June 15, 2005

Demand for Natural Gas Brings Big Import Plans, and Objections

By SIMON ROMERO

Just as the 19th century was shaped by coal and the 20th century by oil, people in the energy industry say, this century will belong to natural gas. But to judge by the battle over energy legislation that began yesterday in Congress, it will not happen easily.

International energy companies, the Bush administration and governments in gas-rich countries are aggressively championing the creation of a global market for natural gas, with the United States at its center as the largest importer. They are promoting the fuel as more plentiful and less polluting than oil and needed to sustain economic growth.

But in the same way that American oil output began to fall short in the 1960's and has steadily diminished as a source of energy, the United States is already running low on its own production of natural gas. To fill the gap, vast amounts of gas will have to be imported - in liquefied form, arriving by tanker on the coasts of the United States or elsewhere in North America.

Like oil, large reserves of natural gas are found far from the big markets for the fuel, in countries like Qatar, Iran, Russia, Angola, Yemen and Algeria. Competition for gas projects in these places has prompted a frenetic race among international oil companies to meet demand for the fuel in rich industrialized countries.

These ambitions in the United States face strong resistance. Officials in some states where energy companies plan to build terminals that would receive the gas tankers - including Alabama, California, Maine, Massachusetts, New Jersey, New York and Rhode Island - say they could fall victim to a catastrophic explosion, either accidental or set by terrorists.

President Bush, trying to maneuver past the objectors, has endorsed legislation, which is currently being debated in the Senate, that would allow the federal government to overrule the states. "Congress should make it clear to the Federal Energy Regulatory Commission its authority to choose sites for new terminals, so we can expand our use of liquefied natural gas," Mr. Bush said in April. But he faces a fight in Congress too. Several senators, including Dianne Feinstein, Democrat of California, are sponsoring an amendment to oppose greater federal authority.

The federal commission's chairman, Patrick Wood III, told energy industry officials in Houston in February that he expected at least eight new terminals for liquefied natural gas, or L.N.G., to be built in the United States by 2010. There are now four terminals - in Georgia, Louisiana, Maryland and Massachusetts - built during an earlier foray into L.N.G. in the 1960's and 1970's.

Some Object to Terminals

Energy companies want to construct more than 40 such terminals at a cost of $500 million to $1 billion each. The emerging conflict is taking place as some scientists and environmentalists say that the nation is once again placing too little emphasis on improving energy efficiency and making investments in other methods for producing power and heat, including wind, biomass and nuclear energy.

Meanwhile, utilities that buy gas warn that in becoming ever more reliant on natural gas from abroad, the United States would be running the same risk it made when it came to depend on oil from unstable sources in the Middle East.

Natural gas is expected to overtake coal and rival oil as the leading fossil fuel in the world by 2025 - sooner if the largest energy concerns get their way. They are pursuing more than $100 billion in projects to create a global market for gas that will be increasingly vital to generate electricity, heat and cool buildings, manufacture the fertilizers that help feed the world and even run some vehicles.
Natural gas accounts for 24 percent of the nation's energy consumption.

Plentiful and less polluting than oil, natural gas, whose consumption still emits greenhouse gases, has become much more popular over the last decade after it was prized as a fuel for new power plants. The rising consumption of natural gas comes with a significant cost, however. "We're at a similar stage with natural gas as we once were with oil," said Donald E. Felsinger, president of Sempra Energy of San Diego, which plans to import natural gas from Russia to Texas, Louisiana and northern Mexico. "We're not self-sufficient anymore, and we're going to depend on imports to allow people to keep consuming it."

The price of natural gas has doubled in the United States in the last five years, exposing a vulnerable reliance and the possibility of higher prices if supplies are not increased. Indeed, even with the global gas market in its infancy, some nations want to act as a cartel to control the price of natural gas much as the Organization of the Petroleum Exporting Countries has at times manipulated the oil market.

Efforts to import more natural gas have already touched off a political dispute in California where resistance has mounted to plans to build several L.N.G. terminals, including one in Long Beach and two off the coast, one close to Oxnard, north of Los Angeles, and the other near Camp Pendleton, north of San Diego.

