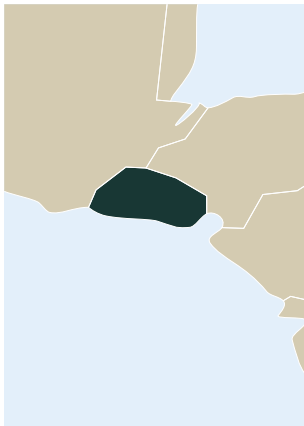


Overall Rating  
**A**

A Foundation for Sustained Growth



**39 El Salvador**

# Power Sector Emergency Improvement Project Electric Power Sector Project (2)

Contributing to economic growth by expanding and stabilizing power supply capabilities

**Loan Amount/Disbursed Amount** 8.817 billion yen/8.150 billion yen (Power Sector Emergency Improvement Project)  
7.585 billion yen/5.499 billion yen (Electric Power Sector Project(2))  
**Loan Agreement Terms & Conditions** March 1993/July 1996  
**Final Disbursement Date** Interest rate 3.0%, Repayment period 30 year (grace period 10 years), General untied  
August 2000/April 2003  
**Executing Agency** Comisión Ejecutiva Hidroeléctrica del Río Lempa (<http://www.cel.gob.sv>)



## Project Objectives

El Salvador suffered horrific damage during its recent civil war. By conducting repairs on the country's highly deteriorated Acajutla thermal power station, and by repairing and installing transmission and distribution facilities in the region, this project was to improve power supply stability and capability while securing a reserve power supply, and thereby contributing to El Salvador's economic growth and post-war reconstruction efforts.

## Effectiveness & Impact

Rating **a**

In El Salvador, the privatization of government organs in the electrical power sector was promoted based on electricity laws enacted in 1996. Those in charge of running thermal power plants and electrical transmission and distribution facilities were replaced, and a private sector initiative was enacted to stimulate competition and enhance operating efficiency. As a result of the privatization, while this project was in progress, low-cost hydroelectric and geothermal energy resources were tapped, and the Acajutla thermal power station targeted by this project was put to use as a reserve power source for times when hydroelectric and geothermal power generation could not supplement the shortfall. As a result, the usage of the plant was changed from the initial design, and sending end power volume and capacity factor were lower than before the project was begun (approximately 45%). Although the plant's facilities' utilization rate was lowered, the plant played a major role in stabilizing the power supply, playing backup under a tight power supply and demand balance. At the same time, the project enjoyed low power transmission and distribution losses across the board: transmission losses stood at 1.8%, and the distribution losses at Montserrat and Nuevo Cuscatlan were 0.86% and 2.25%, respectively. In addition, there were few problems with the power transmission lines and transformer substations, and power outages were

of shorter duration. Therefore, this project has largely achieved its objectives, and effectiveness is highly satisfactory.

## Relevance

Rating **a**

Both at the time of the appraisal and at the time of the ex-post evaluation, this project has been highly relevant with national plans and policies. During both the appraisal and the ex-post evaluation, El Salvador placed great emphasis on the improvement of power supply capacity and reliability.

## Efficiency

Rating **b**

Although project costs were shorter than planned, reaching 82% of target, duration greatly exceeded the original plan, reaching 151% of target. Therefore, the evaluation for efficiency is moderate. Among the reasons cited for the project delays was the fact that supplementary construction was needed to repair the Acajutla plant, and the fact that much time was consumed negotiating to acquire easement rights to lay out transmission lines.

## Sustainability

Rating **a**

The companies in charge of project facilities following privatization have shown themselves to be capable, things are fine on the financial front, and operation and maintenance is being conducted satisfactorily. Therefore, sustainability of this project is high. At the Acajutla power plant, operation is appropriate, and maintenance is being conducted in a timely manner. In the transmission and distribution sector of each operating company, measures such as the establishment of an annual operation and maintenance plan, assignment of staff, stipulation of detailed periodic inspection items, and standardization of operation process are being taken. Moreover, as each operating company's financial condition is solid, operations have been in the black in recent years.



Ateos substation

## Third-Party Opinion

This project sought to expand power generation capacity and improve the nation's power system overall. Although it took much time to privatize the power sector, as a generous supply of high-quality power has been realized, this project has helped lay the foundations for economic activity.

Name of specialist: Mr. Francisco Molina (economist)  
MA in economics from American University. Served as an economist for the Central Bank of El Salvador, and now works as a consultant for Salvadoran Government, international organizations, aid agencies, and private enterprises. Specializes in economics.