

Build begins on Wyoming-to-California power line amid growing wind power concern

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U.S. Interior Secretary Deb Haaland, center, takes part in a groundbreaking ceremony Tuesday, June 20, 2023, for the TransWest Express transmission line south of Rawlins, Wyo. The transmission line will partly parallel the existing PacifiCorp Gateway West transmission system, seen in the background, moving electricity from a planned 600-turbine wind farm to California. Wyoming is having a wind energy boom that could help alleviate climate change but is raising worries among residents that proliferating wind turbines will spoil views, disturb wildlife and kill birds. Credit: AP Photo/Mead Gruver

Portrait photographer Anne Brande shoots graduation and wedding engagement photos at scenic spots throughout southeastern Wyoming's granite mountains and sprawling sagebrush valleys. But she worries what those views will look like in a few years, when hundreds more wind turbines dot the landscape. Wind energy is booming here.

"Dandelions in my yard, you know, when there's four or five, it's OK," Brande said. "When my whole yard is dandelions, I'm just not too excited."

In a state where being able to hunt, fish and camp in gorgeous and untrammled nature is a way of life, worries about spoiled views, killed eagles and disturbed big-game animals such as elk and mule deer have grown with the spread of wind turbines.

On Tuesday, state and federal officials beneath fluttering flags formally broke ground on the TransWest Express, a transmission line that will move electricity from the \$5 billion, 3,000-megawatt, 600-turbine Chokecherry and Sierra Madre wind farm to southern California, a place legally mandated to switch to clean energy. The wind farm will be the country's biggest yet.

Federal regulators gave the go-ahead to TransWest in April. The International Energy Agency and other experts say wind power is crucial to attaining a carbon-neutral world by 2050. Developers here estimate the wind farms will prevent the emission of between 7 and 11 million tons of carbon dioxide a year and provide enough carbon-free electricity to power 1 million homes.

"We want people to say yes—yes to clean energy in the same way that people said yes to fossil energy," Energy Secretary Jennifer Granholm

said at the groundbreaking that also brought out Interior Secretary Deb Haaland and Wyoming Gov. Mark Gordon, a Republican.

Gordon has pledged to make Wyoming not just carbon neutral but carbon negative, looking to renewable energy and technologies such as carbon capture to make it happen.

"As we see climate change, we know we don't have time to waste," said Gordon at the event on a treeless Wyoming expanse where not just TransWest Express but two major PacifiCorp transmission lines will soon extend over the horizon.

But in Wyoming, despite extensive wildlife studies and lengthy federal environmental reviews, there's more skepticism about wind power than when TransWest Express and Chokecherry and Sierra Madre were first proposed 17 years ago.



Wind turbines stand at a wind farm along the Montana-Wyoming state line on June 13, 2022. Wyoming and federal officials will formally kick off construction Tuesday, June 20, 2023, of a massive transmission line project to export wind power from Wyoming to southern California. But despite extensive wildlife studies, design tweaks and clearing of lengthy federal environmental reviews, the projects are now being built amid a more tepid attitude about wind power in Wyoming than when they were first proposed more than 15 years ago. Credit: AP Photo/Emma H. Tobin, File

"I think it's just as simple as too much of a good thing," Brande said.

As elsewhere, opposition to wind farms in Wyoming correlates with proximity to homes and cabins: Chokecherry and Sierra Madre is massive but isolated, and has generated less opposition than some others.

But Brande and rural property owners opposed a 500-megawatt, 120-turbine wind farm soon to be built near the Colorado state line. They lost, but the matter reached the Wyoming Supreme Court.

The contentious county approval process included a [five-hour public hearing](#) in a packed courtroom in Laramie in 2021. Residents expressed a range of concerns, from turbine blades killing birds to construction blasting damaging home foundations.

In neighboring Carbon County, the county commission on June 6 held off permitting for a 280-megawatt, 79-turbine project called Two Rivers, after hearing from people with concerns. Commissioners told the developers to get federal approval first.

The local opposition to a wind farm is a recent development in an area that previously welcomed the economic benefits with few questions, Carbon County Commission Vice Chairman Sue Jones said. Named for its coal reserves that once fueled steam engines, Carbon County adopted an official seal in 2021 that features a wind turbine.

Yet county officials recently required wind farms to turn off their red warning lights except when aircraft approach, responding to public complaints.

The regulation wasn't retroactive. But PacifiCorp, which serves customers in Wyoming, Utah and the Pacific Northwest, retrofitted its wind turbines in the area with the on-and-off pilot warning system anyway, Jones said.