Energy companies, including Chevron and BHP Billiton of Australia, are financing a group called Californians for Clean Affordable Safe Energy to persuade people of the need for L.N.G. The group is part of a $1 million campaign supporting L.N.G. created by a Republican political strategist, Mike Murphy.

But skepticism persists. "If you jump-start an industry this way and bring in an abundance of natural gas, you're creating an addiction to something that wasn't there," said Susan Jordan, director of the California Coastal Protection Network, an environmental group in Santa Barbara campaigning against L.N.G. terminals. "This is happening without any mention of conservation and with little regard for the renewable alternatives."

Unlike oil, natural gas can be devilishly difficult and expensive to ship around the world. To create a liquid, natural gas must be cooled to 260 degrees below zero, squeezing its volume by a factor of approximately 600. Once it reaches its destination, it needs to be reheated before it can be used in the power grid.

Half the Cost of Oil, or Less

But natural gas has many advantages, particularly in terms of convenience and cost. A typical barrel of oil commands roughly $50 on the world market today, while 6,000 cubic feet of natural gas, its energy equivalent, is much less expensive. Even delivered from a pivotal Middle Eastern country like Qatar, it would probably cost $18 to $24, according to Bernard Picchi, a senior energy analyst with Foresight Research Solutions in New York.

Natural gas, once scoffed at by oil companies as a nuisance when found alongside reserves of oil, is also thought to be more plentiful than oil. BP, the British energy giant, estimates global gas reserves at 67 years of supply at current production rates, compared with global crude oil reserves equal to 41 years of annual supply.

Plaguing the L.N.G. boom are comparisons to the scramble for oil in the last century and the transfer of wealth and financial leverage to a handful of nations in the Middle East.
The United States, for much of the 20th century, was the world's largest oil producer, easily satisfying its own needs. But, with a fast-growing economy and increased reliance on the automobile, the nation began to import more oil than it exported after World War II. In 1973, when the Arab oil embargo pushed prices sharply higher, oil imports amounted to only 36 percent of domestic oil consumption. Now they account for nearly 60 percent.

As with oil, American production of natural gas is no longer enough to meet domestic demand. Reliance on natural gas in the United States increased sharply after electricity companies designed more than 90 percent of the power plants in the 1990's to run on natural gas. Meanwhile, imports from Canada, whose large natural gas fields are connected by pipeline to the United States, have started to run short as well.

Strong demand for natural gas is occurring not just in the United States, but in the fast-industrializing economies of China and India, which are set to compete for supplies. The United States is expected to emerge as the world's largest L.N.G. market, with imports forecast to account for as much as 20 percent of natural gas consumption in the United States by 2015, up from only about 2 percent today. Before that happens, however, the United States will need to build the terminals able to receive L.N.G.

So energy companies watched with interest in March when a small Houston company, Excelerate Energy, completed the first such project in the United States in more than 20 years, off the coast of Louisiana, near Cameron, a sleepy parish seat.

The terminal is welcomed by many residents there as a source of jobs. But Cameron's embrace of L.N.G. stands in contrast to the positions in communities in California and along the east coast, where demand for natural gas is the strongest and most L.N.G. ports have been proposed.

These include proposals for Long Island Sound, nine miles off Rocky Point, N.Y.; Providence, R.I.; Logan Township in southern New Jersey; and Harpswell, Me. Concern over the possibility of damage from an accident or terrorist explosion involving a terminal or tanker has prevented such projects from getting off the ground in these coastal communities. A recent report by Sandia National Laboratories concluded that terrorists blowing a hole in an L.N.G. tanker could produce a spill of liquefied natural gas that could reheat and set off a fire that would cause second-degree burns on people nearly a mile away.

Industry Cites Safety Record

The L.N.G. industry responds that the safety record of its tankers far exceeds any other sector of the shipping industry. Only a few relatively small accidents have occurred in the last three decades, and industry groups contend that an accidental spill or a suicide bomb attack is extremely unlikely. Japan and South Korea, currently the top L.N.G. markets, have never experienced a major accident or attack.

