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"The price of hot-rolled sheet in coil—the most common steel product—rose by 116% and then fell by 47% in the past 20 months" (up to September 2005). "So, the London Metals Exchange (LME) and the New York Mercantile Exchange (NYMEX), are revisiting the possibility of global trading in steel futures." The Multi Commodity Exchange (MCX) of India, currently in contract with the LME in energy futures, began its steel futures trading on March 12, 2004. And the Shanghai Futures Exchange (SHFE), at the beginning of June 2006, announced that steel futures will be launched soon into their market.

In mid-May, the LME had already confirmed their choice of pricing companies, Platts and McGraw-Hill, to "create, manage, and promote prices and products in the area of price risk management in the steel market." In LME's 2005 financial statement, Chief Executive S.J.N. Heale writes, "And I am pleased to say the LME is seen as the preferred exchange for the introduction of steel futures contracts. Although our first choice for ensuring price convergence is through a physical delivery mechanism, the complex nature of steel resulted in the conclusion that the LME should not seek to introduce physically settled steel futures contracts, either on an in-warehouse basis or a delivered basis. As a consequence, the only contract design that could, in our opinion, work is a 'cash settled' contract using a reference price derived from physical transactions."

For obvious reasons, steel producers, consumers, and traders alike oppose the idea. According to *Purchasing* magazine, "The LME steel futures plan has never been supported by the International Iron and Steel Institute, the trade association in Brussels representing almost all the world's steelmakers."

At the Steel Strategies Conference in New York on June 20, CEO Daniel DiMicco of Nucor, the largest of the U.S. mini-mills, said, "The folks who are going to make money off this aren't in steel," referring to speculators and other financiers. Rodney Mott, president and CEO of Stelco in Canada, agreed: futures trading in steel was unnecessary. Even Lakshmi N. Mittal, chair and CEO of Mittal Steel, said, "I don't think we need a futures market for steel."

In the past, neither the International Iron and Steel Institute, nor the American Iron and Steel Institute, the Steel Manufacturers Association, nor the Latin American Iron and Steel Institute have supported this swindle. And, on June 22 of this year, Bo Andersson, General Motors Vice President of Global Purchasing and Supply Chain, told an automotive industry seminar that he saw little need for steel future contracts to help GM hedge its exposure (a standard lying rationalization for futures markets), because, although it buys 10 million tons of steel a year, "Most of the stuff we buy. . . we have long-term contracts."

Nevertheless, the charge toward a steel futures market barrels mindlessly ahead, a harbinger of the impending financial blowout.

Nuclear Power: The Key To Bolivian Development

by Luis Vásquez Medina

The economic development of Bolivia, the poorest nation in South America, is urgently necessary to bring peace and development to the entire South American continent. To bring about this South American great project, this country in the Andean highlands must acquire the most advanced science and technology. Bolivia must enter the age of nuclear energy now. Today, while there is sovereign discussion going on over what to do with its natural gas wealth, there is a particularly favorable opportunity for Bolivia to take this leap forward. The political formula in Bolivia today should be: *gas for nuclear power.*

Bolivia not only shares borders with the greatest number of South American countries, but contains the greatest mineral, energy, and freshwater reserves of the region. That is why it has been targetted by the international Synarchist banks, which have incessantly promoted regional geopolitical conflicts to facilitate their strategic objectives. Synarchist puppet Augusto Pinochet himself, in his book *The Geopolitics of Chile,* has indicated that in the long term, whether it wants to or not, Chile will have to try to seize control of those precious resources, especially the water and gas that can be found in the plateau of Titicaca, in southern Peru and in eastern Bolivia.

The solution to the shortage of power and water in northern Chile must also be the peaceful development of nuclear power. Although people are thinking along these lines in Chile right now, there is an absence of the political will to develop nuclear power. As of now, President Michelle Bachelet has indicated that, during her administration, Chile will not pursue anything that has to do with nuclear power.

