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LATIN AMERICA

Nuclear Energy Facilities and Programs

Several Latin American countries have nuclear programs, but only Argentina, Brazil, and Mexico have nuclear power together with fuel cycle facilities under construction or planned. Chile, Venezuela, and Cuba have modest nuclear research programs focused on developing nuclear power in the near future. Colombia, Peru, Ecuador, Uruguay, Bolivia, and Paraguay are just beginning to develop nuclear research programs and are looking for outside assistance.

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Argentina has the most advanced and comprehensive nuclear energy program of any Latin American country and is seeking to become self-sufficient in nuclear energy. Because it possesses relatively abundant reserves of uranium, Argentina is basing its power program on natural uranium-fueled reactors.

One such power reactor is in operation, another is under construction, and negotiations are under way for a third; if completed on schedule, these three plants will give Argentina 1,600 megawatts of nuclear electric generating capacity of 1985. The Argentines plan to construct or are already building facilities for chemical reprocessing, fuel fabrication, and heavy water production.

Most other Latin American nations consider Argentina not only the regional leader in nuclear development but also a possible supplier of nuclear equipment, materials, and technology. Four Latin American countries already receive nuclear assistance from Argentina. The Argentines are supplying research reactors to Peru, designing a pilot chemical reprocessing plant for Mexico, training Chilean personnel, and constructing a uranium ore treatment plant in Bolivia. Ecuador, Uruguay, and Paraguay are seeking nuclear assistance from Argentina.

Brazil's nuclear program is less advanced but more ambitious than Argentina's. Westinghouse is constructing a nuclear power reactor in Brazil that is scheduled for completion next year. The Brazilian nuclear program is based on a nuclear assistance agreement with West Germany that provides for eight power reactors as well as facilities for uranium isotope separation, fuel fabrication, and chemical reprocessing.

If the agreement is fully implemented and if an adequate uranium supply can be developed, Brazil will have a complete nuclear fuel cycle and will be self-sufficient in nuclear energy. Brazil, however, will be almost totally dependent on imported technology for its nuclear program, and proven uranium reserves are inadequate to meet projected needs.

Mexico's nuclear power program, like Brazil's, is heavily dependent on foreign

assistance. The program is less developed than the Argentine and Brazilian programs, and Mexican officials are disappointed with it. Construction of two US-supplied power reactors, which began in 1972, has been delayed, and the completion date for the project has slipped to 1982, some five years behind schedule.

Mexican scientists are now independently designing nuclear fuel cycle facilities including uranium processing, fuel fabrication, chemical reprocessing, and plutonium fabrication. Mexico has substantial uranium deposits and is operating a pilot ore concentration plant.

Chile has a small nuclear program consisting of two operating research reactors that mainly produce radioisotopes. The government is examining nuclear power as an alternative to fossil-fueled power plants and is considering the purchase of the smallest size nuclear power reactor available commercially.

Venezuela, Cuba, and Colombia have research reactors and rudimentary nuclear research programs devoted mainly to production and application of

radioisotopes and to training. Cuba is the only one of this group and the only Caribbean nation with specific plans for nuclear power; the Cuban program includes planned construction of two Soviet supplied power reactors.

Uruguay, Peru, Bolivia, Paraguay, and Ecuador are just beginning nuclear research. All have uranium deposits and are receiving or plan to obtain nuclear assistance from Argentina.

Latin America is the only continental region that has a nuclear-free-zone treaty. The treaty forbids development, manufacture, or stockpiling of nuclear weapons, but does not preclude the development of peaceful nuclear explosives. The treaty is not now in effect in Argentina, Brazil, Chile, or Cuba, and it is unlikely that this situation will change in the foreseeable future.

Argentina, Brazil, and Chile have not signed or ratified the Nuclear Non-Proliferation Treaty, nor have Cuba, Guyana, and Belize. Of the countries, only Argentina and Brazil are potential developers of nuclear explosive devices in the foreseeable future.

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SS—Secret SPOKE
S—Secret
C—Confidential
U—Unclassified
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REL...—This information has been Authorized for Release to...

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