From Promethean Fire To Nuclear Energy

by Manuel Romero Lozano

The author is a LaRouche Youth Movement member from Mexico.

There can be no doubt that these are times in which the moral and historic quality of individuals is being put to the test, as modern civilization faces the worst economic, financial, and existential crisis ever. Now, as in other historic periods, civilization needs extraordinary individuals to serve as leadership to guide humanity in a good direction, just as Prometheus did in giving fire to humankind.

In this sense, the LaRouche Youth Movement throughout the continent has taken up Lyndon LaRouche's challenge, as posed to us during his mid-March visit to Monterrey, Mexico. Said LaRouche: "Unity between Central and South America must be achieved, from Mexico down to Argentina. The potential to do this exists. You must provide the population with the politics of ideas. You must become giants and fill that vacuum that now exists among nations; that is your mission."

One week after this challenge was posed, members of the LYM from Mexico, Argentina, Colombia, and Peru released the first edition of the Ibero-American LYM's weekly Internet publication Prometeo (Prometheus), designed to provide the "politics of ideas" to the population of Ibero-America, but especially to its youth (www.wlym.com/~spanish).

On to Laguna Verde

After the successful completion of this publication mission, and with the takeoff of the nuclear campaign in Mexico, the LYM refined its high-energy isotopes towards achieving a "fusion reaction" in the organizing, by visiting Laguna Verde, Mexico's sole nuclear energy plant.

And thus began our voyage to the center of the atomic nucleus. Right away, we were asked by our guide to talk more about the LaRouche political movement. Afterwards, we watched a video on how the reactor is refueled. Then, an engineer took us to see life-size pedagogical models of various parts of the reactor, such as the fuel rods, control rods, fuel assembly, and so forth. It is worth noting that the visit to this section was initially planned to last 45 minutes, but given the dialogue that naturally ensued with our pro-nuclear group, it lasted nearly two hours.

We were all awed by a scale model of a cross-section of the boiling water BWR-5 nuclear reactor. Questions to our guide poured out: "What is this?" "What's that for?" and



Author Manuel Romero of the Mexican LYM, with a model of a nuclear fuel rod, at the Laguna Verde plant. A large group of LYM members toured the plant.

so on. Another interesting aspect was the explanation about radiation, and we learned that in our daily lives, we are constantly bombarded with low-level radiation.

Then, the moment we had all been waiting for arrived. We put on our safety helmets and safety glasses, to enter the building where the reactor itself is housed. It was incredible, going through all the security systems.

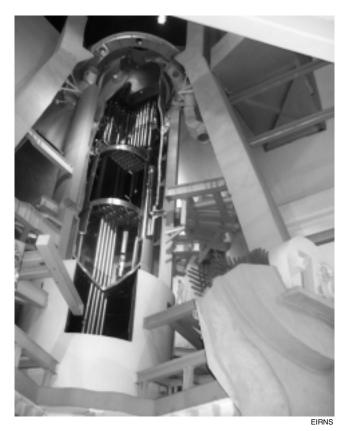
At the first radiological checkpoint, the engineer leading our group told those in charge of the section that we were a group of pro-nuclear youth, to which those working in the section responded with great enthusiasm. With all of the security equipment and safety checks, we felt as if we were about to take a voyage into outer space!

We saw the reactor's controls, and various floors of the reactor building, including the room where the refueling takes place. From the refueling area, one could see the pool which held the used fuel rods. It was an awesome experience to realize that a nuclear reactor was operating right in front of our eyes.

'The Safest Place in Mexico'

As we left the reactor building, safety regulations were stricter. We even joked that "we are in the safest place in Mexico," which was actually quite true. The most impressive thing was how they tracked radioactivity in the body, and

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A cutaway model of part of the Laguna Verde nuclear reactor. The two Laguna Verde reactors supply 6.25% of Mexico's total energy consumption.

wouldn't let you leave until you were free of contamination. Having exited the building with a radiation reading of .01 millirem, we burst into our now-famous song on nuclear energy.

The guides were thrilled with our songs, and it appears that we gave them back the hope of having more nuclear reactors in the country. Contrary to the urban myths that Laguna Verde is obsolete, that it pollutes, that it is old and unsafe, and so on, the fact is that the Laguna Verde nuclear plant is the safest, cleanest, and most carefully monitored site in all of Mexico!

Some of the most striking points about the plant include:

- It is located in the state of Veracruz, on the coast of the Gulf of Mexico;
- It has two BWR-5 reactors of the Mark 2 direct-cycle type;
- The plant generates 6.25% of the total energy consumed in Mexico;
- The plant has two turbo generators made by Mitsubishi Heavy Industries, of 682.44 megawatts each.

And so, once again, we are generating the critical mass so that the Mexico LYM can ensure that the nation will have sufficient energy for the 21st Century!

What We Really Know About Chernobyl Today

by Marjorie Mazel Hecht

It has been 20 years since the Chernobyl nuclear explosion on April 28, 1986. The accident shocked the entire world and continues to keep most of the population in the area around Chernobyl frightened about what happened and about their future, while worldwide, anti-nuclear organizations and media keep fanning the flames of fear, without regard for science or truth.

What do we really know after 20 years about the effects of the radiation released from Chernobyl?

The most competant analysis is the official report of the United Nations Scientific Committee on Atomic Radiation (UNSCEAR), issued in 2000, which determined that there was *no* increase in the incidence of solid cancers and leukemia in the highly contaminated areas, except for thyroid cancers (which are the result of the screening effect—see below), and *no* increase in genetic diseases. More recently, the UNSCEAR assessment was echoed by the 2006 report of the United Nations Chernobyl Forum, which is composed of representatives of eight UN organizations, the World Bank, and the governments of Belarus, Russia, and Ukraine.

Both reports have come under fire from the unscientific special interest groups, which prefer to proliferate the idea that radiation at any dose is "dangerous." Greenpeace, for example, claims that 200,000 people will die as a result of the Chernobyl radiation, and the German-language *Der Spiegel* calls Chernobyl "The Pompeii of the Nuclear Age," in an April 17 article that highlights alleged radiation-caused genetic aberrations (such as deformed limbs) in children born after the accident.

Radiation in Perspective

Dr. Zbigniew Jaworowski, a physician and radiation scientist at the Central Laboratory for Radiation Protection in Warsaw, Poland, and a former chairman of UNSCEAR, presents a most informed, thorough, and sobering assessment. Writing for the Spring 2006 issue of 21st Century & Technology, as well as for the current issue of the Polish-language edition of Scientific American, Jaworowski puts the Chernobyl radiation in perspective. The enormous amount of radioactive dust from the burning reactor, he says, was 200 times less than the atmospheric radioactivity from the previous generations of nuclear bomb tests. From these tests, he says, the highest radiation dose was in 1963, at 0.1133 milli-sievert, to the world population. The Chernobyl radiation dose, in the