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AGENCY FOR INTERNATIONAL DEVELOPMENT  
UNITED STATES OF AMERICA A. I. D. MISSION  
TO EL SALVADOR  
C/O AMERICAN EMBASSY.  
SAN SALVADOR, EL SALVADOR, C. A.

August 12, 1988.

Mr. Samuel E. Bunker  
Administrator  
International Programs Division  
National Rural Electric Cooperative Association  
1800 Massachusetts Avenue, N.W.  
Washington, D.C. 20036

Subject: Cooperative Agreement No. 519-0358-A-00- 8499-00  
Rural Electrification Project

Dear Mr. Bunker:

Pursuant to the authority contained in the Foreign Assistance Act of 1961 as amended, the Agency for International Development (hereinafter referred to as "A.I.D." or "Grantor") hereby grants the National Rural Electric Cooperative Association (hereinafter referred to as "NRECA" or "Recipient") the sum of \$5,000,000 to provide support for the Rural Electrification Project for El Salvador as described in the schedule of this Cooperative Agreement and Attachment 2, entitled "Program Description."

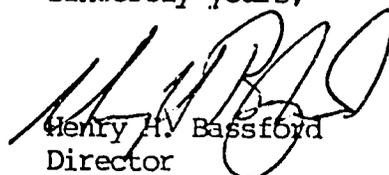
This Cooperative Agreement is effective and obligation is made as of the date of this letter, and shall apply to commitments made by the Recipient in furtherance of program objectives during the period commencing with the effective date of this Agreement and ending September 30, 1992.

This Agreement is made to NRECA on condition that the funds will be administered in accordance with the terms and conditions as set forth in Attachment 1, entitled the "Schedule"; Attachment 2, entitled "Program Description"; and Attachment 3, entitled "Standard Provisions"; which have been agreed to by your organization.

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Please sign the original and three (3) copies of this letter to acknowledge your acceptance of the terms and conditions of this Agreement, and return the original and two copies to the USAID/El Salvador.

Sincerely yours,



Henry H. Bassford  
Director  
USAID/El Salvador

Attachments:

1. Attachment 1: "The Schedule"
2. Attachment 2: "Program Description"
3. Attachment 3: "Standard Provisions"

Acknowledged:

Signed by:



Title: Executive Vice President  
and General Manager

FISCAL DATA

Appropriation: 72-1181021  
Budget Plan Code: LDSA-88-25519-KG13  
Project Number: 519-0358  
Total Estimated Amount: \$5,000,000  
Total This Obligation: \$5,000,000  
  
Funding Source: USAID/El Salvador

SCHEDULE

A. PROJECT PURPOSE

The purpose of the Project is to implement and demonstrate proven methods for improving the delivery and end-use of electricity in rural areas of El Salvador. At the end of the Project, at least 15,000 additional rural Salvadorans will have access to electricity and investment in rural electrification will be made based on a planning process that involves consideration of economic, financial, and social concerns. In addition, with the assistance of the National Rural Electric Cooperative Association (NRECA), the Executive Hydroelectric Commission of the Rio Lempa (CEL) will have established a demonstration program promoting the productive use of electricity in rural areas. This demonstration and promotion program will include on-farm demonstrations and technical assistance. As required, NRECA and CEL will also work with the Central Reserve Bank and A.I.D. to ensure that adequate credit to purchase electrical machinery is available and easily accessible to rural residents. The Project is more fully described in Attachment 2 to this Agreement entitled "Program Description."

B. PERIOD OF AGREEMENT

1. The effective date of this Agreement is the date on which it is signed. The expiration date of this Agreement is September 30, 1992.
2. Funds obligated hereunder are available for program expenditures for the estimated period from the date of signing to September 30, 1992, as shown in the Financial Plan below.

C. AMOUNT OF AGREEMENT AND PAYMENTS

1. A.I.D. hereby obligates the amount of \$5,000,000 for purposes of this Agreement.
2. Payment shall be made to the Recipient in accordance with the procedures set forth in paragraph 1, entitled "Payment - Letter of Credit" of Attachment 3, Standard Provisions for U.S. Grantee and Subgrantees, from A.I.D. Handbook 13, Appendix 4C.

