

12-2-2010

"Still Undecided" but Chile Leans toward Nuclear Energy

Benjamin Witte-Lebhar

Follow this and additional works at: https://digitalrepository.unm.edu/la_energy_notien

Recommended Citation

Witte-Lebhar, Benjamin. ""Still Undecided" but Chile Leans toward Nuclear Energy." (2010). https://digitalrepository.unm.edu/la_energy_notien/40

This Article is brought to you for free and open access by the Latin American Energy Policy, Regulation and Dialogue at UNM Digital Repository. It has been accepted for inclusion in NotiEn: An Analytical Digest About Energy Issues in Latin America by an authorized administrator of UNM Digital Repository. For more information, please contact disc@unm.edu.



Your information source on Energy Policy, Regulation
and Dialogue in LATIN AMERICA



"Still Undecided" but Chile Leans toward Nuclear Energy

By Benjamin Witte-Lebhar

A revealing visit to France last month by President Sebastián Piñera has reignited a long smoldering debate in Chile over the "nuclear option." Careful not to endorse the possibility outright, the Chilean leader nevertheless made it clear during an Oct. 20 stopover in Paris that, with the benefit of some French know-how, nuclear power plants may eventually be in the cards for Chile.

Chile has to prepare itself for the world of nuclear energy," Piñera said following a meeting with his French counterpart President Nicolas Sarkozy. "Our government has the obligation to prepare our engineers, scientists, and technical workers."

The two signed a "strategic alliance" under which Chile looks to benefit from France's considerable experience with atomic power plants. Atomic energy provides roughly 78% of the European nation's electricity. More specifically, the Chilean president announced plans to send some 30 professionals to France to learn the ins and outs of its nuclear-power industry.

Piñera also spoke of Chile's desire to be included in the Nuclear Energy Agency (NEA), part of the Organization for Economic Cooperation and Development's (OECD). "It will allow us to develop our institutions, because, if one day Chile needs to make a decision regarding [nuclear] energy, it has to adhere to three criteria: clean energy, safe energy, and economically affordable energy," he said.

Still, as enthusiastic as the Chilean president seems to be about nuclear power, he insisted the jury is still out on whether the country will ever put that learning to use and build commercial reactors. "The decision won't be made now, not even during our government," he said.

Neither here nor there

At first glance, Piñera's hybrid position on the matter may seem a bit perplexing. While saying one thing--that Chile is nowhere close to jumping on the nuclear bandwagon--he appears to be doing quite another--preparing the country for just that scenario.

His approach is not altogether surprising, however, as it is essentially a continuation of the stance taken by his leftist predecessor, former President Michelle Bachelet (2006-2010), who professed neutrality on the nuclear issue yet earmarked millions of dollars for feasibility studies. It would be "irresponsible" of the government not to seriously explore the nuclear option, her energy minister, Marcelo Tokman, said at one point.

Piñera's neither-here-nor-there policy also reflects the image he has carefully constructed for himself as being both a businessman and an environmentalist. A successful entrepreneur and

investor whose personal fortune is estimated at some US\$2 billion, Piñera has dabbled in ecophilanthropy as well, a trend first pioneered in Chile by US garment mogul Douglas Tompkins. Five years ago he famously opened Parque Tantauco, a huge nature reserve on the southern island of Chiloé.

Piñera proudly touted his green leanings on the campaign trail and, upon taking office, put his money where his mouth is by stepping in personally this past September to block a billion-dollar coal-burning electricity project slated for Chile's northcentral coast. The move came as a major surprise to would-be critics, particularly since environmental authorities had already approved the facility, the 540-megawatt Barrancones plant.

Environmental groups had campaigned for years against the proposed venture, which French energy company GDF Suez hoped to erect roughly 20 km south of the picturesque coastal Punta de Choros. The site of two marine reserves, Punta de Choros and its surrounding islands boast a rich population of dolphins, sea otters, Humboldt penguins, and other marine animals.

You can't please everyone

Juggling the demands of both business groups and environmentalists is no easy task, as the new president is now learning. Piñera's handling of the Barrancones issue earned him the affection of environmental groups but caused grumblings among business leaders. His recent manoeuvrings on the nuclear issue look to be having the opposite effect.

Environmental groups, convinced nuclear power is neither safe nor practical, are taking little comfort in the president's assurances that the matter is still technically up for debate. They instead see Piñera's statements in Paris as a clear indication that his sympathies lie with the nuclear lobby.

