permit

The project filed initial permit applications in February 2012, with the hope of beginning construction in late 2013, and commencing operations by 2015. The developers worked with state permitting agencies to prepare a comprehensive Environmental Impact Statement. The Washington Department of Natural Resources denied the project’s aquatic lands lease application, and the state’s Department of Ecology denied a key water permit under the federal Clean Water Act.

As a result, the project filed several lawsuits against these state agencies. In 2021, the U.S. Supreme Court refused to hear a lawsuit filed by the State of Montana itself, deferring to Washington state’s administrative appeals system. The State of Montana’s lawsuit alleged that Washington state had denied the Clean Water Act permit for on invalid grounds focused on climate policy rather than water quality—and claimed this bad-faith impoundment of Montana’s coal from markets abroad violated provisions of the Constitution designed to prevent coastal states from controlling interior states’ ability to engage in commerce. The project was officially canceled soon after the Supreme Court’s decision.

Keystone XL Pipeline Project

Status: Canceled

The Keystone XL project was an \$8 billion project and would have been the fourth phase of the Keystone pipeline system. The Keystone XL Pipeline would have connected existing pipeline terminals in Hardisty, Alberta, Canada and Steele City, Nebraska, by a shorter route (see map)

and a larger-diameter pipe. It would have run through Baker, Montana, where American-produced light crude oil from the Williston Basin of Montana and North Dakota would have been added to the Keystone's throughput of synthetic crude oil from Canada. The project proposed the transport of up to 830,000 crude oil barrels per day from production centers to refineries that process oil into gasoline and other products. The pipeline would have been a massive undertaking, creating an estimated 42,000 jobs in the United States and resulting in millions of dollars of tax revenues.



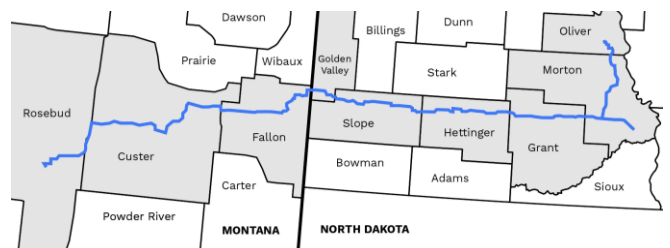
- ▶ **November 2015:** President Obama blocks project
- ▶ **January 2017:** President Trump approves right-of-way application
- ▶ **January 2021:** President Biden revokes permit
- ▶ **June 2021:** Project officially abandoned

In 2015, President Obama blocked the project by withholding a presidential permit for the cross-border segment of the pipeline, causing TC Energy (the company owning the pipeline) to initiate a US \$15 billion lawsuit under the North American Free Trade Agreement (NAFTA). President Trump reversed this course, granting a presidential permit and moving the pipeline closer to completion. As a result, TC Energy suspended its NAFTA lawsuit, but soon a number of lawsuits were filed challenging several of the project's federal agency permits, including approvals under the Endangered Species Act and the Clean Water Act. On his first day in office, President Biden revoked the presidential permit, effectively blocking construction of the cross-border segment. The project was officially abandoned by TC Energy in June 2021.

North Plains Connector Project

Status: Beginning the permitting process

The North Plains Connector project is a proposed \$2.5 billion electricity transmission project. As planned, the project consists of a 385-mile long, high-voltage direct-current transmission line that would connect central North Dakota to Colstrip, Montana. Once completed, it would connect the Montana and North Dakota electric grids, reduce congestion in those grids, and more than double the amount of electricity that could be transferred between the Western and Eastern grids. During construction, the project is expected to create 400 temporary jobs and result in tens of millions of dollars in tax revenue.



- ▶ **January 2023:** Project announced
- ▶ **Summer 2023:** Targeted to begin permit approval process

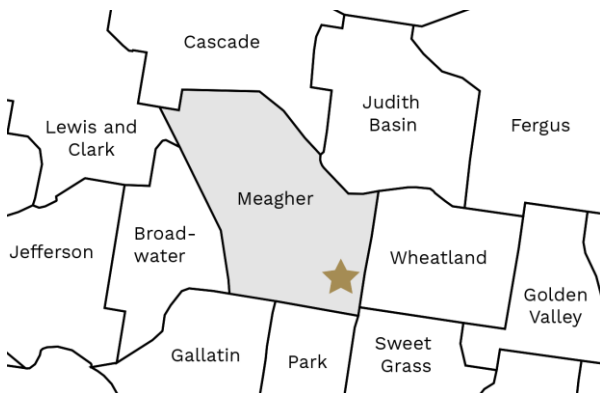
- ▶ **2025:** Targeted permitting process completion
- ▶ **2029:** Targeted commercial operation

The project is currently still in its initial planning and development phase. The developers hope to receive necessary permit approvals by 2025 in order to begin construction, and to become operational by 2029.

