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# Rich in Coal, a Tribe Struggles to Overcome Poverty

By ERICA GIES

SAN FRANCISCO — The Crow Nation in southeast Montana has long dealt with unemployment of nearly 50 percent. To create more jobs, Crow leaders are focusing on developing the nation's energy resources.

Sparsely populated and beautiful, with rolling plains and unusual rock outcroppings, the Crow reservation is home to about three-quarters of the tribe's 12,144 enrolled members. Their land lies in the Powder River Basin, an epicenter of U.S. energy development that supplies more than 40 percent of the country's [coal](#). In spite of the Crow Nation's long struggle with poverty, it is coal rich, with more than 9 billion tons of the fossil fuel.

Coal development might seem like an obvious step, and indeed, since 1974 the tribe has leased coal reserves to Westmoreland Resources at the Absaloka Mine near Hardin, Montana. The mine ships as much as 7.5 million tons of coal annually. But execution of a new coal project has proved difficult, and some tribal members are pursuing wind development as an alternative.

In 2008, Crow tribal leadership announced a 50-year, \$7 billion deal with Australian-American Energy Co. to mine its coal and build a coal-to-liquids plant, or C.T.L. The technology has been mostly uneconomical since its invention in 1920s Germany. But now, with technology improvements and higher prices for crude oil, those numbers are beginning to change. Nevertheless, there is just one commercial-scale C.T.L. plant operating in the world at the moment, in South Africa, according to the World Coal Association.

The tribe was attracted to the project, called Many Stars, in part because it claimed to be environmentally friendly in capturing and sequestering carbon dioxide generated by production.

“With all this coal we have, one component of the coal monetization has to be state-of-the-art clean coal and addressing [climate change](#), for long run utilization of coal,” said Bill Watt, Crow tribal attorney.

But claims that C.T.L. has a light environmental footprints have been disputed. A 2007 report

from the Natural Resources Defense Council, an environmental organization, said C.T.L. created 8 percent more carbon dioxide emissions than standard gasoline, even when the emissions were captured for reuse or storage.

And it might not be. A study earlier this year from the Massachusetts Institute of Technology found that, in the near term, C.T.L. projects would not use carbon capture and storage because the added cost would be uneconomical.

In any case, the Many Stars project stalled this year because the energy company was unable to raise the additional investment that it needed.

“Continued uncertainties at the federal level have made it difficult to find additional support in the financial markets for a C.T.L. project,” said Dick Lyon, who is global projects director for Australian-American.

In May, the tribe moved to terminate the agreement because of the lack of progress. On May 18, the energy company sued the tribe in a U.S. court in Delaware to prevent termination. A few days later, it agreed to negotiate and by July it had agreed that Australian-American would help the tribe to find another investor, with a “stronger ability to self-finance,” Mr. Lyon said.

A call for competitive bids was issued Oct. 6 through Pritchard Capital Partners, in Covington, Louisiana. Bids are due by Dec. 1, Mr. Lyon said.

From the beginning, the proposed C.T.L. plant has been divisive among Crow tribal members. A group called the Crow Allottees Association feared their water would be taken or polluted by the project. In its place, they are planning wind development for their land.

Division among the Crow tribe has historical roots in the General Allotment Act of 1887, a bid by the U.S. government to grab land and disrupt the social cohesion of communal tribes by dividing up reservations into small land parcels, individually owned.

The Crow tribe now collectively owns just 20 percent of its original reservation land. Crow allottees individually own another 45 percent, and non-Indians own the remaining 35 percent, according to the Bureau of Land Management. As a result of inheritance, many allottee parcels are now jointly owned by multiple family members.

As originally proposed, the Many Stars project would strip-mine 38,000 tons of coal a day to make 50,000 barrels of diesel gasoline or aviation jet fuel. It would deliver 3,000 to 4,000 construction jobs and 700 to 900 permanent jobs in mine and plant operations. The energy company has also invested in local education, offering scholarships and supporting the

development of vocational and professional programs.

Such enticements, however, have not swayed the allottees' association.

"Any kind of extraction would damage the adjacent allottees' land," said John Dust, an association member.