D. A.I.D. INVOLVEMENT

USAID/El Salvador, through its Division of Infrastructure and Regional Development, will participate in activities under this Agreement in the following manner:

1. A.I.D. will review and approve the analytical process and selection criteria which will be used to develop an annual investment plan for the construction of rural systems. It is understood that this plan will be based primarily on economic and technical considerations. However, A.I.D. may direct NRECA to modify the plan to incorporate other factors, such as security concerns, or to provide for the expansion of rural electrification systems in priority areas of the country and so as to achieve relatively equal rural electrification coverage in the non-conflictive areas.
  2. A.I.D. will assist NRECA in the identification of modifications necessary in existing credit programs to ensure the availability of, and facilitate access to, credit for productive uses. As required, A.I.D. will assist in negotiations with the Central Reserve Bank to accomplish any changes required.
  3. A.I.D. will review and approve annual action plans for each calendar year.
  4. A.I.D. will approve the selection of the Project Director.
  5. A.I.D. will assist, as required, in negotiations with the Government of El Salvador to ensure that adequate levels of counterpart funding for CEL's participation in the Project is made available.
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E. Financial Plan

<u>Line Item</u>	<u>A.I.D. Grant</u>	<u>Counterpart**</u>	<u>Total</u>
	<u>(\$ 000 or Equivalent in Local Currency)</u>		
Salaries	490.2	42.5	532.7
Fringe Benefits	161.8	14.0	175.8
Overhead	367.7	31.8	399.5
Travel and Transportation	49.4	55.3	104.7
Allowances	179.3	0	179.3
Equipment and Supplies*	3,717.6	7,045.2	10,762.8
Other Direct Costs	<u>34.0</u>	<u>110.9</u>	<u>144.9</u>
TOTALS	\$5,000.0	\$7,299.7	\$12,299.7

\* Including shipping and all contractor costs for rural electrification construction.

\*\* Estimated amount to be provided by the host country.

This represents the Financial Plan for total life-of-project funding, including local currency financed items. Actual Agreement expenditures may vary up to 15% from the line item amounts shown above, without prior written approval by A.I.D. However, the total Agreement budget may not be exceeded. Any variations in the Agreement budget in excess of 15% must be approved, in writing, in advance, by the A.I.D. Revisions to this Plan shall be made in accordance with Mandatory Standard Provision No. 4 entitled "Revision of Grant Budget."

F. REPORTING AND EVALUATION

1. Financial Reporting Requirements

The financial reporting requirements are as detailed in paragraph 1(c) (1) and (2) of the attached Standard Provisions. The financial reports entitled "Federal Cash Transaction Report" (SF-272), and "Financial Status Report" (FS-269), shall be submitted quarterly to AID/Washington, with copies to the USAID/El Salvador, Infrastructure and Regional Development Division (IRD). On a monthly basis, NRECA will send a copy of their Internal Financial Report to IRD, USAID/El Salvador.

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## 2. Program Progress Report

The Recipient shall monitor performance under the Agreement and ensure that time schedules are being met, projected work units by time periods are being accomplished, and other performance goals are being achieved. Based upon this monitoring, the Recipient shall submit monthly summary and quarterly technical performance reports to the IRD, USAID/EI Salvador, that briefly present the following information for each activity under the Agreement:

- a. A comparison of actual accomplishment with the goals established for the period in the implementation plan;
- b. Reasons why established goals were not met;
- c. Adequacy of remaining funds to reach goals; and
- d. Other pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.

Upon completion of this Agreement, NRECA will submit to USAID/EI Salvador, a completion report which shall include a section on "lessons learned."

## 3. Evaluation

- a. The Project will undertake its first formal evaluation at the end of the second Project year. The review will determine whether the Project is meeting or will meet established Project objectives, and if not, recommend changes necessary to reach original Project targets. NRECA and A.I.D. will collaborate in the development of the terms of reference for this evaluation and the selection of the consultants, who will be paid with Project funds.
- b. Within 10 days following termination of the Project, the Recipient will submit to the Infrastructure and Regional Development Division a final evaluation report of the activities that it has carried out under this Agreement. This evaluation will be contracted with Project funds and carried out in accordance with a scope of work to be mutually agreed upon by A.I.D. and the Recipient.