The Titicaca Basin

Lake Titicaca is the largest reserve of fresh water in South America, at more than 8,290 square kilometers (3,200 square miles) in area. It is the highest lake in the world, at an altitude of 3,815 meters above sea level. It has an average depth at the present time of 275 meters, although it is drying up. Lake Titicaca straddles the Bolivia/Peru border, is also near Chile, and is part of a closed basin that includes the Desaguadero River, the only river that drains out of the lake and which connects it with Lake Poopó, and more to the south with the salt deposits of Coipasa and Uyuni. This whole system is land-locked, having no outlet to the sea, and is drying up because of evaporation. This whole basin, called TDPS (for

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the initials of the lakes and rivers that comprise it), extends for some 140,000 kilometers, is inhabited by more than three and a half million people, and has the highest demographic density for a region that is at 3,500 meters elevation.

The large volume of water in Lake Titicaca, 930 cubic kilometers, offers a tremendous potential for hydraulic wealth, since 35 cubic meters per second flow out of it, into the Desaguadero River, despite the fact that this flow represents only 19% of the flow of the five leading tributaries of the lake. That so much more water flows into the lake than out of it, demonstrates the large amount of water that the lake loses through evaporation. The ratio between what the lake loses by evaporation and what flows from it into the Desaguadero River, is 20 to 1. The whole TDPS basin, in the recent past, was a vast interior sea, which is drying up rapidly. Fifty years ago, the salt field of Coipasa was semi-swampland. Today, the Uyuni is the largest salt deposit in the world.

The economy of the entire TDPS basin depends entirely on the vagaries of the weather: Agriculture and ranching in the region depend on the rains. The tragic irony of the area is that when there is drought, there is hunger, even while living along the coast of the largest freshwater reserve on the continent. Recent history is a series of tragic famines, the result of droughts that have sometimes lasted 2-3 years. During the 1980-83 drought, anthropological research turned up indications of human sacrifice of children, carried out by the inhabitants of the region to ingratiate themselves with Mother Nature.

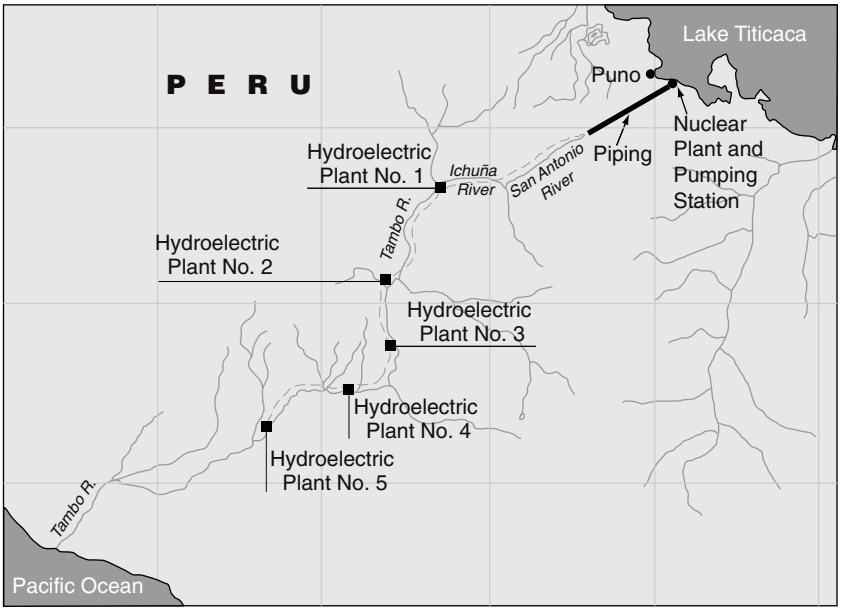
In the high plateaus of Titicaca, there is no possibility of generating hydroelectric power, because there are no waterfalls. Thus, the only economical source of power is nuclear. At the present time, electricity in the large cities of both Bolivia and Peru is very costly. Electricity is transported from far away, or generated at great expense in gas- or oil-burning thermo-electric plants.