Yet considerable apprehension persists. In an analysis in May for the attorney general of Rhode Island, Richard A. Clarke, the former counterterrorism adviser to the Clinton and Bush administrations, concluded that terrorist groups could easily attack an urban L.N.G. port or tanker, exposing the areas around Providence and Fall River, Mass., to "a high risk of generating catastrophic damage" from explosions and fires.

Responding to the energy industry's urgency, Congress included in the broad energy legislation approved this spring in the House, and given clearance in May by the Senate Energy and Natural Resources Committee, a provision that would effectively usurp the authority of states to block L.N.G. terminals.

Six governors from coastal states, including Arnold Schwarzenegger of California and Mitt Romney of Massachusetts, wrote to the Senate committee, asking for states to remain on equal footing in L.N.G. reviews. Senator Charles E. Schumer, Democrat of New York, said this month that he opposed an L.N.G. terminal in Long Island Sound, citing security concerns.

Those officials are opposing senators like Lamar Alexander, Republican of Tennessee, and Tim Johnson, Democrat of South Dakota, who are pushing to bolster federal authority. Meanwhile, foreign governments that are pinning their hopes on exporting L.N.G. to the United States are investing in ventures to build terminals. One West African supplier, Angola, has acquired part of a venture called Gulf LNG Clean Energy that is planning a port in Mississippi.

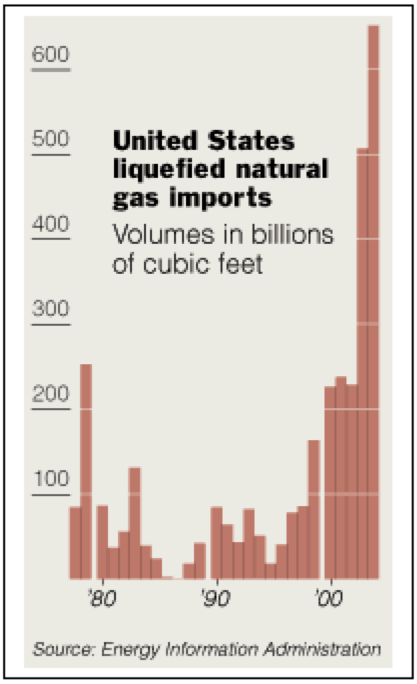
Qatar, the Connecticut-sized nation in the Persian Gulf that is expected to become the world's largest L.N.G. exporter over the next decade, has shown keen interest in the L.N.G. provisions in the energy bill before the Senate. Qatar and 12 other gas-rich nations, including Iran, Egypt, Nigeria and Venezuela, met in April to discuss ways to keep L.N.G. prices satisfactorily high. The group, called the Gas Exporting Countries Forum, is still in its infancy and for now is incapable of modeling itself after OPEC, but its members agreed to establish a liaison office in Doha, Qatar.

Daniel Yergin, an energy analyst and author of "The Prize," a history of the quest for oil over the last century, argues that it would be difficult for a confrontational cartel of gas producers to take hold over the next several years. He said that is because L.N.G. producers will be competing with each other for market access and relying heavily on Western energy companies to shoulder much of the multibillion-dollar risk of large L.N.G. projects. "Managing price would be negative for an industry set to grow rapidly over the next 10 years," Mr. Yergin said. "There is more pronounced interdependence of consuming and producing countries for natural gas than for oil."

Others view the growing reliance on imported natural gas in the United States more ominously.
"We accept having L.N.G. as part of the energy solution, but we're very concerned about making the same mistakes we made with imported oil," said David Schryver, vice president for Congressional affairs at the American Public Gas Association, which represents municipal gas utilities that would consume much of the imported L.N.G. "Facing the prospect of another OPEC for natural gas is alarming."

Despite such concerns, L.N.G. imports to the handful of terminals that exist in the United States soared 29 percent last year and are set to increase rapidly throughout this decade.

"Going without L.N.G. requires making some difficult lifestyle changes in the way we consume our energy," said Charif Souki, chief executive of Cheniere Energy, a Houston company with plans to build three L.N.G. terminals in Louisiana and Texas. "If you have a better alternative, then please pursue it."




LNG - Lake Charles, LA