AID 1020-25 (10-70)

REPORT U... 4970215 (6) PD-AAD-724-E1

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PROJECT APPRAISAL REPORT (PAR)

1. PROJECT NO.	2. PAR FOR PERIOD:	3. COUNTRY	4. PAR SERIAL NO.
AID Loans 497-H-0286032	April 1973 TO March 1977	Indonesia	77-12 7p

5. PROJECT TITLE
497-00-000-215 497-00-000-232
West Java T&D Phase I and II

6. PROJECT DURATION: Began FY 73 Ends FY 80	7. DATE LATEST PROP	8. DATE LATEST PIP	9. DATE PRIOR PAR
	N/A	N/A	None

10. U.S. FUNDING	a. Cumulative Obligation Thru Prior FY: $ 2.9 million	b. Current FY Estimated Budget: $	c. Estimated Budget to completion After Current FY: $

11. KEY ACTION AGENTS (*Contractor, Participating Agency or Voluntary Agency*)

a. NAME	b. CONTRACT, PASA OR VOL. AG. NO.
Government of Indonesia (GOI) acting thru the State Electric Power Agency (PLN)	Loan Agreement, 497-H-028 and 032
C.T. Main, Consultant to PLN	Contract No.pj.013/PST/74 Contract No.Pj.023/PST/75

I. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION (X) USAID	AID/W	HOST	B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
X			Issuance of Implementation Letters authorizing project revision.	May 15, 1977
		X	Open bid documents and award contracts.	April 15 to July 15, 1977
X			Review and approve procurement contracts and request opening of Letters of Commitment.	August 1, 1977
X			Request AID/W for project Terminal Date for Disbursement (TDD) extension to meet manufactures delivery contained in procurement bids, scheduled for May, June opening.	Sept. 1, 1977

D. REPLANNING REQUIRES
REVISED OR NEW: ☐ PROP ☐ PIP ☐ PRO AG ☐ PIO/T ☐ PIO/C ☐ PIO/P

E. DATE OF MISSION REVIEW: 15 March 1977

PROJECT MANAGER: TYPED NAME, SIGNED INITIALS AND DATE	MISSION DIRECTOR: TYPED NAME, SIGNED INITIALS AND DATE
Eugene Tierney 3/16/77	Thomas C. Niblock 3/22/77
Robert F. Zimmerman	Sarah Jane Littlefield

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II. PERFORMANCE OF KEY INPUTS AND ACTION AGENTS

A. INPUT OR ACTION AGENT — CONTRACTOR, PARTICIPATING AGENCY OR VOLUNTARY AGENCY	B. PERFORMANCE AGAINST PLAN — UNSATISFACTORY 1	2	SATISFACTORY 3	4	5	OUTSTANDING 6	7	C. IMPORTANCE FOR ACHIEVING PROJECT PURPOSE (X) — LOW 1	2	MEDIUM 3	4	HIGH 5
1. PLN - GOI Electric Power Agency				X								X
2. C.T. Main - Consultant			X									X
3.												

Comment on key factors determining rating #2 - C.T. Main's contracts were signed on Feb.16, 1974 for Phase I and Jan.27, 1975 for Phase II with the scope of work including design, procurement specifications and bid evaluations, engineering supervision and inspection, training, and final acceptance for PLN of the completed facilities. Implementation has been slow due mainly to the negotiating process for the change of the project scope, which eliminated the distribution section and provided for installation of the Phase I transmission line by PLN forces under the direct supervision of C.T. Main. The project encountered additional delays when the consultant required seven months to replace his project manager and, as a result, the project implementation slipped at least six months. However, there has been a marked improvement in the consultant's project office output since the arrival of the new project manager in November 1976.

	1	2	3	4	5	6	7	1	2	3	4	5
4. PARTICIPANT TRAINING				X						X		

Comment on key factors determining rating The consultant has prepared a detailed training program that has been reviewed and approved by PLN. This program will have to be updated to assure compatibility with the new project scope. To date the consultant has conducted training classes and on-the-job training for land surveyors and draftsmen and is using over fifty trained PLN personnel on the transmission line survey. (Cont'd).

	1	2	3	4	5	6	7	1	2	3	4	5
5. COMMODITIES												

Comment on key factors determing rating

No commodities have been scheduled for procurement at this stage of the project under the revised scope.

		1	2	3	4	5	6	7	1	2	3	4	5
6. COOPERATING COUNTRY	a. PERSONNEL				X						X		
	b. OTHER				X						X		

Comment on key factors determining rating

Manpower - PLN has provided adequate manpower on a timely basis to accomplish the work to date (line survey and centerline drawings).

	1	2	3	4	5	6	7	1	2	3	4	5
7. OTHER DONORS												

(See Next Page for Comments on Other Donors)

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II. 7. Continued: Comment on key factors determining rating of Other Donors

No other donors are participating in this project.

