

PROJECT EVALUATION SUMMARY (PES) - PART I

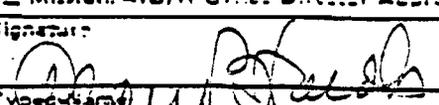
Report Symbol U-447

PROJECT TITLE all Decentralized Hydropower (NRECA)	2. PROJECT NUMBER 936-5715	3. MISSION/AID/W OFFICE S&T/EY
	4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) <u>23-7</u> <u>4/5/83</u>	
<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION		
5. ESTIMATED PROJECT FUNDING		7. PERIOD COVERED BY EVALUATION
A. Total \$ <u>5,500</u> B. U.S. \$ <u>5,500</u>		From (month/yr.) <u>8/79</u> To (month/yr.) <u>4/82</u> Date of Evaluation Review
6. PROJECT IMPLEMENTATION DATES A. Final Obligation Expected FY <u>80</u> B. Final Input Delivery FY <u>84</u> C. Final Input Delivery FY <u>85</u>		

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIC, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
<p>Acceptance of Evaluation Report with Recommendations.</p> <p>Authorize FY 82 funding increment and issue PIO/T to accomplish.</p> <p>Amend Cooperative Agreement to include FY 82 funding.</p>	<p>A. B. Jacobs</p> <p>R. Roan/W. Eilers</p> <p>SER/CM</p>	<p>May 1982</p> <p>June/July 1982</p> <p>August 1982</p>

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT		
<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan (e.g., CPI Network)	<input checked="" type="checkbox"/> Other (Specify) <u>Cooperative Agreement</u>	A. <input type="checkbox"/> Continue Project Without Change		
<input type="checkbox"/> Financial Plan	<input type="checkbox"/> PIC/T		B. <input type="checkbox"/> Change Project Design and/or		
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify) _____	<input type="checkbox"/> Change Implementation Plan		
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P		C. <input type="checkbox"/> Discontinue Project		

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Name and Title)		12. Mission/AID/W Office Director Approval	
Eric Peterson (from January 1983) S&T/EY		Signature:  Type Name: Alan B. Jacobs	

13. Summary

A. Essentially under the cooperative agreement, NRECA was not to provide capital funding for projects, but was to:

1. Provide project management services.
2. Provide project identification services as requested by AID missions.
3. Conduct prefeasibility studies as requested by AID missions.
4. Provide site selection for feasibility systems.
5. Develop a data base and state-of-the-art report including an evaluation of equipment manufacturers.
6. Develop methodologies for use in assessment and design.

B. The evaluation team consisted of the following persons: John J. Cassidy, Chief Hydrologic Engineer, Bechtel Civil and Minerals, San Francisco; Wayne A. Fernelius, Civil Engineer, Planning Policy Staff, Bureau of Reclamation, Washington, D.C.; Robert L. Kinsel, Mechanical Engineer, U.S. Army Corps of Engineers, Washington, D.C.; and Francis R. Campbell, Chief, Analysis and Evaluation Division, Office of Program in AID's Science and Technology Bureau.

The team found that the NRECA had made significant accomplishments and that the overall thrust of their program had been good. The staff, while enthusiastic and articulate was found to lack expertise and practical experience in hydropower design and in economic analysis and social evaluation. Though the team strongly recommended that the program be continued under NRECA management at the initial rate of funding, it made recommendations for changes and improvements. (See Below)

Recommendations:

A. Staff

1. NRECA should hire a person with hydro experience to review reports, review technical methodologies, interview and recommend consultants, as well as participate on Technical Assistance teams.
2. NRECA should include staff with experience in economic analysis and social sciences.
3. The size of the NRECA staff is adequate for the current program.

B. Workshops

1. Workshops should be continued and should include field trips and practical case studies to make them truly a workshop as opposed to a symposium.
2. Workshops should include more participation by U.S. manufacturers and consultants.

C. Methodology Reports

1. Methodologies should be more specific in context, include examples, and a format which, when completed, will insure that all required information has been addressed.
2. Reports should be specifically devoted to practical applications for SDH plants.
3. Reports should be much more thoroughly reviewed by persons with experience and expertise in the field.
4. More care should be taken in selecting individuals or firms to prepare methodologies.

D. Technical Assistance

1. The types of assistance provided have been good, but the thrust should now emphasize improvement in quality. Reports should include more detailed site information.
2. Team members should be outfitted with basic tools such as hand level, altimeter, tape, clinometer, camera, and perhaps a velocity meter.

E. Size of Sites

1. NRECA should continue to emphasize their thrust toward sites less than 1 MW in size. However, country assessments and prefeasibility studies should identify larger sites when they could be part of the total potential.

F. Budget

1. NRECA should be allowed to use alternate funds to help finance workshops or in-country travel related to SDH tasks.

G. Incorporating Federal Assistance and Industry

1. NRECA should continue to manage the SDH program but should attempt to utilize assistance from other U.S. entities such as the USBR, U.S. Army Corps of Engineers, TVA, and private firms with proven expertise.

H. General

1. NRECA should consider centralized as well as decentralized sites where generation of power would still meet the objectives, or benefit the target groups of AID.
2. NRECA should devote part of their program toward education of decision-makers in developing countries to gain national political and financial support for SDH programs.
3. A detailed independent evaluation of the SDH program should be made at the end of the 4th year to determine if the program is meeting its goals, what aspects of the program have been effective in developing ongoing SDH programs, and whether central funding by AID should be continued.
4. NRECA should not engage in research activities but should be encouraged to make recommendations for research.
5. Acknowledgment of AID sponsorship should be included in all proceedings and reports.
6. AID should thoroughly review the SDH project design to clearly identify scope and objectives and to develop quantifiable measures of achievements.