"We all know that when it comes to nuclear reactors, there's a multimillion-dollar industry that has its own interests at heart," Juan Pablo Orrego, head of the Santiago-based environmental organization Ecosistemas, explained in a recent interview with Radio Universidad de Chile. "The French are the first to promote [nuclear power] because they're the ones with the most advanced technology."

Critics of the nuclear option argue that, while nuclear accidents are rare, they nevertheless have the potential of being catastrophic. The 1986 disaster at the Chernobyl facility in Ukraine is a case in point. Safety, they warn, should be of particular concern in Chile given its propensity for earthquakes.

In 2007 a magnitude 6.8 quake in Japan, which is known for its state-of-the-art anti-seismic constructions, damaged the huge Kashiwazaki-Kariwa nuclear facility. The earthquake sparked a fire in the plant and caused radioactive material to spill into the Sea of Japan, the International Atomic Energy Agency (IAEA) reported. If that can happen in Japan, observers say, what might happen in Chile, where, as February's massive magnitude 8.8 earthquake demonstrated, seismic episodes can be particularly fierce?

"Maybe that doesn't mean it's impossible, but it certainly makes it more expensive, since you have to take stricter security measures," said Flavia Liberona, director of the environmental organization Fundación Terram. "There's also the whole issue of the [radioactive] waste. Beyond what President Piñera said or what cooperation agreement he signed with the French

government, today the country just doesn't need [nuclear energy]....We have many other options."

Weighing the alternatives

Relatively speaking, Chile's energy needs are quite modest. The country's current installed electricity capacity is just shy of 15,000 MW, according to the Comisión Nacional de Energía (CNE). Nearby Argentina and Brazil, in contrast, have installed capacities of approximately 25,000 MW and 100,000 MW, respectively. Both countries have nuclear power plants (two each), but rely on them for just a minor portion of their energy needs. In Argentina, a long-delayed third plant is expected to go online early next year.

Chile generates nearly all its electricity using conventional technologies: large-scale hydroelectric dams (which account for roughly 35% of total capacity) and thermoelectric—fossil-fuel-burning (principally coal and natural gas) power stations—for which the country must import most of the requisite raw materials. Fully privatized, Chile's electricity industry is dominated by just a handful of mostly foreign-owned utilities.

As Chile continues to grow, so too will its electricity needs—particularly in the north, where energy-hungry mines generate much of the country's wealth. For numerous reasons, Chile needs not only to increase electricity production but also to diversify its matrix. Thermoelectric plants are heavy polluters. They also put Chile—which must import natural gas, coal, and oil—at the mercy of international markets. Large-scale hydroelectric dams have the benefit of running on a domestic energy source (water) and are emission free, but they alter landscapes, damage ecosystems, and displace people and thus are also opposed by environmental groups.

But while there may be growing consensus on the need to embrace new technologies, Chile has yet to chart a clear course regarding which of the available alternatives it plans to pursue.

Backers of the nuclear option point to countries like France to show that atomic power plants are reliable, relatively clean (except for the radioactive waste they produce), safe when handled properly, and capable of producing large amounts of electricity. Renewables are well and good, they argue, but when it comes to guaranteeing consistency and quantity, nuclear plants are Chile's best bet.

Many energy analysts disagree, arguing that, because of its relatively modest needs and particular geography, Chile is in an enviable position to satisfy future demand instead by combining energy efficiency with investment in wind and solar generators.

Wind farms have already begun popping up in Chile. So far, however, their overall contribution to the energy grid (less than 100 MW) is modest. Proponents of renewable energy insist there is tremendous room for growth, particularly in Chile's spacious and largely unpopulated desert north, a vast reservoir of potential solar power.

"Chile has many other resources: solar energy, geothermic, wind, all kinds of abundant renewable energies," Nobel Prize-winning Italian physicist Carlo Rubia told Chile's *La Nación* during a visit in October 2009. "Among the different energy options, nuclear is the most delicate and complicated. It presents the most problems. The real question that needs to be asked is, why make things difficult if they can be done easily? Solar energy is extremely easy and functions marvelously. Why open yourself to all the problems involved with nuclear energy?"

Publicly, President Piñera says the only decision he's made so far is not to decide. His actions--like those of the governments that preceded him--seem to be telling a different story. Factor in the regional context (Argentina and Brazil are both expanding their atomic energy industries), Chile's fondness for foreign investment, and the status that would come with joining the "nuclear club," and the writing may very much be on the wall.