S.C. touted for nuclear plant

Some politicians and businesspeople think the Savannah River Site is the ideal spot for America's next commercial nuclear reactor

By LAUREN MARKOE
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It's been nearly 30 years since construction began on an American commercial nuclear reactor.

But a growing number of powerful business people and politicians want the hiatus to end — in South Carolina, at the Savannah River Site, near Aiken.

Hurdles to building nuclear plants have lowered, they say. And the political and economic cost of fossil fuels has risen. The federal government is newly willing to defray the costs of new plants.

They also point to SRS — a hive of nuclear waste management and research for decades — as the ideal place for nuclear power's new American dawn.

"The winds have changed," said U.S. Rep. Gresham Barrett, R-S.C., whose district includes SRS and who hopes to hold a summit there this month on building a new nuclear reactor.

"We've been working with community leaders," Barrett said. "We've been working with folks from Westinghouse, Duke Energy, Bechtel. I've even contacted Santee Cooper to ask, 'Are you interested in a new nuclear reactor?' Without fail, every one of them said, 'Absolutely, yes.'"

Dan Keuter, vice president of nuclear development for New Orleans-based Entergy Corp., visited Aiken last month to pitch the idea of a new commercial plant. Entergy is part of a consortium of energy-related companies — the NuStart Energy Development LLC partnership — that wants to take advantage of the warmer nuclear climate and begin planning a new plant. Construction could begin as early as 2010.

But if the will to build is strong and the environment for building is better than it has been in decades, getting a nuclear power plant financed, designed, licensed and running is still an arduous and drawn-out process.

"There may be a lot of momentum, but there doesn't seem to be a lot of money," said David Lochbaum, a nuclear safety engineer with the nonprofit Union of Concerned Scientists, which does not take a position as to whether nuclear power should expand in the United States.

"I've been in this job eight years," he said. "About every year the industry comes up with the 'renaissance of nuclear power.' Ask them how many groundbreakings there have been in eight years."

But nuclear proponents say Republicans in the White House, the Department of Energy and Congress are going to help with those previously prohibitive costs. Improved nuclear technologies will create more efficient plants. And investors will take notice.

"We want to show Wall Street and the bankers that we can do this quickly instead of taking 12 to 15 years. We can do it in six years, at a reasonable cost," said Mal McKibben, a former SRS employee and executive director of Citizens for Nuclear Technology Awareness. The proof, he said, comes from abroad.

"France and Japan have shown you can do it a whole lot cheaper."

GAS HAS TRIPLED

Barrett in December flew to France to see for himself what a new nuclear power station looks like. He saw three — all of them..."
technologically a generation ahead of the newest American plants.

"I look at my plant in Oconee, one of the best and most efficient in the United States. These new plants are smaller, more efficient, and they can use reprocessed fuel," he said.

Therein lies a potential synergy.

SRS is owned by the Department of Energy and, during the Cold War, produced the key components for the nation's nuclear stockpile. It also has been designated by the DOE as a future site for the production of reprocessed fuel.

In a mixed oxide or MOX plant at SRS, weapons-grade plutonium would be transformed into nuclear fuel suitable for a commercial nuclear reactor.

For Entergy's Keuter, factors other than technology are driving interest in reactor construction.

"The main reason the industry hasn't been looking at nuclear is that natural gas was far less expensive," he said. "Now, nuclear looks very competitive."

Gas prices have tripled in the past several years, and the federal government estimates that Americans will pay 7 percent more for natural gas this winter than last.

Political instability in the Middle East, moreover, also has made nuclear fuel more attractive to American consumers. OPEC, the Organization of Petroleum Exporting Countries — most of which are Middle Eastern — controls half of the world's gas reserves.

Those heralding a rebirth of the American nuclear industry also cite the federal government's renewed interest.

In his first term, President Bush set a goal for a new American nuclear plant by 2010. Most nuclear experts — whether they embrace or disdain nuclear power — say that goal is unrealistic.

Still, the federal government has made it easier to begin thinking about breaking ground on a new plant by streamlining the licensing process and offering to pay half the enormous costs of siting and licensing nuclear plants. Keuter estimates pre-construction costs at about $400 million. Construction amounts to about $2 billion.

U.S. Sen. Lindsey Graham, R-S.C., who represented Barrett's district when he was a House member, also is pushing a package of incentives for the nuclear industry in Congress. One would extend to nuclear plants the tax breaks enjoyed by other energy technologies that don't burn fossil fuel.

"We have stifled the growth of nuclear power through irrational policies," he said.