In the Bolivian high plateau, which is made up of three departments—La Paz, Oruro, and Potosí—and on the Peruvian side, of Puno department, cheap water and electricity are urgently needed for development, which can only be achieved through nuclear power plants. Studies carried out in the early 1960s by the Council of Atomic Energy of Peru and the U.S. company General Electric, determined the feasibility of industrializing the entire region with the installation of a nuclear facility on the shores of Titicaca.

FIGURE 1
The South American Continent

FIGURE 2
The Lake Titicaca Basin

FIGURE 3
Lake Titicaca Nuclear and Hydroelectric Project



A Nuclear Plant at Titicaca

In 1960, the Council of Atomic Energy of Peru publicized a feasibility study done by the International General Electric Company, regarding the possible installation of a boiling-water nuclear plant capable of producing 100,000 kilowatts, on the shore of Lake Titicaca. The project was intended to contribute to the economic development of important areas of the Peruvian and Bolivian republics. In the written presentation of the project, possible financing by the U.S. Eximbank was suggested: "The U.S. Atomic Energy Commission and the Export-Import Bank of Washington agree to conduct a joint effort regarding the construction of energy-generating atomic plants in nations, such as Peru and Bolivia, that have cooperation agreements with the United States." The team of GE scientists and engineers that came to Peru to carry out feasiblility studies proved the technical feasibility of the project which, had it been realized, would have completely changed the economy of the entire region.

In its design, the project involved:

1. Installation of a 100,000-megawatt nuclear reactor near the city of Puno, on the banks of the lake on the Peruvian side, with which there would be sufficient energy for pumping 500 cubic meters of water per second across the western mountain range, and the electrification of the entire northern zone of the high plateau between Peru and Bolivia.

2. The second part of the project, on the Peruvian side, presupposed using the pumped water in a system of hydroelectric plants to generate more than 1,000 megawatts of electricity, and to irrigate southern Peru and the extreme northern part of Chile. The conclusion of the study unequivocally states: "A preliminary investigation indicates that there would be no difficulty in building and operating a nuclear energy plant along the shore of Lake Titicaca, at an elevation of approximately 12,500 feet. The transport facilities for bringing the largest and heaviest parts of the plant from the coast to their installation site appear adequate. A nuclear energy plant is well adapted to operate in isolated locales, since it is not necessary to transport large quantities of fuel to keep the plant in operation. Based on the previous observations, it is concluded that the Lake Titicaca Project is viable from an engineering standpoint, and that there exist no serious obstacles to be found in the design, provisioning of equipment, and final construction of the project."

Gas for Nuclear Power

At the current time, income from Bolivian gas makes the construction of a modern, approximately 400,000-megawatt nuclear plant very feasible, which would make the industrialization of the entire Bolivian high plateau region possible, as well as the transport of water to the eastern region of Bolivia for irrigation. In addition to both Peru and Chile, Argentina and Brazil should also undoubtedly participate in the project, with their technology.

It should be remembered that the International Monetary Fund shut down the nuclear programs in all the countries of Ibero-America which, through continental cooperation, had been destined to enter into the nuclear age by the end of the 20th Century. Argentina transferred atomic technology to Peru where, with that cooperation, a 10-megawatt nuclear research reactor was built in Huarangal, north of Lima. This was to be the first phase in the construction of two nuclear plants, one in the north of the country and the second on the shore of Titicaca, before the end of the 20th Century.

At the moment when the international financial empire that prevented those advances is itself crumbling, it is time for our nations to once again take up these noble ideas of progress.

Lyndon LaRouche's June 15, 2006 videoconference with Mexico and Argentina discussed the need for nuclear power. See *EIR*, June 23. The video can be found, in English and Spanish, at

www.larouchepub.com/spanish/audio/2006/15jun06MexArgEEUU.htm