

Western Spirit transmission lines tower above the interstate and farmlands in Bosque, NM on January 14, 2023.*Photographer: Adria Malcolm/Bloomberg*

Green | Climate Politics

The Bitter 17-Year Saga to Build a Power Line Critical to US Climate Action

The planned SunZia 500-mile transmission line would carry wind power across the Southwest. The fights over approval are just getting started.

By Daniel Moore
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In 2006, Barbara Sultemeier began getting calls from companies across the US, Europe and even Australia, all seeking the rights to build on her small ranch about two hours southeast of Albuquerque, N.M.

It wasn't the land that mattered to the firms. They wanted the wind.

The wind there regularly reached 50 miles per hour, lashing homes, whipping flag poles and sending garbage cans tumbling into neighbors' yards. But what many New Mexicans dismissed as a nuisance, the developers saw as an invaluable resource to be harnessed to power fast-growing cities across the Southwest.

Sultemeier helped organize ranchers who, like her, had been eking out a living on parched land. They weighed the offers and potential impact, and in the end signed on as supporters of SunZia, what would become the largest renewable energy project in US history. A wind farm seemed preferable to housing developments gobbling up ranchland across the state.

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"Everybody came to the agreement that this is a good thing for us," Sultemeier said. "I'd rather see a turbine than a subdivision."

Ultimately, it was not the turbines – about 916 of them spread across a tract 12 times the size of Washington, D.C. – that would stall the $8 billion project. It was the path their wind-generated energy would travel. SunZia called for twin electric transmission lines 20 stories tall to stretch more than 500 miles into Arizona, where they could plug into the grid and deliver power to 3 million people.

SunZia's circuitous, 17-year saga is a window into the approval process for building transmission lines that US energy officials argue are urgently needed to integrate remote wind and solar farms critical to the nation's future.



Wind farm, rangeland,and cattle near Encino, New Mexico. *Photographer: Minesh Bacrania/Bloomberg*

The plan drew raucous public meetings, a novel state government partnership, promises of royalties and job creation, difficult compromises over river crossings and staunch opposition from an Arizona community with a history of beating back development to protect wildlife. Project developers seeking to achieve national clean-energy goals found themselves in grinding battles against groups fighting to protect land values, tourism revenue and migratory bird habitats.

"SunZia is really the first of what I call the 'mega projects,'" said Gary Kother, senior vice president of North America development for San Francisco-based Pattern Energy, which took over the project last year. "It's now been vetted as well and for as long as any infrastructure route has been considered."

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SunZia is among some two dozen projects spanning hundreds of miles and worth hundreds of millions of dollars that renewable advocates say have been stalled by bureaucratic delays. The projects include the TransWest Express from Wyoming to Nevada; the Champlain Hudson Power Express from Quebec to New York City; and the Grain Belt Express from Kansas to Illinois.

The lines, US energy officials say, are needed to meet the Biden administration's climate goals, which include net-zero greenhouse gas emissions from the power sector by 2035.



Western Spirit transmission lines tower above farmlands where cows are grazing in Bosque, New Mexico. *Photographer: Adria Malcolm/Bloomberg*

"We want to see more, more, more buildout," Energy Secretary Jennifer Granholm told Bloomberg Law in an interview after attending the groundbreaking of another transmission line in Arizona in January. Routes can be altered based on local concerns, she said, but "speeding up and facilitating the buildout is the thing that we're most concerned about."

"And we have to do it on all this land that's here," she added.

Even as SunZia barrels toward what appears to be final approval in April, one last hurdle has emerged: a lawsuit filed in late January that contends Arizona officials broke the law by approving a route that slices through saguaro-studded wilderness.

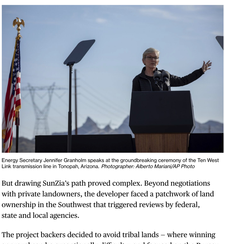
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A gold mine of renewable energy

In 2006, SouthWestern Power Group, a Phoenix-based developer, conceived a really, really big power line, one that would unlock a new pathway for growing wind, solar and geothermal resources.

The name, SunZia, married the sun symbols depicted on the state flags of Arizona, where the line would end, and of New Mexico, where it would start.

The proposal was a relatively early player in the national race to build transmission lines to connect renewable energy, driven by falling costs, better technology and recently established tax incentives to accelerate the replacement of fossil fuel generation. It was one of seven transmission projects fast-tracked by the Obama administration. The other projects would cross through Colorado, Idaho, Minnesota, Nevada, Wyoming, Utah, New Jersey, Pennsylvania, Oregon and Wisconsin.



Energy Secretary Jennifer Granholm speaks at the groundbreaking ceremony of the Ten West Link transmission line in Tonopah, Arizona. *Photographer: Alberto Mariani/AP Photo*

But drawing SunZia's path proved complex. Beyond negotiations with private landowners, the developer faced a patchwork of land ownership in the Southwest that triggered reviews by federal, state and local agencies.

