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PacifiCorp's Reliance on Coal Plants Brings Utility to Expensive Juncture

Ted Sickinger| June 25, 2011

Tim Kupsick / Casper Star-Tribune

When it comes to power plant pollution, the spotlight in Oregon has been fixed on Portland General Electric and its plan to shut the Boardman coal plant by 2020 rather than invest $500 million to keep it running under stricter air-quality mandates.

But when it comes to coal, PacifiCorp is king. That dependence is driving Oregon's second largest utility to a very different strategy when it comes to impending regulations: to stay the course with coal, despite the expense.

PacifiCorp relies on a fleet of 26 coal-fired boilers at 11 locations in Montana, Wyoming, Utah, Arizona and Colorado. Those plants provide almost two-thirds of the electricity consumed by customers in its six-state territory, and their low-cost output partly explains why Pacific Power's rates in Oregon remain lower than PGE's.

So it's no wonder that company executives were in Washington, D.C., this month to lobby against the quick imposition of new clean air rules proposed by the U.S. Environmental Protection Agency. Cathy Woollums, chief environmental counsel for PacifiCorp's parent company, told lawmakers that compliance within the short time frame proposed by the agency would cause the cost of plant retrofits and new generation to skyrocket as parts and labor shortages outstripped supply.

Woollums estimated that PacifiCorp would face $1.3 billion in additional environmental compliance costs, almost 40 percent of the value of its coal fleet. She didn't translate those costs to rate increases, but said the impact would be concentrated in a narrow window between 2013 and 2015, potentially forcing early plant closures and exacerbating rate hikes from other investments in new gas plants, transmission projects and renewable power.

But while it lobbies against the new rules in Washington, PacifiCorp is telling ratepayers and state regulators that plant retrofits to keep the coal fires burning are the least-cost, least-risk strategy to meet demand.

"For baseload generation, it's either gas, coal or nuclear," said Micheal Dunn, president of PacifiCorp Energy. "There aren't a lot of other options out there, and we believe that retrofitting the coal units is the most economical option for our customers."

That question will be pivotal as state regulators and ratepayer advocates scrutinize the company resource plans over the next few years. Pacific Power has raised residential rates in Oregon by 49 percent since 2005, when it announced its takeover by MidAmerican Energy Holdings, a subsidiary of Warren Buffett's Berkshire Hathaway conglomerate. Part of that rise was driven by the $1.2 billion in environmental upgrades that PacifiCorp has made during that period. Indeed, MidAmerican's chief rationale for buying PacifiCorp was as an investment vehicle for Berkshire Hathaway capital.

PacifiCorp spent $345 million on emissions controls in 2009 and an additional $398 million in 2010. Much of that spending went into units at one plant, and helped drive the 4.4 percent and 8.4 percent rate increases PacifiCorp's Oregon customers saw in 2010 and early 2011, respectively.

Emerging regulations on ash disposal and treatment of cooling and wastewater are likely to require further investments. The company also has a pending request with Oregon regulators to increase rates by 5.2 percent to cover high-

er power costs, driven in part by rising costs for coal. Many experts say the trend will continue because of increased domestic and foreign competition for Wyoming's Powder River Basin coal.

Importantly, none of the planned coal plant retrofits addresses their enormous output of carbon dioxide, the chief culprit in global warming. Should Congress or individual states adopt a carbon tax or cap-and-trade system, the added cost to PacifiCorp ratepayers would be significant.

"They've obviously got a problem," said Maury Galbraith, an economist with the Oregon Public Utility Commission. "Some of (the coal plants) are fairly new and up to date. They'll probably have to make heroic investments to update some. And some they may eventually want to retire."

Long-term commitment

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The real risk of PacifiCorp's strategy is that incremental investments to address ongoing regulatory changes will commit ratepayers to running the coal plants long term, said Bob Jenks, executive director of the Citizens' Utility Board, an advocacy group for residential ratepayers. Each of those investments may make sense in isolation, he said, "but nobody's asking the question whether all these together are cost effective versus going with a different technology."

The holdup on that analysis is regulatory uncertainty, reflecting the fact that regulations, not demand growth, are now driving the bulk of utility investments and cost increases.

The question is hardly isolated to PacifiCorp. Utilities across the country have already canceled plans to build more than 150 new coal plants in the past four years, according to the shareholder activist group As You Sow. A 2010 study by The Brattle Group, a Boston-based consulting outfit, found that 20 percent of the coal generation capacity in the nation could be retired if currently contemplated mandates are passed. The study estimated that compliance costs for plants that stay open could total $180 billion.

In the semiannual resource plan that PacifiCorp finalized this year, it analyzed myriad power-generation mixes under different operating scenarios. The preferred portfolio that emerged included up to three new natural gas plants, wind farms to comply with state renewable power mandates and lots of energy efficiency.

In contrast to PGE, which says it's better for ratepayers to shut Boardman by 2020 to avoid the most expensive retrofits, PacifiCorp doesn't envision closing any of its coal plants before 2025, when one or two units could close.

Regulatory uncertainty

The key variables in that calculation are the price of natural gas as a replacement fuel and the price of any eventual tax on carbon dioxide emissions. If there's no carbon tax, the company says, the utilization of its coal fleet is likely to remain steady at 80 to 90 percent. Alternatively, if PacifiCorp faces a combination of low gas prices and high CO_2 tax, it could reduce the coal plant utilization rate to 35 percent by 2030. Most scenarios included a reduction in utilization, meaning ratepayers would foot the overhead for running plants less efficiently.

PacifiCorp said regulatory uncertainty is the key caveat, but it concluded that under currently expected scenarios, its coal fleet remains economically viable.

The analysis included some, but not all, the costs of expected environmental upgrades. PacifiCorp's Dunn downplayed the risks from water treatment and ash disposal, for example, as he said those costs would be modest. The key factor in keeping coal plants going is fueling costs, he said, noting that it's still 2 1/2 to three times more expensive to run plants with natural gas than coal. PacifiCorp buys two-thirds of its coal supply on the market and gets one-third from

company-owned mines. It says that blend results in a stable, low-cost coal supply.

But those costs are rising, too. The company recently told regulators in Utah that coal prices had increased nearly 25 percent because of increased operating costs at its own mines, and the expiration of long-term supply contracts that are being replaced by new agreements at prevailing prices. The company has requested a power cost adjustment in Oregon that would kick in next January.

PacifiCorp says it's too soon to estimate rate increases its customers can expect because regulations are in flux. Regardless, it acknowledges that the costs will be significant.

Michael Early, executive director of an advocacy group for large electricity consumers, Industrial Customers of Northwest Utilities, wonders how PacifiCorp plans to mitigate rate shock from the environmental mandates. He points to the utility's plans to remove several dams on the Klamath River. That's ostensibly a better deal than upgrading them to aid salmon migration, and he wants to see the same analysis of the coal fleet.

"We still have a lot of energy intensive businesses here," Early said. "If we get hammered with higher energy prices, it will forestall their recovery or cut it off altogether."

SOURCE: http://www.oregonlive.com/business/index.ssf/2011/06/pacificorps_reliance_on_coal_p.html