

# Electric Power Sector Program, Stage II

EL SALVADOR

SECTOR: Energy

PROJECT NAME: Electric Power Sector Program, Stage II  
(838/OC-ES)

TOTAL COST: \$332 million

FINANCING:

IDB	\$215 million
OTHER	\$ 55 million (OECD of Japan)
LOCAL	\$ 62 million

DATE OF APPROVAL: November 30, 1994

GENERAL DESCRIPTION: The objectives of this program are to: (a) provide the infrastructure needed to accommodate the country's growing demand for electricity through the rehabilitation and expansion of geothermal generation and transmission systems; (b) contribute to electric power integration as a means of supporting economic development in Central America; (c) support the process of sector and institutional reform of electricity utilities; and (d) foster the efficient use of electricity.

The specific components include: (a) construction of the 55 MW Berlín geothermal generation plant; (b) stabilization and rehabilitation of the 42 MW Ahuachapán geothermal plant; (c) construction of three new 115 kV transmission lines and two 115-46 kV substations, rehabilitation of twenty 115 kV lines, and expansion of the capacity of eight existing substations; (d) an energy conservation program; and (e) institutional strengthening and staff training of

the Comisión Ejecutiva Hidroeléctrica del Río Lempa (CEL).

**CONSULTANTS:**

The method of direct procurement will be utilized to hire consultants to conduct the feasibility study. A team of 2 or 3 international consultants will be hired to help implement the energy conservation program component. An engineering firm specialized in geothermal projects will be hired to advise the Geothermal Office of the CEL, prepare the construction designs for all works, and supervise the contractors' engineering works. This firm will also supervise and interpret all geoscientific data found through deep exploration, production and reinjection drilling and help CEL's Geothermal Office define well-drilling strategies.

**GOODS AND EQUIPMENT:** The method of direct procurement will also be utilized for the purchase of replacement equipment for the Ahuachapán geothermal plant. The transmission and subtransmission projects will require towers, conductors, guard lines, vibration mufflers, spacers, insulators and fittings.

**CIVIL WORKS:**

The following types of civil works will be required: (a) construction of the 55 MW Berlín geothermal plant (two 27.5 MW units); (b) rehabilitation of the Ahuachapán geothermal plant: including the clearing, drilling, reinjection and connection of new wells, repairs to a 30 MW unit and a 35 MW unit, initial reinjection tests in the Chipilapa field, drilling of new production wells, and high-temperature reinjection systems; and (c) construction of 160 km of 230 kV transmission lines between the Pavana substation in Honduras and the 15 de Septiembre hydroelectric substation in El Salvador: including installation of a 230 kV loop outlet circuit at the Pavana substation, construction of a 230 kV, 250 MVA substation and expansion of the existing 115/46 kV substation at the 15 de Septiembre plant, and installation of a teletransmission, telecontrol and teleprotection system. ICB will be required for works contracts exceeding \$1.5 million.

**EXECUTING AGENCY:**

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