G. SPECIAL PROVISIONS

1. Within 30 days after signing the Agreement, NRECA will submit:
  - a. evidence, in form and substance satisfactory to A.I.D., that the Agreement has been executed by a duly authorized representative of NRECA and that such Agreement constitutes a legally valid and binding obligation of the organization. Such statement should also include the name of the person(s) empowered to act on behalf of the Association for all purposes relevant to this Agreement, along with a specimen signature of such person(s).
  - b. the executed memorandum of understanding (MOU) with the Ministry of Planning for Economic and Social Development and CEL demonstrating the host country's commitment to Project activities. The MOU will delineate responsibilities between CEL, as the implementing agency, and NRECA, which will provide technical assistance for the construction component. The MOU will also provide for agreement on the total amount and allocation of local counterpart funds.
2. Within 60 days after signing the Agreement, NRECA will present, for A.I.D.'s review and approval, a more detailed description of the analytical process and selection criteria that have been developed with CEL for use in developing an annual investment plan for the construction of rural systems. It is understood that this plan will be based primarily on economic and technical considerations. However, A.I.D. may, based on the plan, request modifications to the plan, pursuant to Section D of this Agreement.
3. Within 90 days after signing the Agreement, NRECA will present an analysis of the magnitude of credit resources which will be needed to implement the rural productive uses program and an analysis of perceived obstacles to the timely availability of such credit.
4. By November 15 of each year, NRECA will present, for A.I.D.'s review and approval, an action plan for the following calendar year that reflects the activities which NRECA will carry out in coordination with CEL to achieve the Project purpose. These plans will specify the activities planned by quarter, include an investment plan for the construction of rural electrical systems and the analytical basis for the proposed investment plan, indicate the magnitude of CEL's financial commitment to purchase equipment and materials and the source of these resources, and identify plans and a schedule for short term technical assistance.
5. NRECA agrees to pay no more than reasonable prices for any goods and services financed in whole or in part under this Agreement. Such items will be procured by employing fair and good procurement practices to assure the most effective use of the funds provided.

6. Audits and Inspections.

The A.I.D. Office of the Regional Inspector General may conduct audits of the funds made available during project implementation through contracted certified public accounting firms, which are affiliated with firms in the United States, or by U.S. government staff. The reports shall provide certified opinions on the accountability for project funds, internal controls over the funds, and compliance with the applicable laws, regulations, and Agreement terms. The audits shall be conducted under generally accepted government auditing standards as promulgated by the United States General Accounting Office.

NRECA will ensure that: (1) independent accounting records are maintained for the use of the funds provided under the Agreement, and that these records shall be kept separate from the records of all other funds from other sources; (2) the books and records related to the Agreement and maintained by NRECA shall be retained in good order for three years after the final A.I.D. disbursement; and (3) the books and records shall be adequate to show the nature and extent of competitive solicitations for goods and services, the basis for awards, and overall project progress.

Representatives of A.I.D. will have access to project-related books, records, and the other documents, project construction sites, and NRECA personnel related to the project. These representatives may be from outside the country and may include A.I.D. audit and inspection officials.

7. Standard Provisions. Attachment III contains the Standard Provisions for U.S., Non-Governmental Grantees (June 1987). All mandatory Standard Provisions contained in Attachment III are applicable to this Agreement. In addition, the following optional Standard Provisions of Attachment III are also applicable to this Agreement:

- (1) Payment - Letter of Credit
- (4) Air Travel and Transportation
- (5) Ocean Shipment of Goods
- (6) Procurement of Goods and Services
- (7) A.I.D. Eligibility Rules for Goods and Services
- (8) Subagreements
- (9) Local Costs Financing with U.S. Dollars
- (10) Patent Rights
- (11) Publications
- (12) Negotiated Indirect Cost Rates - Predetermined
- (13) Negotiated Indirect Cost Rates - Provisional
- (14) Regulations Governing Employees
- (21) Title to and Use of Property (U.S. Government Title)
- (22) Title to and Use of Property (Cooperating Country Title)
- (24) Use of Pouch Facilities
- (25) Conversion of United States Dollars to Local Currency