"The companies do try to be good neighbors," Jones said. "But it is starting to show and it is reaching a point where maybe it's too much. It's affecting wildlife habitat. It's affecting the birds and the bats."

In just four years, wind generation capacity in Wyoming has doubled, adding about 600 turbines—the bulk of them in the southeast—since 2020, according to the U.S. Geological Survey.



The future route of the TransWest Express transmission line is seen Tuesday, June 20, 2023, south of Rawlins, Wyo. The transmission line will partly parallel the PacifiCorp Gateway West transmission system, seen in the background, moving electricity from a planned 600-turbine wind farm to California.

Wyoming is having a wind energy boom that could help alleviate climate change but is raising worries among residents that proliferating wind turbines will spoil views, disturb wildlife and kill birds. Credit: AP Photo/Mead Gruver

Chokecherry and Sierra Madre alone will double that amount again—and at least five more wind farms are planned, according to a 2022 [University of Wyoming report](#).

If they all stay on schedule, Wyoming could soon vault from 14th to among the top five states for wind energy, though wind energy is booming elsewhere, too.

Almost 60% of electricity generated in Wyoming, wind power included, isn't used here but goes to other states, according to the U.S. Energy Information Administration.

Increasingly the state's wind energy is coveted by utilities in California, Arizona and the Pacific Northwest.

TransWest Express will move the Chokecherry and Sierra Madre electricity 732 miles (1,178 kilometers) from south-central Wyoming to just outside Las Vegas. Along the way, it will cross northwestern Colorado and Utah, with conversion from direct to alternating current in central Utah.

The wind farm and transmission lines, both projects of The Anschutz Corporation owned by Denver oil and gas billionaire Phil Anschutz, are scheduled to come online around the same time, starting in late 2027.

The transmission line's direct-current section allows efficient, long-distance electricity transfer with no tie-ins to other power lines, while the alternating current segment is less efficient but connects to the rest of the grid.

Wyoming wind averages almost 13 mph (21 kph) day and night, year-round, matching well with daytime solar generated elsewhere. But so far there aren't a lot of ways to get wind power from Wyoming onto the

western U.S. power grid, said Roxane Perruso, TransWest Express executive vice president and chief operating officer.

"So we're going to enhance the ability to move renewables and other power, carbon-free power in the future, around the grid," Perruso said.



Heavy equipment sits at the site of a groundbreaking ceremony Tuesday, June 20, 2023, for the TransWest Express transmission line project south of Rawlins, Wyo., which will move electricity from a planned 600-turbine wind farm to California. The transmission line will partly parallel the PacifiCorp Gateway West transmission system visible in the distance. Wyoming is having a wind energy boom that could help alleviate climate change but is raising worries among residents that proliferating wind turbines will spoil views, disturb wildlife and kill birds. Credit: AP Photo/Mead Gruver

Paralleling TransWest Express in places, PacifiCorp's Gateway South transmission lines connecting Wyoming wind farms to southern Utah are scheduled for completion next year. PacifiCorp's Gateway West lines, already partly built across southern Wyoming, will stretch all the way to the Pacific Northwest sometime after 2030.

While wind power benefits the climate, environmentalists are split over its costs to wildlife. In Wyoming, wind farms pose a risk to golden eagles and sage grouse, a chicken-sized, ground-dwelling bird that tends to avoid high structures that can provide perching spots for predatory birds, said Erik Molvar, of Laramie, executive director of the Western Watersheds Project.

"The real answer is to incentivize the siting of solar panels in urban areas where the electricity's actually going to get used," Molvar said.

Power Company of Wyoming, the Aschutz subsidiary building Chokecherry and Sierra Madre, spent years working with federal regulators on ways to minimize harm to sage grouse and golden eagles, such as tweaking turbine locations to reduce bird collisions. But eagle deaths at wind farms are a common problem, one that often goes unprosecuted.

Wyoming's position as the country's top coal-producer and a major source of oil and gas, meanwhile, has meant an uneasy relationship with wind at times. Wyoming is the only state that taxes wind energy, a \$1 per megawatt-hour charge lawmakers have discussed raising to \$4 or more.

And local resistance could grow. People often don't appreciate what a wind farm with its turbines, lights, roads, power lines and substations will look like, said Jones, the Carbon County commissioner.

"You really have no idea what that's like until it's there. And then you go,

wow. It's an industrial area. A different kind of industry, but an industrial area," Jones said.

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