11:00 04 Aug FEATURE-Firms cautiously mull linking Chile power grids

By Tiffany Woods

TALTAL, Chile (Reuters) - The swath of land extends for about 200 miles (300 km) between the town of Taltal and the city of Antofagasta in the world's most arid desert.

It is a barren no-man's-land in northern Chile where you can drive for several hours without seeing a filling station or finding a radio station on your dial. It is also the patch of land that separates the country's two main power grids.

Interest in the zone has picked up as electric utilities -- driven in part by Chile's worst drought this century and an expected surplus of energy in the north -- mull the possibility of uniting the two grids. But it is not as simple as just linking a few wires. Economic feasibility, future energy needs and government regulations must be considered, the firms say.

Two main grids light up Chile, one in the extreme north, known as the SING, and another, known as the SIC, that runs from Taltal to the southern island of Chiloe.

In June, the SIC produced 70.8 percent of the country's energy and the SING, which is the lifeline for large mines in the Atacama Desert, put out 23.9 percent. The remaining 5.3 percent came from minor systems.

The SIC and the SING were peacefully pumping out their megawatts until the drought and the arrival of natural gas to the north changed life as they knew it. The dry spell, which has reduced the water essential to Chile's hydroelectric plants, and technical failures of natural gas generators caused major blackouts in the SIC early this year and late last year.

In addition, natural gas, which arrived in the SING in July and is expected to create a surplus of energy there, botched its debut. A glitch in a generator caused a widespread temporary blackout, sent mines scrambling to save production and had copper traders sitting on the edge of their seats.

CAUTIOUS INTEREST

Electroandina, the main power producer in northern Chile, said it was evaluating the possibility of uniting the SIC and the SING and expected its studies to be finished in September.

Electric producer and transmitter Edelnor said it also was interested in connecting the two grids, and an official at Gener, the country's second largest power producer, said it was studying the idea as well.

An interconnected system would allow some of the excess energy produced in the SING in the next few years to be transferred to the troubled SIC. Energy analysts see supply in the SING next year at around 3,500 megawatts and demand at only about 1,300 megawatts.

"For the viability of growth of Chile, (a link) is the only thing that makes sense. They need to do it to avoid the problems that they saw," Edelnor's executive president, Mark Lynch, said.

But don't tell that to natural gas pipeline operator GasAtacama. Its general manager, Rudolf Araneda, says a connection could actually cause instability. Because of Chile's straight-line geography, a failure in a line in the north or a collapse of a tower could affect what is south of it, he said.

In addition, the lines in the northern SIC would not be able to handle a massive injection of power, he said. Because they are at the end of the SIC, they are built to receive a diminished amount of energy.

GasAtacama is defending its own interests. It is building a natural gas pipeline that will run from Mejillones, just north of Antofagasta, to a 360-megawatt plant that will be built in the town of Paposo, just north of Taltal.

NO NEED FOR A CONNECTION

The project seeks to meet the short-term energy needs of the SIC and will do away with any need for a connection between the two grids for at least the next 4 to 6 years, Araneda said. "I don't see (an electric connection). It's not justifiable. We are taking away the reasons to have one," he said.

The bottom line is, it simply may be cheaper to build generators in the SIC or import natural gas from Argentina rather than connect the grids, John Walton, an electric sector analyst at Santander Investment Chile, said. A connection "isn't feasible at this point," he insisted.

A minor link would cost about $150 million and a major one, with reinforcement to Chile's capital Santiago, would at least double that price, Araneda said.

If regulations were changed, a link might be profitable, Electroandina's investment manager, Luis Hormazabal, said. "There are obstacles in terms of regulation. It does not guarantee an adequate return or even the possibility of one."

If the grids were linked, the government would have to issue new regulations for wheeling charges, the user fees paid to transmit energy along the lines, Hormazabal said. Charges in the northern grid differ from those in the southern grid. <EDN.SN> <CHG.SN> <CHR.N>

Wednesday, 4 August 1999 11:00:44

ENDS [nN04181726]