The project backers decided to avoid tribal lands – where winning approval can be exceptionally difficult – and focused on the Bureau of Land Management, which was viewed as more amenable to development on federal lands than other agencies. They carefully

assessed where the line might cross desert rivers and canyons and whether it edged too close to White Sands Missile Range, a military installation that occasionally orders evacuations during weapons testing.

"It's a lot of art, there is some science, and there's an awful lot of judgment," David Getts, the developer's general manager, said in an interview. "The question is not: 'Why can't you just put it somewhere else?' The question is: 'If you put it somewhere else, what are the impacts over there?'"

In September 2009, SouthWestern Power submitted its application to BLM, and took a first step toward winning approval in New Mexico by signing a memorandum of understanding with the state's newly formed Renewable Energy Transmission Authority. They promised an "extensive" public involvement process – with hopes to be up and running by 2013.

New Mexico's RETA can lure developers with tax breaks, bond sales to finance projects and eminent domain authority. RETA can also partner with developers and even own a finished line – a show of unified political support from a board with representatives from the state energy and treasury departments and appointees from the state House, Senate and governor's office.

"We knew we were sitting on a gold mine of renewable energy resources," said Fernando Martinez, who led the state energy office when the agency was formed and has since become RETA's executive director. "It's not just rich developers coming to take advantage of the little guy. No, these are real projects that can benefit the state and benefit our grid."

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RETA started small. In 2010, it issued $50 million in bonds to finance a 32-mile line connecting to a wind farm, aptly called the High Lonesome Mesa, that powered 30,000 homes in central New Mexico. But fickle financing and permitting setbacks put other early projects on a shaky footing.

In 2011, Republican Susana Martinez succeeded New Mexico Gov. Bill Richardson, a Democrat and former US Energy Secretary, and came into office pledging steep funding cuts to address a state budget deficit. RETA temporarily lost its paid staff and "all but had to shut the doors," its executive director recalled.

Not until 2015 did the Bureau of Land Management, after seven years of review, finally approve SunZia's route.

But unlike interstate natural gas pipelines, transmission lines need state backing, and the state capitals are often where project detractors get their best shot to block the plan.

'Flyover' country fights back

The route BLM approved cut across the Rio Grande near Socorro, New Mexico, a picturesque town of 9,000 south of Albuquerque where thousands of snow geese, sandhill cranes and ducks fill the skies each fall.



Snow and Ross's geese fill the sky at dawn at the Bosque Del Apache National Wildlife Refuge. *Photographer: Adria Malcolm/Bloomberg*

Deborah Caldwell, executive director of the Friends of the Bosque del Apache Wildlife Refuge near Socorro, worried about the line's impact on migratory birds. But she also saw the birds as a way for her hometown to bounce back.

Socorro County has double the national poverty rate and about half the per-capita income – a victim of broader socioeconomic challenges facing small-town America. It depends on tourism linked to wide-open skies and unspoiled scenery that draw hikers, wildlife enthusiasts and film and television crews. Recreation generated $16 million a year for the Socorro area, according to 2017 estimates, and an annual migratory bird festival could haul in as much as $3 million.



Deborah Caldwell *Photographer: Adria Malcolm/Bloomberg*

"There's no two ways around it," Caldwell said. A transmission line would have a big impact "on an area that can least afford it."

In local meetings, the conservationists bonded with strange bedfellows: cattle ranchers and chili farmers worried about land values and the military community concerned about operations at the missile range.

Adren Nance, a rancher and Socorro County attorney, became a voice for the united opposition in Santa Fe, the state capital. In 2018, he filed a motion urging the New Mexico Public Regulation Commission to reject the application.

SunZia's proposal treated the county like a "flyover area," hitting the local economy while providing no real benefits, he recalled in a recent interview.



Birders and photographers gather on the marsh edge during sunrise at the Bosque Del Apache National Wildlife Refuge. *Photographer: Adria Malcolm/Bloomberg*

But those Santa Fe hearings had another side: a mostly silent crowd of ranchers with cowboy hats from the windswept eastern part of the state. The group was corralled by Sultemeier, a rancher and school district business manager.

She and other ranchers called themselves the Corona Landowners Association. Over the years, they had learned to work with the developers.

They had negotiated with the companies to include setbacks and exclusion zones, and pressed for a $50,000-a-year community enrichment fund.

The contracts varied, but most ranchers got wind payments that likely at least matched their annual ranching revenue, Sultemeier said. A typical small ranch in the region yields on average $40,000 a year, she estimated. (The company would not give any estimates of payments.)



Adren Nance *Photographer: Adria Malcolm/Bloomberg*

In exchange, Sultemeier organized letters of support for SunZia to federal and state officials. And when the battle moved to the state level, the developers called her to rally the troops and head to the capital.