Gordon Butte Pumped Storage Hydro Project

Status: In permitting process

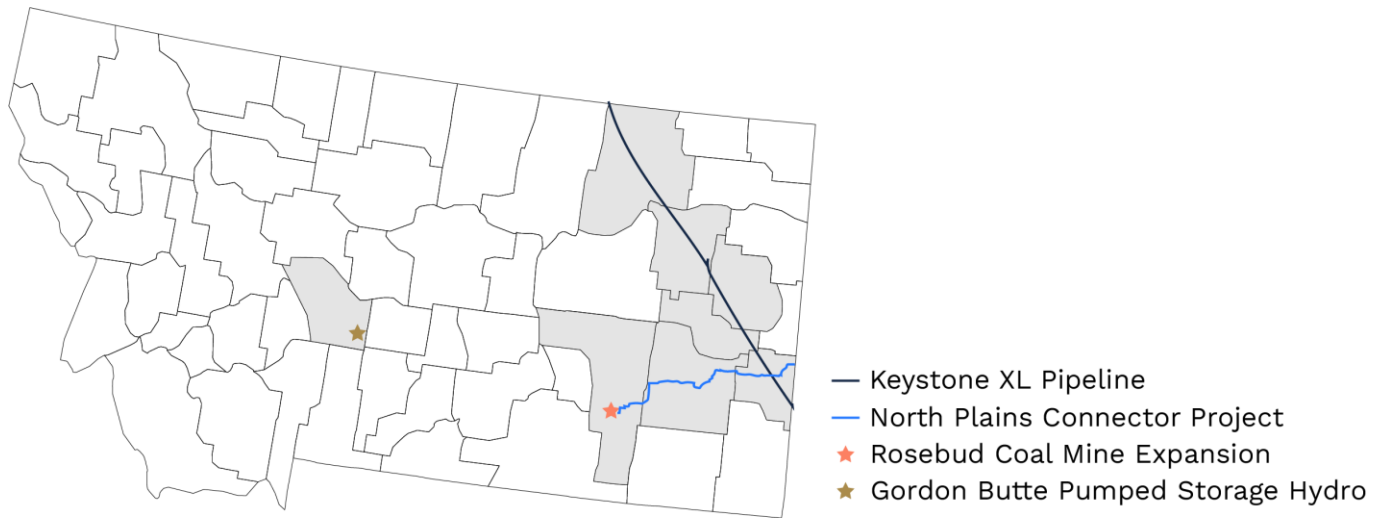
The Gordon Butte Pumped Storage Hydro Project is a planned, \$1 billion closed-loop pumped storage hydroelectricity facility located in Meagher County, Montana. The facility would consist of multiple reservoirs that harness gravity to store energy and increase grid reliability. Water would be pumped to the higher of the two reservoirs when electricity is abundant and then released into the lower reservoir to create electricity at times of shortage.



- ▶ **2013:** Initial permit granted by the Federal Energy Regulatory Commission
- ▶ **2015:** Final License Application filed
- ▶ **December 2016:** Final License issued by FERC
- ▶ **2025:** Targeted construction start
- ▶ **2029:** Targeted commercial operation

The project received its initial permit from the Federal Energy Regulatory Commission (FERC) in 2013 and submitted a Final License Application in 2015. FERC accepted this application and issued the license in December 2016. Developers originally intended for the project to begin construction in 2020 but cited the pandemic and the inexperience of regulators and utilities with pumped storage resources as reasons for delay—a common problem for innovative projects that seek to replace existing methods of power generation, or those being actively favored by the government and regulators themselves. Construction for the facility is now projected to start in 2025 and be completed in 2029.

The Big Picture



In Montana, permitting issues forced developers to shut down two major projects. The Millennium Bulk Terminal project and Keystone XL Pipeline project were both eventually abandoned following lengthy legal battles and after necessary approvals were either withheld or withdrawn. The Rosebud Coal Mine Expansion has been significantly delayed for similar reasons, and now awaits a more extensive National Environmental Policy Act (NEPA) review of the emissions associated with the end use of the additional coal that project would provide access to mine. Gordon Butte Pumped Storage Hydro Project and the North Plains Connector Project have not faced the same level of permitting delay, but they had to undergo lengthy planning processes, in part because of state and federal regulatory requirements—and permitting battles could lie in their future.