

PROJECT ASSISTANCE COMPLETION REPORT
DOMINICA RURAL ELECTRIFICATION PROJECT
Project No. 538-0130

The Dominica Rural Electrification was authorized on March 4, 1985. A grant agreement in the amount of \$4,700,000 was executed on March 13, 1985. The purpose of the project was to increase DOMLEC's generating capacity to meet increasing system demand and to provide electricity service to the east coast by extending the utility's transmission/distribution network.

The original budget contained in the project agreement was as follows:

<u>Project Element</u>	<u>Cost (\$000)</u>		
	<u>AID</u>	<u>GOCD</u>	<u>Total</u>
Diesel Generators	1,834		1,834
11KV Transmission Line	2,090		2,090
Distribution Materials/Installation	727	350	1,077
Environmental Activities	<u>40</u>	<u>10</u>	<u>50</u>
TOTALS	4,681	360	5,041

The generation component of the project was intended to permit DOMLEC to meet peak power demand through diesel generation until new capacity from the hydro expansion program comes on stream in 1990. Requirements for additional diesel units were identified by EBASCO Services, Inc., under a PDS funded requirements contract completed prior to project authorization. 1500KW was determined to be the minimum requirement. EBASCO prepared an RFQ, including technical specifications, which was used as a basis for soliciting quotations for the units. A direct-AID contract was utilized to facilitate the procurement which was also advertised prior to project authorization. General Engineering Company of Kingshill, St. Croix, was awarded a contract for supply/installation of 2,750KW units and ancillary equipment in May, 1985. EBASCO provided periodic inspection services until the units were commissioned in April, 1986. The supply installation contract was valued at \$876,000, considerably less than the budgeted amount. Defects in the diesel engines and supporting equipment which surfaced subsequent to commissioning were repaired under the warranty clause of GE's Contract.

A contract for construction of the high voltage (11KV) transmission line from Trafalgar to Rosalie on the east coast and thence north to Castle Bruce and south to Delices was awarded to Sadelmi N.Y. Inc., on the basis of formal competitive bidding procedures. Prequalification had been carried out prior to authorization of the project. Award of the contract was held up pending confirmation from GC/IAC that Sadelmi met the nationality requirements stipulated in Chapter 2 of AID Handbook 11. Construction of the 23.5 mile transmission line commenced in August, 1985, and was completed in August, 1986. The final contract amount was \$2,405,000 including a claim of \$44,000 for extended overhead costs resulting from delays in processing access permits in a timely manner.

Materials for the low voltage distribution network to be installed by DOMLEC forces were also procured using formal competitive bidding procedures. A contract was awarded to Ardry Trading Company of Morristown, N.J., in June,

1985. Delivery of these materials was completed in April, 1986. The contract amount was \$646,000, DOMLEC transported the materials to warehouses on the east coast, maintained inventory controls, and installed the poles, hardware, and conductor for the low voltage distribution network.

After all of the original project objectives had been met, DOMLEC requested that the balance of the grant funds remaining, approximately \$500,000, be used to (1) procure additional distribution materials required to extend the distribution network from Delices to Stowe in the south and from Castle Bruce to Marigot in the north and (2) to carry out a training program which had been recommended in the institutional analysis of the PP. USAID endorsed DOMLEC's request to include training activities in mid-1986 and the request to include additional procurement in January, 1987. The PACD was extended from June 30, 1987, to February 28, 1988, to allow additional time for the procurement activity.

Training activities were carried out under a contract with the National Rural Electric Cooperative Association (NRECA). The training contract was awarded under a sole source waiver approved by RDO/C in October, 1986. NRECA developed individually tailored programs for DOMLEC staff, including both technical and managerial training. A total of 12 persons participated in the program. Training programs ranged in length from one to ten weeks. Including travel and per diem, the training component of the project cost approximately \$120,000.

Remaining distribution materials were procured under a contract with Audry Trading Company, which was awarded on the basis of competitive bidding procedures. The contract amount was about \$380,000. All materials were delivered prior to the PACD. Installation of the materials is being carried out by DOMLEC using its own resources. The utility has agreed to continue to provide brief bimonthly progress reports to RDO/C until construction of the distribution network is completed.

Besides the major supply, construction and training contracts, project funds were also used for a public information program (\$30,000) and project management services (95,000). The latter included salary and other costs for a project manager and the procurement of computer equipment used to schedule project activities and monitor progress under the various contracts.

The revised project budget, which incorporated the training activity and the additional procurement, was as follows:

<u>Element</u>	<u>Cost (\$000)</u>		
	<u>AID</u>	<u>G/C/D</u>	<u>Total</u>
Diesel Generators	907	-	907
11KV Transmission Line	2,458	-	2,458
Distribution Network	1,051	500	1,551
Training	120	-	120
Environmental Activities	40	10	50
Project Management	95	-	95
Public Information	29	-	29
TOTALS	<u>4,700</u>	<u>510</u>	<u>5,210</u>

All project objectives established in the Project Paper were met by the PACD. Institutional shortcomings identified in the Project Paper were addressed through the training program. Management capabilities of the utility have been greatly strengthened through both the training activity and the installation of a comprehensive computer network. Over 1,000 house connections have already been made on the east coast. Additional domestic, commercial, and industrial connections will be made as the distribution network is extended. The network should be completed by the end of calendar year, 1988.

Through the PACD, counterpart contributions to the project totalled EC\$1,689,632, or about \$625,000 at an exchange rate of 2.7 to 1. The bulk of these expenditures were for labor costs, warehousing costs, vehicle/equipment operating and maintenance costs, and crop compensation. Additional costs will be incurred by the utility to complete the remainder of the distribution network. DOMLEC's contribution will thus far exceed that envisioned in the project budget.

Implementation of the Dominica Rural Electrification Project was facilitated considerably by carrying out certain elements of the procurement process prior to or concurrent with the project authorization/obligation. Prequalifying construction contractors and advertising major construction, supply and supply/installation contracts during the design phase of the project enabled the implementing agency or RDO/C to award these contracts within a short period of time after execution of the Project Agreement. Thus, substantive work on the project began within a few months of the project authorization.

An evaluation of the Project will be conducted as a part of the infrastructure program evaluation to be carried out in late calendar year 1988.