Nuclear projects face financial obstacles

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Hopes for a nuclear revival, fanned by fears of global warming and a changing political climate in Washington, are running into new obstacles over a key element -- money.

A new approach for easing the cost of new multibillion-dollar reactors, which can take years to complete, has provoked a backlash from big-business customers unwilling to go along.

Financing has always been one of the biggest obstacles to a renaissance of nuclear power. The plants are expensive, and construction tends to run late and over budget. The projected cost for a pair of proposed Georgia plants would be $14 billion; the Obama administration last month pledged to provide them with $8.3 billion in federal loan guarantees.

So utilities have turned to state legislators and regulators to help contain capital costs. In states such as Georgia, Florida and South Carolina, utilities have won permission to charge customers for some of the cost of new reactors while construction is still in progress -- a financing technique that would save utilities a couple of billion dollars for each reactor. Previously, utilities had to wait until power plants were in operation before raising rates, as they still do in most states.

"We tell people it's like paying off the interest on your credit card as you go along, rather than letting it compound," said Suzanne Grant, a spokeswoman for Progress Energy.

But businesses and other electricity users in those states aren't buying that argument. Instead, they are saying utilities are pawning off much of the projects' liabilities on customers because bank lenders and investors will not take the risks.

"It's a terrible idea," said Jim Clarkson, a consultant with Resource Supply Management, a Georgia firm that advises companies on how to reduce electricity use. "We've had decades of subsidies for nuclear plants and all sorts of preferential treatment. They still require loan guarantees because the smart money won't touch them."

“Nuclear power is very important," says John W. McWhirter, who represents the Florida Industrial Power Users Group. "We just wish consumers could be protected."

The reaction of big businesses, as well as other consumers, has turned states that were bastions of support for nuclear power into hazardous territory. And it could thwart the Obama administration's efforts to jump-start nuclear reactor construction by handing out chunks of the $18.5 billion in federal loan guarantees Congress authorized in 2005.
Turning to the states

Thirty to 40 years ago, expensive nuclear plants drove some utilities into bankruptcy. That has made banks gun-shy about lending and investors wary about buying bonds. Moreover, the new plants are so expensive that a single unit could equal a quarter to 100 percent of the market capitalization of an entire utility company, potentially damaging the utility's credit rating.

That's why utilities turned to the states, lobbying in recent years for the ability to charge customers while construction is in progress. "Without this legislation, we would not be considering building new nuclear generation in Florida," Grant said.

The savings for the utilities are huge because they have to borrow less money. Southern Co. said the law passed in 2000 will help its Georgia Power subsidiary shave nearly $2 billion off the cost of the two new nuclear reactors at its Vogtle site -- and Georgia Power owns only 45 percent of the project.

Last month, Southern received "conditional" approval for $8.3 billion in federal loan guarantees from the Obama administration on that project. (While still under negotiation, the terms of the federal loan guarantees would probably save Southern an additional $15 million to $20 million a year, a company spokesman said.)

In Florida, Progress Energy and FPL have won approval from state regulators to pass along about $360 million in costs associated with new nuclear power units northeast of St. Petersburg. Progress Energy says it has already collected $196.6 million from customers, a third of its total expenditures so far.

But the Florida utilities have not yet obtained permits they need from the Nuclear Regulatory Commission, so while some site preparation has taken place, construction hasn't even started.

The utilities' gains are the consumers' losses -- and businesses such as the Georgia Industrial Group and the Georgia Textile Manufacturing Association have joined consumer and environmental groups in combating the state laws and higher rates.

In Florida, PCS Phosphate, which has a fertilizer plant that uses about 1 percent of Progress Energy's output, told the Public Service Commission that new rate increases "will substantially affect" the company "by directly increasing the cost of power."

"Certainly coming on top of the recession, it is badly timed," said James W. "Jay" Brew, attorney for PCS Phosphate, a unit of Potash Corp. "It's asking a lot of current customers to fund that large a capital expense up front."

Worth the wait?

Progress Energy says that over time, companies such as PCS Phosphate will be better off. "It lowers the overall costs of a nuclear power plant to customers by several billion dollars," the company said in a statement. "Paying these costs in advance significantly lowers the long-term
financing costs. The overall cost of the plant decreases, minimizing the price customers pay over its operating lifetime."