Even a segment of the environmental community is open to changing some of those policies, he said. Worried about greenhouse gases produced by non-nuclear fuels, they are showing a new openness to nuclear power.

English scientist and environmentalist James Lovelock, whose writings are widely read in the United States, last summer wrote, "I am a Green, and I entreat my friends in the movement to drop their wrongheaded objection to nuclear energy."

THE COMPETITION

In South Carolina, the NuStart Energy Development LLC partnership will not have to face tough opposition if it picks SRS for a new commercial plant.

Despite leaky nuclear storage tanks and threats that nuclear material from SRS is seeping toward the Savannah River, the nuclear campus has enjoyed strong support in and around Aiken since the 1950s.

In addition to Entergy, the second-largest nuclear generator in the nation, NuStart includes Westinghouse and General Electric — both of which build nuclear power plants. In September, Keuter said, NuStart aims to have narrowed its search for a site to two contenders.

One strong competitor for SRS is the Grand Gulf Nuclear Station in Port Gibson, Miss. It may be easier, NuStart reasons, to build a plant where one exists.

But SRS also has its attractions.
In addition to the community support and SRS's status as a national laboratory, the size of the campus — 300 square miles — will allow for two new plants and the resulting economies of scale, Keuter said.

Bob Guild is one South Carolinian who says South Carolina will be better off losing to the competition.

The Columbia environmental lawyer, and the Sierra Club's S.C. chapter chairman, said South Carolinians too quickly dismiss the threats to the environment and human health that SRS already poses.

"We still haven’t figured out what to do with the inevitable nuclear waste stream," said Guild, noting that Nevada’s Yucca Mountain, the designated federal repository for high-level nuclear waste, may not be open by its 2010 target.

And though Guild acknowledges that the possibility of a major accident is low, its catastrophic nature would argue against a new nuclear plant.

"In Charlotte, N.C., they calculated early fatalities for a core meltdown at the (nearby) Catawba or Maguire plants in the tens of thousands," Guild said. "There have been over 100,000 deaths attributable to the accident at Chernobyl. What is the cost of making a plan 'good enough'? That cost makes the technology uneconomical."

And that is why, he said, the nuclear industry is pushing the willing Bush administration for hundreds of millions of dollars in subsidies.

Geoff Fettus, a lawyer with The National Resources Defense Council, said the need for subsidies should tell South Carolinians something.

"There has not been a nuclear power plant built in the United States for about 30 years," said Fettus, who stressed that his nonprofit does not consider itself pro- or anti-nuclear.

"That's not because we don't yet have a waste depository," he said. "That's not because of public opposition to nuclear power or the risk of proliferation. It is because it is uneconomical. Commercial nuclear generation can't compete in the market place."

Nuclear power proponents reply that though the startup costs may be high, once a nuclear power plant is up and running, nuclear fuel is cheaper to produce than competing energy sources. It works in Europe and Japan, they say.

Opponents counter that nuclear fans don't count the price — both environmental and economic — of storing waste safely for the thousands of years that it remains a threat.

JOBS AND MONEY

Guild proposes an alternative: Sink the money the federal government wants to invest in nuclear energy into energy conservation programs. Make it easier for people to insulate their homes, use public transportation and buy hydroelectric cars. Make it more expensive for them to drive gas-guzzlers.

Must Americans, he asks, who make up less than 5 percent of the Earth’s population, use 25 percent of its energy?

If Barrett's Westminster home is typical, then conservation isn't on the American agenda.

"Every light is always on; the computer's always on; the coffee maker is always going," the congressman said. "We are not going to change our lifestyle."

Like many lawmakers who support nuclear energy, Barrett has collected generous campaign contributions from individuals and companies with nuclear interests.

Duke Energy's political action committee, for example, gave him $4,500 before his most recent election, according to the nonprofit Center for Responsive Politics. BNFL Inc.'s PAC — a subsidiary of British Nuclear Fuels — gave him $2,000.

But Barrett, in his second term in the House, said support from the nuclear industry followed his principles, not vice versa. "I grew up around nuclear power. I've been a proponent and enthusiast long before I became a politician."

And from an employment perspective, it makes perfect sense to expand SRS's mission, he said.

SRS has lost jobs steadily since the height of the Cold War. A decade ago, 25,000 people worked there. Now, 13,000 do. Last year,
SRS announced that it would shed another 2,000 jobs over the next two years.

Keuter said a new nuclear plant would require as many as 1,000 people to run it and 3,000 people to build it.

Those jobs should go to SRS, said Barrett. "We do things right at SRS."

With the next American commercial nuclear reactor, he said, South Carolina can be "a shining star for the nation."

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