III. KEY OUTPUT INDICATORS AND TARGETS

A. QUANTITATIVE INDICATORS FOR MAJOR OUTPUTS		TARGETS (Percentage/Rate/Amount)					
		CUMULATIVE PRIOR FY	CURRENT FY TO DATE	CURRENT FY TO END	FY 78	FY 79	END OF PROJECT
Engineering design, preparation and issuance of IFBs, bid evaluations and contract awards.	PLANNED	20	70	80	90	98	100
	ACTUAL PERFORMANCE	10	50				
	REPLANNED			-	-	-	-
Material receipt, storage, issuance, and construction for West Java transmission line.	PLANNED	0	0	0	90%	100%	-
	ACTUAL PERFORMANCE	0	0				
	REPLANNED			-	-	-	
Material receipt, storage, issuance, construction of substations, power line carrier and installation of radios.	PLANNED	0	0	0	90%	100%	
	ACTUAL PERFORMANCE	0	0				
	REPLANNED						
Implementation of supply and erect contract for West Java II transmission line.	PLANNED	0	0	0	40%	90%	100%
	ACTUAL PERFORMANCE						
	REPLANNED						

B. QUALITATIVE INDICATORS FOR MAJOR OUTPUTS	COMMENT:
1. N.A.	
2.	COMMENT:
3.	COMMENT:

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IV. PROJECT PURPOSE

A. 1. Statement of purpose as currently envisaged. 2. Same as in PROP? ☐ YES ☒ NO

The purpose of the project is to construct a 150 KV steel tower, double circuit transmission line from the city of Tegal in Central Java to the capital city of Jakarta and provide substations in the cities of Bandung and Bogor.

B. 1. Conditions which will exist when above purpose is achieved.	2. Evidence to date of progress toward these conditions.
The transmission line will connect the two largest PLN electrical systems and increase the efficiency and reliability of both. PLN will then be able to operate the most efficient generating units, while reducing the spinning reserve, which will result in increased operational service.	The IFB's have been issued and bid openings scheduled from April 15 to June 1, 1977.

V. PROGRAMMING GOAL

A. Statement of Programming Goal

The electric power sector goal for the GOI is to provide electric service to every existing and potential customer who desires such service. In working towards that goal, PLN is adding to their generating, transmission and distribution facilities as rapidly as financial, manpower and other resources allow.

B. Will the achievement of the project purpose make a significant contribution to the programming goal, given the magnitude of the national problem? Cite evidence.

The West Java Transmission project is a key facility in creating a modern integrated power system as it will tie together the existing generation and transmission systems of Central and West Java. This integrated power system will improve the operating efficiency and provide PLN with additional revenue of 2 to 5% and increase thereby the viability of the company and their ability to acquire financing for additional expansion.

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1. Are there alternative approaches to achieving this Project's Purpose or the Sector Goal? Would any other approach be more effective or appropriate for USAID?

There are no alternative approaches to that which was taken if the object is to provide an integrated power system.

2. What is current priority of Project with the GOI? Evidence for or against?

The project has a high priority with the GOI and PLN as they are aware of the advantages of an integrated power system. To support this view, the GOI has approved the PLN budget request for 1.6 billion rupiahs for FY 78 project implementation and furnished PLN assurance of timely and adequate budget support throughout the life of the project.

3. How does GOI view USAID role? Do USAID and GOI share common perception of Project Purpose?

The GOI and PLN views the AID procurement procedures and regulations with amusement, however, they have been through several AID financed projects prior to this and seem to have an attitude of toleration.

USAID and the GOI do share a common perception of the project purpose which is to provide an integrated power system that will improve the operating efficiency and provide electric service to additional consumers at the lowest possible cost.

BEST AVAILABLE DOCUMENT

4. Are there Adverse Side Effects to this Project?

a. Economic? None at this time.

b. Ecological? None at this time.

c. Social/Political? None at this time.

d. Health? None at this time.

5 Do the Benefits justify the costs?

When preparing the project CAP a benefit/cost ratio was calculated for varying economy interchange. The results of the analysis shows that the internal rate of return was higher than the opportunity cost of capital for moderate economy interchanges. For an average MW transfer of 50 MW, the internal rate of return was about 15%.

Since the original assesments, firm commitments by various donors have been made to finance substantial amounts of electrical operation capacity, as well as portions of the T&D investments that had originally been included in the AID Loans. The economic internal rate of return for the revised project is more than 19%.

6. Are there any unexpected Benefits not directly related to project purpose?

Some of the unexpected benefits not related to the project are the additional employment during construction and manpower positions within PLN after completion.

7. Overall Assessment of Project Performance.

Unsatisfactory		Satisfactory			Outstanding	
1	2	3	4	5	6	7
		X				

Project implementation has been extremely slow to date due to several factors including changing the project scope and the U.S. Consultants personnel problems. However all of these problems have been corrected with a noted improvement in the project implementation.

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Continuation

#2 Item 4 - Participant Training

C.T. Main has initiated a program whereby two PLN engineers attend the General Electric-Systems Engineering Course at Schenectady, New York, each year for the life of the C.T. Main contract. This will provide PLN with 10 highly trained engineers that may be used to optimize the new power generation and transmission grid.