But the ratepayers disagree. They say that if the plants are delayed, ratepayers will absorb the expense. When the Florida utilities said the increasingly hostile atmosphere might prompt them to abandon the nuclear plants, the consumers said that only proved their point: Consumers could pay millions for a project that might never reach fruition.

"If a project cannot attract private investment, it's a turkey and we shouldn't be wasting taxpayer money or forcing the users of electricity to pay for something the stakeholders and lenders won't risk their money on," Clarkson said.

In addition, the consumers argue, many residential customers might move to another state, or even die, in the six to 10 years it will take for new plants to come on line, and they might never see the benefits. Others will have to stick around another 15 years before the savings compensate for higher rates now, Brew said.

FPL Vice Chairman Moray P. Dewhurst said intergenerational fairness is always an issue for power plants. "Look at the wonderful deal that retirees are getting now from nuclear plants built years ago and which are paid for," he said.

Financing questions have also challenged nuclear plans in other states. In Missouri, a backlash from ratepayers helped defeat a similar proposal to allow higher electricity rates during nuclear plant construction.

In South Carolina, the state Supreme Court on Thursday will consider an appeal by Friends of the Earth of a decision by the state Public Service Commission allowing South Carolina Electric & Gas (SCE&G) to begin collecting higher rates to cover costs associated with a two-reactor project.

In Texas, rising cost projections for a pair of new reactors threatened the credit rating of San Antonio's city-owned utility, which owned 40 percent of the project, and raised the specter of tax increases. San Antonio fired the head of its municipal utility and filed a $32 billion lawsuit against its partners, NRG Energy and Toshiba, alleging they concealed cost information. On Feb. 23, the partners agreed to shrink the San Antonio utility's stake in the project to just under 8 percent.

There is one state that has presented new obstacles to nuclear power for reasons having nothing to do with economics. Last month, the Vermont state Senate voted against extending the operating license for Vermont Yankee, the state's sole nuclear power plant, after the discovery of radioactive tritium in test wells raised fears about plant safety. (Tritium raises cancer risks.) Vermont, unlike most states, must approve any extension of the plant's license, which will expire in 2012. Most plants must get approval only from the Nuclear Regulatory Commission.
The project has faced obstacles as many of its original investors have opted out in the past years, including Germany's E.ON and Swedish metals firm Boliden. Rosatom, which has been stepping up overseas expansion, agreed in 2013 to take a stake in the reactor, and to supply and finance it. The involvement of the state-owned Russian company prompted concerns in Finland after the Ukraine crisis in 2014, but Finland's parliament nevertheless backed the plan by 115 votes to 74. In another troubled Finnish nuclear project, the Olkiluoto 3 reactor is expected to begin production almost a decade later than initially planned, and plant supplier Areva and its client, utility TVO, are locked in a dispute over the delays.

Interview by Henry Sokolski, Interviewee Bernard Gwertzman, Interviewer. This month, the Obama administration’s focus will be the start of a full-court press to reduce the number and spread of nuclear weapons, including the signing of the follow-on to the Strategic Arms Reduction Treaty with Russia on April 8 in Prague and a nuclear summit of forty countries in Washington beginning on April 11.

Financial Advisor. Podcasts. Latest Podcasts. The tax bill now being negotiated in D.C. excludes a provision extending the nuclear power credit that Southern Co. (SO +0.3%) has been expecting for the Vogtle nuclear reactor project under construction in Georgia, Bloomberg reports, citing a Republican with knowledge of the talks. The exclusion - if it remains in the bill - could represent a serious setback for the first U.S. nuclear plant to be licensed in 30 years, as Vogtle is not likely to be in service before 2021, when the federal production tax credit for new nuclear power generation is due to expire. One problem facing energy projects in developing countries is lack of financing. Among the reasons SDG 7 is at risk of not being met is the fact that “[f]inancial flows, including public and private investments in energy, are falling short of what is needed”. Developing nations often turn to development finance institutions (DFIs), such as the World Bank, for financing. Nuclear generation facilities also have higher upfront capital costs than other energy projects, and so by the time the plant is completed a significant share of the costs are sunk. If a project is abandoned due to changing political views or construction overruns, it is too late for the investor to reverse the investment decision and avoid a significant loss.