8. Estimated Level of Effort

The following table summarizes the estimated level of effort to be provided by the Recipient:

<u>Position Description</u>	<u>Estimated Person-Months</u>
Resident Project Advisor	48
Local Support Staff	48
NRECA Professional Staff	22
NRECA Home Office Support Consultants	11 <u>21</u>
TOTAL	150

H. OVERHEAD RATE

Pursuant to the optional Standard Provision No. 12 entitled "Negotiated Indirect Cost Rates - Predetermined (May 1986)," a rate or rates shall be established for each of the recipient's accounting periods during the term of the Agreement. Payments on accounts for allowable indirect costs shall be made on the basis of the negotiated predetermined rate, which has been determined to be as follows:

<u>Rate</u>	<u>Base</u>	<u>Time Period</u>
75%	Salaries	Date of signing until amended

Rates for subsequent periods shall be negotiated pursuant to Standard Provision No. 12.

I. TITLE TO PROPERTY

The Recipient will have use of property financed under this Agreement until the termination of Project activities. Upon termination of the Project, A.I.D.-financed property, other than goods imported for the rural electrical systems, will be returned to the USAID/El Salvador in accordance with Optional Standard Provision No. 21 attached to this Agreement, unless otherwise agreed to in writing by AID. Title to A.I.D.-financed goods imported for rural electrical systems will be vested in the host country, in accordance with Standard Provision No. 22.

J. AUTHORIZED GEOGRAPHIC CODE

1. Except as provided in paragraph 2 below, the authorized geographic code for procurement of goods and services under this Agreement is 000, the United States, for foreign exchange costs, and code 596, the Central American Common Market (CACM) for local currency costs.

2. Procurement of one motor vehicle from Geographic Code 899, not to exceed a value of \$25,000, is hereby authorized.

PROGRAM DESCRIPTIONA. Project Purpose

The purpose of the Project is to implement and demonstrate proven methods for improving the delivery and end-use of electricity in rural areas of El Salvador. The Rural Electrification Project has two major components, an institutional development component comprising 30% of the U.S. Dollar funding for the project and approximately 15% of the total funding; and a rural electrification construction component comprising the balance of the funding. At the end of the Project, at least 15,000 additional rural Salvadorans will have access to electricity and investment in rural electrification will be made based on a planning process that involves consideration of economic, financial, and social concerns. In addition, with the assistance of the National Rural Electric Cooperative Association (NRECA), the Executive Hydroelectric Commission of the Rio Lempa (CEL) will have established a demonstration program promoting the productive use of electricity in rural areas. This demonstration and promotion program will include on-farm demonstrations and technical assistance. As required, NRECA and CEL will also work with the Central Reserve Bank and A.I.D. to ensure that adequate credit to purchase electrical machinery is available and easily accessible to rural residents.

B. Background:

On May 5, 1987, NRECA signed Cooperative Agreement No. 596-0146-A-00-7022-00 with A.I.D. for the Central American Rural Electrification Support (CARES) Project. Under this Project, NRECA receives funding to carry out studies of the rural electrification needs and investment plans of Central American countries, discuss these plans with the relevant authorities in the Central American countries, and provide technical assistance and training to improve the planning capabilities of national power sector organizations. At the end of this Project, Central American countries such as El Salvador will have adopted policies and institutional reforms to strengthen the organizational and financial basis for rural electrification, enhanced the operational efficiency of rural electric systems, improved rural electric system design, and improved the capability of national power sector organizations to plan and implement productive use promotional programs. Also, over the course of the Project, NRECA will endeavor to assist CEL develop a large rural electric project suitable for funding by an international donor.

The Rural Electrification Project for El Salvador, supported through this Agreement, carries the program goals of the CARES' Project further, by providing resources to construct rural electric systems using the more cost effective designs developed under the CARES Project and to establish a productive use demonstration program.

