South Carolina's cloudy energy future: Will it affect manufacturing?

By David Wren - Aug 5, 2017

Boeing's 787 assembly plant in North Charleston houses one of the largest rooftop solar panel installations in the nation. More manufacturers are using renewable energy sources as a way to cut power costs and reduce their carbon footprint. File/Provided

Although electricity costs often play a key role in where manufacturers choose to expand, experts say last week's decision to scrap construction of two new reactors at the V.C. Summer Nuclear Station isn't expected to have a long-term impact on statewide economic development efforts.

"I think it's significant, but it surely won't roll back the tremendous momentum of all the things that make South Carolina attractive," said John Boyd, president of industrial site selection firm The Boyd Co.
Boyd said manufacturers pay more attention to labor costs, the availability of workforce training programs and the lack of labor union representation when deciding where to build their next plant. Electricity costs are farther down the list.

A new study of annual manufacturing costs by Boyd's New Jersey-based company shows South Carolina has the 20th-lowest average electricity prices of the 48 contiguous states. That's more than offset by South Carolina's average labor costs of $20.21 per hour — the lowest of the 48 states — and the nation's fewest union members, at 1.6 percent of all workers.

The Palmetto State ranks as the lowest-cost state for manufacturers when all expenses are taken into account, the study shows.

Steve Dykes, economic development director for Charleston County, said: "Without a doubt, electrical rates are a very significant factor in the effort to attract and retain manufacturers."

"Just how significant a factor they are is driven by the relative energy intensity of their individual production processes," he said.

Century Aluminum is one of the largest industrial customers of Moncks Corner-based Santee Cooper, buying 100 megawatts of electricity for its Mount Holly smelter in Goose Creek when the facility is running at full capacity. The company has cut production in half citing the utility's high electricity costs and has sued the utility in federal court seeking to buy all of its power on the open market.

Mike Bless, Century's president and CEO, declined to say what impact the V.C. Summer decision and the resulting uncertainty over future power generation might have on his company's plans. But he told analysts he would take Mount Holly back to full capacity immediately if the company were able to buy all of its electricity from out-of-state providers that use cheap, natural gas as a generating source.

"We'd start that today," Bless said. "It would take a couple of months to recruit people and do the necessary deferred maintenance, but we'd start on that process today."

Leighton Lord, Santee Cooper's board chairman, said during a meeting last month that he questions how large industrial customers, such as Google's data center and the Nucor steel mill, will continue to operate without the type of power generation V.C. Summer would have provided.

"There is no way to keep the lights on at Google down the street and Nucor down the street without baseload generation like nuclear," he said.
Construction of two reactors at the V.C. Summer Nuclear Station stopped last week after utilities Santee Cooper and South Carolina Electric & Gas agreed to abandon the project. Experts say the project's failure probably won't affect the state's ability

An analysis of the costs to complete the reactors by Santee Cooper and South Carolina Electric & Gas, the majority partner in V.C. Summer, determined it would be too expensive to finish construction in the wake of lead contractor Westinghouse Electric's bankruptcy earlier this year.

Both utilities have said they will have to find another generation source for expected growth in power demands. Santee Cooper said Friday it has "sufficient generating capacity through 2036."

Stephen Byrne, chief operating officer for SCE&G, told state regulators last week that the utility will probably buy power from third parties in the short-term until its can build generating plants using natural gas for long-term demand.

That demand might not be as steep as the utilities have previously projected, Boyd said, because many newer manufacturing projects are using green-energy sources and construction methods that cut traditional power consumption.

Boeing Co., for example, has installed 10 acres of solar panels on the roof of its 787 Dreamliner plant in North Charleston.
And Volvo Cars is working with Edisto Electric Cooperative to help power its manufacturing campus under construction in Berkeley County with renewable energy.

"Projects are getting less energy-intensive," Boyd said. "Manufacturers are incentivized to conserve energy and reduce their carbon footprints."

Alternative energy sources are getting cheaper, and that's a key reason V.C. Summer was no longer feasible, said Joey Von Nessen, an economist at the University of South Carolina.

"Alternative sources are more cost competitive, relative to nuclear power," he said. "Thus, it is unlikely that this closing — in and of itself — will significantly increase any uncertainty surrounding general electricity costs for firms looking to locate in South Carolina."

Boyd adds that lawmakers in Columbia aren't likely to let the state's energy costs become an industrial recruitment liability.

Leaders in the Senate last week asked for a special joint session of the Legislature to discuss the nuclear plant failure, saying they are "greatly concerned" by the project's abandonment. In a letter requesting the session, lawmakers said the General Assembly "should have an opportunity to evaluate the facts, corporate responsibility and the state's energy policy" before any further action is taken.

Data from the U.S. Energy Information Administration show South Carolina's average electricity prices for the industrial sector are lower than the national average. Bobby Hitt, the state's commerce secretary, expects that to remain the case even as South Carolina utilities figure out the future course of energy production.

"We acknowledge that there might be some impact by the decision not to move forward with the V.C. Summer project," Hitt said. "But we are confident that internal competitive forces will help keep future utility costs down. It is important to note that, today, South Carolina continues to remain more than competitive in energy costs."