

## The Changing Landscape Of The Southwestern Energy Market

09/15/2013

*Albuquerque Journal (NM)*

Sept. 15--New Mexico has been swept up in a roaring national debate about climate change and the future of fossil fuels.

Federal regulations to control emissions that cause haze around coal-fired power plants is forcing Public Service Company of New Mexico to shut down half of its San Juan Generating Station near Farmington, ushering in the most profound changes in the state's electric system in decades.

Now, with more government controls in the works to limit toxins and cap carbon dioxide emissions for the first time, PNM faces uncertainty about how much longer it can rely on coal-generated electricity and what energy resources will eventually replace that power.

PNM is not alone. Utilities across the country are struggling with those questions as President Barack Obama prioritizes policies to slow climate change and promote renewable fuels.

The government's efforts, in turn, are firing up demands for rapid change by environmentalists and renewable-energy advocates, while generating acrimonious debate with the coal industry and others who either argue for continued reliance on fossil fuels or who advocate a much slower transition to alternatives.

Consumers need to pay attention, said Pat Lyons of the New Mexico Public Regulatory Commission, because the outcome of today's debates will have long-lasting impacts.

There will be impacts on consumers in terms of where they get their electricity, the environmental consequences of energy consumption and how much people will pay to continue switching their lights and appliances on and off.

"We're concerned about the impact of all these things on ratepayers," Lyons said. "At the PRC, we look at all these things to determine how the changes will affect customers' bills while maintaining the reliability of the electric system ... "

Given the federal regulations coming down the pike, the haze rules that led to PNM's agreement in February to shut down two of the San Juan plant's four units may be just the tip of the iceberg in terms of long-term costs for keeping the plant alive.

### Huge coal cutbacks

That generating station, combined with PNM's minority stake in the nearby coal-fired Four Corners Power Plant run by Arizona Public Service, have provided more than 60 percent of the electricity consumed by PNM customers in New Mexico for decades. Both plants, which came on line more than 40 years ago, account for more than 40 percent of PNM's total electric generating capacity.

PNM negotiated the San Juan overhaul to comply with EPA air quality standards that aim to control nitrogen oxide emissions, which cause haze. Under the agreement, which the EPA still must formally approve, PNM and eight other minority owners at San Juan would shutter about 838 megawatts of the plant's 1,701 MW of net generating capacity.

The costs would be shared among the owners, with PNM spending about \$430 million to shut two boilers by the end of 2017, install more pollution controls on the remaining two units, and then procure electricity from other sources to make up for lost capacity. That includes construction of a new natural gas-fired plant.

Those changes would reduce PNM's coal-generated electricity to about 27 percent of its total generating capacity. The rest would be made up by natural gas-fueled generation, electricity from the Palo Verde Nuclear Generating Station in Arizona, and a mix of renewables that include solar, wind and geothermal.

#### Rate hikes coming

The costs for all that will show up on customers' electric bills after 2018. PNM projects about a 15 percent rate hike, or roughly an extra \$70 annual charge for the average customer.

"Eventually, all this will end up in a rate case at the PRC," Lyons said. "It's a huge cost to shut down those two coal units."

But before the San Juan overhaul is even completed, PNM will face a host of other regulations that the EPA is now developing.

That includes new air quality standards already approved by the EPA to lower mercury and some other emissions, which utilities must comply with by 2017, said Rob Brenner, a senior fellow at Duke University's Nicholas Institute for Environmental Policy Solutions who served for 32 years at the EPA.

The EPA is also reviewing new controls on coal ash disposal and on cooling towers to avoid discharging warm water into waterways to protect fish, Brenner said. After that, coal-fueled power plants will face perhaps the biggest changes to date -- forthcoming limits on carbon dioxide emissions for new and existing generating stations.

#### More EPA regs

The EPA already has drafted a proposed rule for CO2 limits on new plants that will be reintroduced for review this month. And, in a major policy shift in June, Obama ordered the EPA to design another proposal to limit, for the first time, CO2 emissions from existing plants as part of a more aggressive government plan to attack climate change.

Coal-fired generators are in the crosshairs because power plants account for about 40 percent of the nation's CO2 emissions.

"All these things will have significant impact on the utility industry," Brenner told the Journal . "Utilities will have to make some pretty tough decisions as the landscape changes."

Utilities across the country have already closed down many coal-fired generators due to EPA's current nitrogen oxide and mercury standards, as well as the rapid drop in natural gas prices from the shale-gas boom.