C. Problem Statement:

The majority of Salvadorans do not have access to modern means of production. El Salvador is a country of limited land, water, and capital resources, relative to its population and the demand for these resources. Its urgent need, therefore, is to increase resource productivity by making productive factors such as electric energy widely available. AID is currently devoting some resources to the restoration and maintenance of rural public infrastructure in the face of guerrilla sabotage, but relatively few resources are going to be extending access to electricity for the estimated 90% of rural Salvadorans who have no such access.

The extension of electric service to rural areas of El Salvador is constrained not only by guerrilla sabotage, but also by financial and institutional limitations of the country's electric power sector as represented by the national utility, CEL. CEL's financial position has been seriously eroded in recent years by rampant inflation and increasing fuel cost on one hand, and revenue shortage resulting from frozen tariff rates, on the other. Similarly, CEL's capacity for new investment is being squeezed by the inability to raise significant internal resources on one hand, and on the other, by the effects of devaluation, which effectively doubled the CEL's long-term debt in 1986, when CEL's interest payments exceeded its total operating costs.

CEL has also recently acquired new management and financial obligations to operate former private utilities, but transfer of these utilities is still awaiting settlement of terms and legal disputes. As a result, the needed investment in systems such as CAESS, now delayed for nearly a decade, is threatening major sectors of the population with service interruption.

Specific obstacles to achieving the goals of the Government's rural electric program include:

- o Institutional and human resource constraints;
- o Uncertainty of energy supply, given the country's dependence on hydroelectric generation and a recent frequency of drought conditions; and
- o Unfulfilled economic impact of rural electrification, since the full economic potential of electrification is left unexploited and needlessly deferred by failing to promote income-producing uses of electricity, particularly in ways to support agricultural intensification and diversification.

#### D. Project Activities

Project activities will respond to the institutional and human resource constraints and assist CEL in maximizing the economic impact of rural electrical systems; in addition, the Project will have a marginal impact on the development of alternative energy supply sources, through the experimentation with small scale generation schemes. NRECA assistance will provide a combination of technical assistance to help formulate efficient rural electrification institutional arrangement and operating system, buttressed by training for management and operations staff. The project will also assess alternative, decentralized approaches to "retailing" electricity service in rural areas served by CEL. Under one approach, CEL service would be purchased wholesale collectively by a group of consumers at a single service drop. The distribution to individual consumers would be managed by the consumers. The decentralized pilot project will also develop experience in isolated generation/management approaches. A major effort in electrical supply generation is not within the scope of the Project, since other donor assistance will focus on the expansion of the electrical supply through geo-thermal, thermal, hydro-electric, and purchase agreements with neighboring countries.

The Project will fund activities in two basic areas: institutional development and technical support, and rural electric system construction. Included in the first component is a significant multiple-agency initiative in productive use promotion, consisting of an activity to establish a permanent productive-use program in CEL, a series of on-farm electricity use demonstrations, end-user training and efforts to ensure adequate consumer credit is available.

The technical assistance and system construction activities will be supported by targeted training programs in rural electrical system management, lineman and other technical skills, productive uses, decentralized system development, and rural electrical system engineering and construction practices.

Also, over the course of the Project NRECA will endeavor to assist CEL develop a large rural electric project suitable for funding by an international donor.

CEL will be the primary implementing agency for the Project. However, other GOES agencies and private entities will be involved in selected activities, for example, the productive-use elements involving consumer credit and demonstration programs.

A description of specific activities supported under each of the two components follows:

##### 1. Institutional Development and Technical Support Component

###### Technical studies

Based on the results of distribution design and planning studies under the CARES Program, NRECA will provide a consultant to help develop and publish revised standards for rural electrical system design and construction, including conductor and transformer sizes for primary and secondary distribution.

### Sector Planning and Management Assistance

Based on preliminary assessments of rural electric system planning, organizational structure, management capacities, and operating system improvements proposed through studies financed under the CARES Project, long-term workplans will be developed to improve rural electrification planning and management in CEL. A work plan will be developed with CEL which identifies specific technical assistance and training needs to achieve the objective of greater operational efficiency and improved planning within the area of rural electrification system development. An important aspect of this technical assistance will be improvements in the current rate structure.

