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IMPLEMENTATION COMPLETION REPORT

HAITI

**FOURTH POWER PROJECT
(CREDIT 1527-HA)**

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**Infrastructure Operations Division
Country Department II
Latin America and the Caribbean Regional Office**

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FOURTH POWER PROJECT (CREDIT 1527-HA)

Preface

This is the simplified Implementation Completion Report for the Fourth Power Project in Haiti for which Credit 1527-HA in the amount of SDR21.8 million was approved on November 20, 1984, and made effective on February 6, 1985.

A simplified ICR has been adopted for this project because an ICR was not prepared soon after the closing date, June 30, 1990, and the September 1991 coup d'etat in Haiti and subsequent falling into arrears disrupted established agreements with the Association and prevented the Bank from doing any business with Haiti until December 1994 when the suspension of disbursements was lifted. This left the project's ICR on hold for more than three years. Given the considerable time elapsed, knowledge of the situation at the time of the project closing is incomplete and Electricité d' Haiti (EdH, the implementing agency) staff, consultants and contractors involved in the project implementation are no longer available for comments. As by BP 15.55, the simplified ICR is limited to a critical assessment of project implementation based on supervision reports, correspondence between the Association and the Borrower and the executing agency, and correspondence within the Association.

The credit was closed on June 30, 1990, one year after the original closing date. It was fully disbursed, and the last disbursement took place on August 15, 1990. Cofinancing for the project was provided by Caisse Centrale de Cooperation Economique (CCCE) in the amount of US\$8.9 million equivalent to acquire two new 7.8 MW diesel generating units.

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Credit 1527-HA

A. Project Objectives

1. The project objectives were principally to increase generating capacity to meet the growing electricity demand by improving the performance of two diesel plants and one hydro plant, to complete the renovation of the Port-au-Prince distribution network to increase service reliability and decrease energy losses, and to strengthen the national power utility (Electricite d'Haiti - EdH) as an institution. It also included preparation of final design and bidding documents for a new hydroelectric project in the Artibonite river basin and a review of the municipal finances of Port-au-Prince.

2. To achieve these objectives the project comprised: acquisition of two new medium-speed diesel generating units of 7.8 MW each for the existing Carrefour plant and equipment for three plants (two diesel and one hydro); work to complete the renovation of the Port-au-Prince distribution network; and consulting services.

3. To support the energy loss reduction efforts, a special provision was included in the Project Agreement, committing EdH to reduce its energy losses by specific amounts during project execution and to maintain them below a maximum level (17%) from September 30, 1988 onward.

4. The major objectives were well selected in the context of the utility's performance at appraisal. Although the appraisal mentions EdH's shortages in managerial and administrative skills, it does not assess them, but to overcome these stated weaknesses the project does provide for training and fellowships, and requires assurances from the Government for EdH's continued adequate management and independence from the former's undue influence. With these provisions and without further analysis EdH's performance was expected to improve.

5. Reduction of system losses, which severely affected EdH's performance and totaled at appraisal 30.4% (equivalent to 21.0 MW, or 1.5 times the new generating capacity of 15.3 MW acquired under the credit), was not adequately assessed. Energy losses due to inefficient distribution facilities were addressed by the Association, beginning with the Second Power Project of May 1979, continued with the Third Power Project of 1982 and completed with the Fourth Power Project. However, the problem of unaccounted losses, which were half of the total, and due principally to energy thefts, was not analyzed in depth.

Without such an assessment from which to derive a comprehensive program to combat these losses, their expected drastic reduction was unrealistic.

6. Preparation of plans for a new hydro plant was a sound objective since this renewable energy source would complement efforts to reduce the cost of imported fuel which, at appraisal, represented 55% of operating expenses. However, the study on municipal finances of Port-au-Prince, which was motivated by Government's proposal to apply a municipal surcharge to electricity tariffs, should not have been a project component. Improvement of municipal finances could have been a condition in the processing of the credit. In the end, the study was not performed and the link never occurred.

7. The project, as designed, was within the management capacity of the borrower and EdH, except in the matter of reducing energy thefts which fell in the realm of civic and institutional discipline. The Government did not endorse a program to reduce these thefts through appropriate legislation and corresponding enforcement, and EdH did not provide the required management.