Since 2010, utilities have either shuttered or have announced plans to retire 149 coal-fired power plants nationwide, according to the Sierra Club.

And the industry-led American Coalition for Clean Coal Electricity says at least 200 more plants will be shut down in the next few years as a result of EPA regulations.

Most of the plants that have closed or are planned for retirement are older installations that generally have operated for about 60 to 80 years, Brenner said.

But with the coming CO2 limits on existing plants, combined with EPA's other regulations, a lot more younger coal plants will be affected, such as the San Juan Generating Station.

PNM believes its current agreement to shut down half of the San Juan plant will help the utility weather future federal regulations. That's because, apart from controlling nitrogen oxide, the plant overhaul will also lead to sharp cuts in other emissions, including 50 percent or more reductions in CO2, mercury and particulate matter.

PNM Resources President, Chairman and CEO Pat Vincent-Collawn said that, if the EPA sticks to a government target of reducing greenhouse gas emissions to 17 percent below 2005 levels by 2020 -- a commitment made by Obama in 2009 -- then PNM will be "in great shape" to meet the limits at San Juan.

Coal still important

PNM says coal generation is still its cheapest source of electricity. If it can continue operating half the plant, then the company can more easily assure the long-term reliability and affordability of the electric grid.

Nevertheless, PNM will face mounting pressure from local environmental groups and clean-energy advocates to shut down the rest of San Juan and replace it with more renewable fuels.

In fact, opponents question the assumption that coal is still cheaper than other fuels.

David Van Winkle, energy chairman for the New Mexico Coalition for Clean Affordable Energy and a board member at New Energy Economy, said coal plants have become more expensive while alternatives like gas and renewables decline in price, and those trends will increase with more environmental regulations.

"Coal used to be an inexpensive resource, but it's not anymore," Van Winkle said. "Coal is an economic problem getting worse, and then you have all the environmental issues associated with it."

Steve Michel, chief counsel for Western Resource Advocates, said PNM's ratepayers and shareholders would be better off in the long term with more aggressive measures to move away from coal.

"Climate change is a big issue that the EPA is dealing with now, and utilities will have to face that," Michel said. "If utilities continue to lock down on dirty resources, saying it's the cheapest way forward for customers, they'll suffer, because it won't be the cheapest way forward. Smart utilities will get out in front of these issues and manage them in the smartest way possible."

Michel said his organization and others will likely push to shut down more San Juan boilers when the joint ownership agreement between PNM and its eight partners -- which include local counties, municipalities and power companies -- is up for renegotiation in 2023.

"This first agreement (to shut half of San Juan) is a good step forward, but it's not the end of coal issues for PNM, and I think they understand that," Michel said.

Ron Talbot, PNM senior vice president and chief operating officer, said the company is aware such pressures will grow.

"As of this point, we expect to run the other two (San Juan) units indefinitely," Talbot said. "But if I were asked five years ago whether we would shut down the two units we're shutting down today, the answer probably would have been 'no,' so that possibility is out there."

That's got large energy users concerned.

Peter Gould, general counsel for New Mexico Industrial Energy Consumers, said his association is not opposing the plan to shut down half of San Juan, but businesspeople are worried about the economic consequences of forthcoming regulations.

"If we keep raising the costs, it will have a big impact on industrial manufacturing rates," Gould said. "It seems there's a rush to change everything as fast as possible, almost in a panic, when instead we should be working together to plan for changes over 15 or 20 years."

PRC members say the state must work to balance the transition with realistically paced changes that keep the lights on for consumers without breaking their pocketbooks.

"I'm a believer in climate change, and I'd like to see renewable resources tapped," said Commissioner Valerie Espinoza. "But we need to minimize the impact, because a lot of people are living on fixed incomes. As regulators, we need to make sure people can turn on their lights and heat their homes, while still being able to pay their bills every month."

PNM process on future power

Consumers can learn more about PNM's power supplies and future outlook while providing feedback to the company through PNM's integrated resource planning process, which began in July.

The utility is required to file an integrated resource plan, or IRP, with the state Public Regulation Commission every three years to identify the most cost-effective sources of electric generation to meet regulatory requirements and energy needs during the next two decades. The new plan will be developed through a yearlong public process that includes public educational forums and open meetings for participants to give feedback to the company.

"The more voices that are involved in this process, the better the outcome will be," said PNM Chairman, President and CEO Pat Vincent-Collawn.

To learn more, visit [www.pnm.com/irp](http://www.pnm.com/irp).