### Training

Various training activities are planned under the CARES Program which will be implemented primarily on a regional basis. This Project will supplement the regional training with tailored training in specific areas of management, operations, and technical fields, including training in the new design and construction standards.

### Productive Use Program

Technical assistance will be provided to implement the productive use program that is being designed under the CARES Program. This will include specialized assistance to establish on-farm demonstrations, training of trainers who will form a permanent rural productive uses of electricity extension corps, and to ensure the availability of consumer credit for productive uses.

## 2. Rural Electrical System Construction Component

### Rural Electric Grid Extensions

The project will provide funding to construction approximately 580 km of new lines serving up to 15,000 new consumers, 150 km of upgraded distribution lines, and 150 km of sub-transmission lines. CEL has identified a large number of villages which have requested electric service. Many of these will be included in the project. However, prior to initiating any construction, NRECA will assist CEL in establishing an analytical process and procedures for the development of an annual rural electrification investment plan. These procedures and the investment plan will be submitted to A.I.D. for approval prior to initiating construction activities. Goods may, however, be ordered prior to approval of the plan so as to ensure the rapid initiation of construction activities. Private contractors in the various locations will be employed by CEL to carry out the construction under CEL supervision.

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### Small Decentralized Pilot Project

CEL has an interest in looking at decentralized approaches to rural electricity supply. The objectives of this interest are to determine least-costs means of supplying electricity to more isolated electricity demand centers, and to augment national power supplies. Toward this end, an inventory of small hydroelectric sites is being compiled by University technical staff under CEL's funding. Under the project, technical support will be provided to help complete the inventory and site ranking, assist in specialized small hydroelectric design techniques, and to select, design, and construct a pilot project.

### Technical Assistance and Construction Supervision

An estimated \$3.7 million in commodities will be purchased under the project for rural electrical system construction. NRECA intends to subcontract to a suitable agent the task of assisting in the procurement and importation of the equipment, subject to standard U.S. Government regulations governing procurement. NRECA will closely coordinate with CEL the design specifications and bid evaluation process for the equipment. During construction NRECA will also provide continuous technical support for the construction program, as well as for the decentralized pilot project.

### E. Project Implementation and Administration

Overall management and general support for the Project will be provided from NRECA's headquarters in Washington, although the coordination and technical support will be provided by the CARES Program team in Guatemala.

The Project will base in El Salvador a full-time professional advisor having broad experience in rural electric management, engineering, operations, and productive-use program development. The Resident Advisor will be responsible for administration and project coordination, and will also take a lead role in the provision of technical assistance and training. Consultants in specialized topics such as distribution design, load management, and small hydropower engineering will be used for training and to carry out certain studies and technical assistance assignments.

In view of the essential connection between the Project and the CARES Program, periodic trips will be made by CARES staff to assist in specific training, institutional and technical support activities. The interactive elements of the project with the CARES Program are crucial to its orderly development and scheduling. Every effort will be made to give the El Salvador components of the CARES Program high priority.

The project will employ support staff and professional consultants locally as available.

Detailed annual action plans will be developed by NRECA in close consultation with local counterpart agencies and presented to AID no later than November 15 for the following calendar year. The action plans will address the entirety of the project including technical assistance, training, and construction, and should identify how the activities relate to previously completed tasks and to the overall project strategy and plan. Semi-annual action plan updates will also be submitted.

A mid-course evaluation will be scheduled at the end of the second year of the Project and will be carried out by an independent consultant. A final report will be presented by NRECA to AID and the GOES assessing the progress made, reasons for particular successes or output shortfalls, recommended follow-up, and key lessons gained from the Project.

Several donors are contemplating support to El Salvador's rural electrification program, including the Inter-American Development Bank and the Venezuelan Investment Fund. NRECA will maintain close contact with these activities to ensure coordination of design with the outcomes of the institutional development and technical support activities. Moreover, NRECA will endeavor to assist CEL in developing projects for such donors.

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