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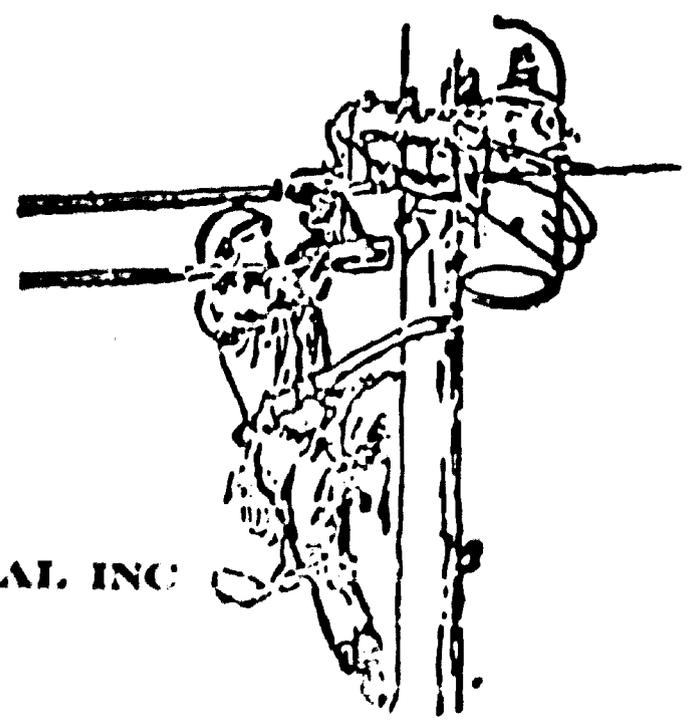
DIRECTORATE GENERAL OF COOPERATIVES

**AID LOAN NO. 497-T-052
RURAL ELECTRIFICATION PROJECT
CONTRACT
AID / ASIA - C - 1357**

MONTHLY REPORT
FOR JULY 1981



CHAS. T. MAIN INTERNATIONAL INC



MAIN
Engineers

CHAS. T. MAIN INTERNATIONAL, INC.

BANDUNG - T R O M O L P O S 69. TEL. : 5 6 8 6 9. J L N. P R O G O 3 2
JAKARTA - P. O. BOX 46 KBYT. KEBAYORAN TIMUR. TEL. 774041 - 2. - 776925 JL. WIJAYA 1/61
SEMARANG - P. O. BOX 26. TEL. : 3 1 1 7 0 2. J L N. S L A M E T 5

12 August 1981

Letter No. J - 4310

U S A I D
c/o American Embassy
Jalan Merdeka Selatan No. 5
Jakarta, Indonesia

Attention: Mr. R.C. Johnson
Project Officer

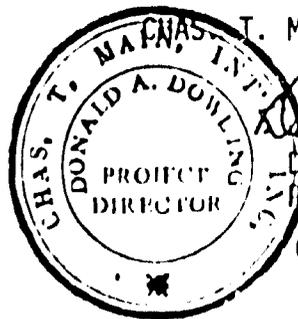
Subject: Rural Electrification
Contract No. AID/ASIA-C-1357
ACTIVITY REPORT July 31, 1981

Gentlemen:

Attached hereto are twelve (12) copies of our monthly report summarizing MAIN's activities during the period ending 31 July 1981.

Very truly yours,

CHAS. T. MAIN INTERNATIONAL, INC.



Donald A. Dowling
Donald A. Dowling
Projects Director

- cc. : Mr. Soedjanadi - Director General for Coops. w/3 copies.
Mr. Muslimin Nasution - Secretary for the State Minister for Coops, w/2 copies.
Mr. Sjoufjan Awal - Chief of PDO/RE, w/6 copies.
Mr. Peter McNeill - NRECA, w/1 copy
Mr. A.J. Curran - CTM, Boston, w/2 copies.

R E P O R T

NO. 21

RURAL ELECTRIFICATION PROJECT - INDONESIA

UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT

LOAN NO. 497-T-052

MONTHLY

ACTIVITY REPORT

JULY 1981

SUBMITTED BY

CHAS. T. MAIN INTERNATIONAL, INC.

RURAL ELECTRIFICATION PROJECT

ACTIVITY REPORT

JULY 1981

DIRECTORATE GENERAL OF COOPERATIVES

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I. DESCRIPTION OF PROJECT

The objective of this PROJECT is to assist the Government of Indonesia (GOI) in its plan to provide areawide electric power distribution facilities in ten specified areas.

Three service areas are located on the islands of Sumatra, Lombok and Sulawesi and will be constructed and operated as investor owned Cooperatives under the direction of the Directorate General of Cooperatives (DGC). Information presented in this report applies to the DGC service areas only.

The Cooperative PROJECTS will consist of approximately 1617 Kilometers of overhead primary and secondary distribution lines and is planned to encompass at least 190 towns and villages. The completed PROJECTS will ensure the availability of reliable, inexpensive electric service to an estimated 110,000 homes. Approximately 51,500 customers will be connected during the first three years of operation, and the remainder connected during the following twelve years.