"Water pollution would likely be an issue," said Willis D. Weight, an engineering professor at Carroll College in Helena, Montana, who specializes in hydrogeology and has been consulted by the allottees' association.

Water consumption is also a potential hurdle. Various figures have been bandied about, the lowest being 1.3 billion gallons a year, or 4.9 billion liters, to operate the liquefaction plant. But even if that optimistic figure is attained, additional water would be required to mine the coal, Mr. Weight said.

While the actual water consumption figures remain murky, what is clear is the highly contentious nature of a recent water deal, the Crow Water Rights Settlement Act of 2010.

Because "the federal government acted on behalf of the allottees without our permission," the act amounts to a water grab, done in part to supply the plant, said Richard White Clay, president of the Crow Allottees Association.

Mr. Weight agreed, saying, "Given that the water compact set aside \$20 million for energy development, my opinion is that the tribal officials were 'inspired' to make the deal."

The act would dissolve the allottees' water rights and give water to the tribe to be managed under a permit system. The act would also ratify an older document, the Crow Tribe-Montana Water Rights Compact, which makes the Crow tribe's water rights junior to the state of Montana, said Mr. White Clay.

Cedric Black Eagle, the Crow tribal chairman, dismissed the allottees' concerns, saying the tribe's water rights could now be protected in court. Previously, he said, the tribe had only a water claim. "To have a technical water right, we had to go through this process," he said. "We can market the water now. We can utilize it for industry."

The Many Stars project has received broad political support in Montana, most notably from Governor Brian Schweitzer, who praised it as "clean-coal technology," saying it offered the country energy security and the Crow tribe economic benefit and jobs.

The federal environment is less encouraging. "This emerging business sector is facing uncertainties regarding whether U.S. energy policy will have a place for C.T.L.," Mr. Lyon said.

But there are other possible destinations for Crow coal, most notably Asia. A proposed export terminal in Washington state is stalled by local controversy: but if and when such a facility opens, shipping coal to Asia would be a real possibility, said both Mr. Lyon and Mr. Watt. The domestic coal market in the United States is currently oversupplied, they said.

While the C.T.L. project has languished, the allottees' association has been moving steadily forward with wind development, attracted by its more promising political profile, by the fact that it consumes no water and by its less imposing physical footprint that would allow members to continue ranching and farming on their land.

Allottee landowners are negotiating with Zephyr Wind Energy, based in Bozeman, Montana, which has a joint development partnership with Midwest Wind Energy of Chicago and Edison Mission Energy of Irvine, California.

The landowners would earn annual lease payments for 20 years, with options to extend another 20 years. Negotiating with multiple allottees can be complex, said Mike Donahue, the owner of Midwest Wind Energy, but it is similar to other wind projects. "We have them form a landowner negotiating committee," he said.

The companies are currently testing the wind resource, hoping to build 350 megawatts of capacity. So far the data look promising, Mr. Donahue said.

"The most difficult aspect of developing a wind farm is finding access to adequate transmission," he said. "One of the highlights of this area is a [hydroelectric](#) generating facility with several transmission lines radiating out."

The developers, however, do not know whether there is enough spare transmission capacity on those lines to accommodate their project.

The Crow tribal leaders are also looking into the possibilities of wind development, but have been unable to reach a deal with the Midwest partnership. They are now looking for other partners. The tribe also has plans to develop additional hydroelectric power on the Bighorn River via a dam downstream from the existing plant, Mr. Black Eagle said.

"The Crow Water Rights Settlement Act provides the tribe with the exclusive right to get it built within a period of time," Mr. Watt said. "We want to take advantage of that term."

As for the C.T.L. plant, the Crow tribe and Australian-American hope to have a new partner lined up by the end of the year, Mr. Lyon said. "This project continues to have all of the right elements: a strong and robust coal source, an excellent counterparty in the Crow tribe, strong

local, state, and regional support,” he said.

Energy development is critical to the tribe’s future, said Mr. Black Eagle. “With the unemployment position that we’re in, we believe the water settlement has given us an opportunity to explore these energy projects, whether it be wind, water, or coal, as ways to help ourselves,” he said.