B. Implementation Experience and Results

8. The project was partially successful in achieving its major objectives since the new generating capacity was in service on schedule, the renovation of the distribution network was completed, plans for a future hydro project were finalized, EdH received sound support from its consultants, and its staff benefited from the training financed by the credit. Nevertheless, EdH's institutional performance deteriorated from weak management and poor finances due principally to arrears in service payments and energy losses which instead of dropping to 17%, as expected, increased to 35% and EdH's rate of return on revalued assets was 2% instead of the agreed 8%.

9. The credit was amended twice to facilitate full utilization of proceeds in an expanded project scope permitted by increased dollar amounts from higher exchange rates of SDR's and French Francs. This required postponement of the closing date by one year. The following tables compare project cost and financing at appraisal and after project completion.

PROJECT COSTS

	SAR			Actual			Diff (%)
	Local	Foreign	Total	Local	Foreign	Total	
	US million						
Carrefour diesel plant	0.9	7.5	8.4	1.2	11.4	12.6	50.0
Generation improvement	0.1	7.8	7.9	1.5	14.2	15.7	98.7
Distribution network	0.8	4.5	5.3	2.5	7.7	10.2	92.5
Consulting services and training	<u>0.7</u>	<u>4.0</u>	<u>4.7</u>	<u>1.6</u>	<u>4.7</u>	<u>6.3</u>	<u>34.0</u>
Total base cost	2.5	23.8	26.3	6.8	38.0	44.8	70.3
Physical contingencies	0.2	2.4	2.6	-	-	-	-
Price contingencies	0.6	4.3	4.9	-	-	-	-
Municipal finances study	<u>0.1</u>	<u>0.4</u>	<u>0.5</u>	----	----	----	----
Total project cost	3.4	30.9	34.3	6.8	38.0	44.8	30.6

	SAR			Actual		
	Local	Foreign	Total	Local	Foreign	Total
Financing Plan						
IDA credit	0.1	22.0	22.1 ^{a/}	0.1	26.6	26.7 ^{b/}
CCCE credit	-	8.9	8.9 ^{a/}	-	11.4	11.4 ^{b/}
EdH	<u>3.3</u>	----	<u>3.3</u>	<u>6.7</u>	----	<u>6.7</u>
	3.4	30.9	34.3	6.8	38.0	44.8

^{a/} Equivalent at appraisal to SDR's and French Francs.

^{b/} Equivalent at closing to SDR's and French Francs.

10. Achievement of the objectives to increase generating capacity and improve performance of the Port-au-Prince distribution network was the result of effective procurement of goods and services and sound execution of the corresponding installations through successful supervision by EdH staff with good assistance from its consultants. The failure in achieving a reduction in unaccounted energy losses was for lack of an effective program to combat them at the time when existing legislation and Government actions against clandestine service connections were inadequate and EdH had poor monitoring of billings and collections. Energy losses and arrears from payment of electricity were the main causes of EdH's very poor financial performance. In spite of these important shortcomings, the project's outcome can be judged to be partially satisfactory since most of the project's investment objectives were achieved. However, in view of the limited institutional progress, one would have to judge the project's sustainability as unsatisfactory.

11. The Association performed nine supervision missions during the four-year project execution period and was constantly concerned with the deteriorating managerial and financial performance of EdH. Although, the Association could not prevent appointment of ineffective managers, legal provisions did exist for rate of return and reduction in energy losses, and the Association failed to take effective action in these matters. The perennial defaults in achieving the required

rate of return were not addressed by the Association and the failure to reduce energy losses was met by only limited notification alerts to the Borrower and EdH and delays in processing the Fifth Power Project.

C. Summary of Findings, Future Operations, and Key Lessons Learned

12. The project achieved its investment, but it did not achieve its institutional objectives. While overall performance can be judged to be partially satisfactory, given the major institutional shortcomings, the project is not likely to be sustainable.

13. The subsequent Fifth Power Project approved in June 1989 also intended to improve EdH's performance and reduce non-technical energy losses, but also without introducing effective changes in the approach used in the previous project to achieve it.

14. When project objectives depend critically on the performance of public institutions, they should be defined on the basis of comprehensive assessments of all the major social, political, institutional and economic factors involved. This was not done in the appraisal of the Fourth Power Project.

IMAGING

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