"When you fill a room with black hats, it's pretty powerful," she said.

Nance and the coalition of opponents ultimately succeeded in at least stalling the project: In September 2018, the commission rejected SunZia's application, citing a lack of detail about the line's route. But its order allowed the company to refile.

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To Sultemeier, that decision was just "a baby step" back. "We were too far in the process," she said.

After the New Mexico rejection, SunZia amended the route, refiling an application with the BLM in 2020. Now, the line would cross the Rio Grande at a different spot, identified by putting GPS backpacks on migrating birds. It would install reflective diverters at river crossings to make the lines more visible to birds. And it would avoid White Sands Missile Range altogether.

SunZia's new commitments alleviated the worst of conservationists' concerns.





Ducks and geese in a marsh at the Bosque Del Apache National Wildlife Refuge. *Photographer: Adria Malcolm/Bloomberg*

"Look, this science is telling us this is the best place to cross," said Jon Hayes, executive director of Audubon New Mexico. "The science also tells us that we need to build out renewable energy to allow us to have birds in the future, so this seems like a good compromise."

Caldwell worried the line would be the first step in branding the area as an energy transmission corridor but acknowledged its route is "much better than where we started." Nance, the Socorro County attorney, called the resolution a "happy medium" for all parties, noting that the county will get roughly $1.8 million from the developers as part of a community benefits agreement.

Months later, SunZia's backers entered into a co-development deal with RETA, the highest-level partnership. By state law, projects co-developed with RETA are spared a full review by the New Mexico Public Regulation Commission.

Last July, Pattern Energy purchased the SunZia project from SouthWestern Power Group, hoping to ride momentum from its completion of a neighboring wind-and-transmission project called Western Spirit.

When they acquired it, SunZia appeared to be headed toward a groundbreaking. It had garnered state approvals and awaited only final approval from the BLM. That decision is expected to come in April based on a final environmental impact statement the agency released this month.

But one more hurdle has emerged.

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Playing hardball

In January, after New Mexico officials had signed off on the project, residents of the San Pedro Valley in Arizona called a meeting of their own.

Eleven people sat in a circle before a fireplace in the Cascabel Community Center, drinking coffee and eating muffins. The residents and conservationists had spent years guarding wildlife corridors, fighting paved roads and an interstate bypass proposal – and, since at least 2009, opposing the SunZia line.

Leading the charge, often on his own dime, was Peter Else, a retired University of Arizona agriculture researcher and chairperson of the Lower San Pedro Watershed Alliance, an all-volunteer conservation group of about 100 landowners.

Confronted with the line's final approval, the community raised funds for Else to hire a Phoenix-based law firm, Tully Bailey, to expedite a new court challenge.

"If this corporation is going to play hardball, we will, too," Else said.



A Sandhill Crane takes flight at the Bosque Del Apache National Wildlife Refuge. *Photographer: Adria Malcolm/Bloomberg*

Else's complaint, filed a few days later, argues in part that Arizona regulators did not hear evidence SunZia met the legal standard of providing an "adequate, economical and reliable supply of power." The developers did not say exactly how much power Arizona would receive or whether it would be cheaper, they argued.

"Had it considered those factors, these lines would never have been approved," its complaint says. It asks the court to vacate the state's approval, clarify the law and reconsider the developer's request.

The Arizona Corporation Commission, the state agency that approved the route, and Pattern Energy defended the regulator's decision and asked the judge to dismiss the complaint. The two parties' responses disagreed on one crucial point that could play out in coming weeks: The commission argued SunZia can't begin construction without getting signoff from regional electric grid reliability officials, while Pattern argued it can.

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The commission and Pattern Energy both declined to comment on the pending litigation.

The Biden administration has been supportive of SunZia, just as the Obama administration was. In November 2022, the White House cited the project as an example of its efforts to expedite thousands of miles of new and upgraded transmission lines.



Phoebe Suina *Photographer: Adria Malcolm/Bloomberg*

Two months later, Granholm, the US energy secretary, stood with Vice President Kamala Harris at the groundbreaking of another transmission line, the Ten West Connect, outside Phoenix. That eight-year-old project had also been rerouted – to avoid popular recreation areas, the Kofa National Wildlife Refuge and tribal lands.

Winning over the opponents is a painstaking but critical part of the process, as SunZia has proven in New Mexico.

Phoebe Suina grew up there in the pueblos of San Felipe and Cochiti. She now works as an environmental engineer and consultant to Native American tribes in the state, and serves as a RETA board member. She was optimistic pueblos and other communities could ultimately see the benefits from the lines, even possibly getting an ownership stake in them.

"It's within our blood, it's within our bones, it's within our DNA to try to balance," Suina said of pueblo culture. But, she said, regulators must do the hard work of community engagement. "Sometimes," she said, "you gotta go slow to go fast."

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