Each of the PROJECT service areas shall include a Headquarters Complex consisting of a Cooperative administrative office building, a warehouse operations building containing an operations office and vehicle maintenance facilities, as well as covered and open material and equipment storage areas.

The power requirements of the completed distribution systems will be supplied by diesel generating plants which shall be constructed, owned and operated by each of the Cooperatives.

Locations of the three Cooperative service areas are shown on page 3 of this report. Project service areas, estimated Pole line kilometers, number of villages to be served and the approximate number of consumer connections after three years of commercial operation are as follows :

<u>SERVICE AREA</u>	<u>COOPERATIVE</u>	<u>POLE LINE KM</u>	<u>VILLAGES TO BE SERVED</u>	<u>APPROXIMATE NO. OF CONNECTIONS</u>
Lampung Sumatra	Sinar Siwo Mego	974	108	23,000
Lombok	Sinar Rinjani	166	32	14,000
Luwu Sulawesi	Samabotuna	477	50	14,500
		<u>1,617</u>	<u>190</u>	<u>51,500</u>
		=====	====	=====

LOCATIONS OF PROJECT SITES



II. FINANCIAL

A. Following is a summary of costs invoiced through 31 July 1981 :

	<u>Budget</u>	<u>Invoiced To Date</u>	<u>Paid To Date</u>
U.S. AID	\$ 5,355,261	\$ 2,864,700	\$ 2,498,599
		Rp. 44,487,852.40	Rp. 44,487,852.40

B. A detailed breakdown by Contract line item of MAIN's invoices to U.S. AID is as follows :

	<u>Budget</u>	<u>Costs To Date</u>		
		<u>PLN</u>	<u>DGC</u>	<u>TOTAL</u>
Salaries & Wages	\$ 1,484,257	\$ 439,503	\$ 444,876	\$ 884,379
Fringe Benefits	278,636	65,598	70,915	136,513
Allowances	382,355	99,768	109,554	209,322
Travel &				
Transportation	959,825	216,055	195,523	411,578
Other Direct Costs	450,037	40,293	163,909	204,202
Overhead	1,390,151	412,564	417,658	830,222
Fee	410,000	93,395	95,089	188,484
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	\$ 5,355,261	\$ 1,367,176	\$ 1,497,524	\$ 2,864,700
	=====	=====	=====	=====

III. ENGINEERING

A. SYSTEM DESIGN

1. LAMPUNG - Energization of the REI Lampung demonstration project was performed on July 13. The maximum peak load to date generated by the 5-100 KW generators has been 180 KW. The original design for the REI Lampung was based on 2000 consumers requiring a total generation capacity of 500 KW. Eight hundred members are presently receiving service which indicates that the original load design concepts were in fact accurate.

Line staking in the Lampung cooperative was hampered during the reporting period, as the survey crews assisted with the construction of the REI Lampung project.

The following information shows the status of the Lampung electrical system design.

	<u>System Map Design</u>	<u>Survey Completed</u>
Primary	563 Km	92 Km
Secondary	411 Km	81 Km
Desas (Village)	108	11

The centerline staking of the design shown on the system map is completed.

A total of 927 Construction Drawings with their appropriate structure data sheets are to be prepared. 75 construction drawings are ready for final preparation. The percentage of system design ready for construction is 5.3.

2. LOMBOK - The following information indicates the status of the Lombok electrical system design.

	<u>System Map Design</u>	<u>Survey Completed</u>
Primary	148 Km	101 Km
Secondary	18 Km	18 Km
Desas (Village)	32	25

The centerline staking of the design shown on the system map is completed.

A total of 300 Construction Drawings with their appropriate structure data sheets are to be prepared. 85 construction drawings are ready for final preparation. The percentage of system design ready for construction is 8.3.

3. LUWU - The following information indicates the status of the Luwu electrical system design.

	<u>System Map Design</u>	<u>Survey Completed</u>
Primary	263 Km	204 Km
Secondary	214 Km	150 Km
Desas (Village)	50	6

The centerline staking of the design shown on the system map is completed.

A total of 360 Construction Drawings with their appropriate structure data sheets are to be prepared. 90 construction drawings are ready for final preparation. The percentage of system design ready for construction is 3.8.

B. HEADQUARTER COMPLEX DESIGN

The Consultants Civil Engineer assigned the responsibility to oversee the planning, design, tendering, and construction of the various cooperative headquarter complexes visited Lampung and Lombok during the reporting period to obtain information from government agencies in those areas concerning contracting constructing companies which have histories of being pre-qualified by those agencies. This information will be helpful in preparing a panel of pre-qualified contractors to bid on the construction of the headquarters buildings.

The relevant office of PDO suggested that the entry ways to the public toilets of the headquarter office building be relocated. In a subsequent meeting it was decided to completely eliminate the public toilets from the office building design and the architect has been requested to alter the plans and drawings accordingly.

It is understood by the Consultant that the estimated constructed cost of the headquarter complex is approximately double the amount allocated by U.S. AID for this construction. The Consultant also is aware that this problem must be resolved expeditiously and will endeavor to bring the relevant parties together so that a solution may be forthcoming.

IV. PROCUREMENT

A. LINE MATERIAL AND EQUIPMENT

<u>LAMPUNG CONTRACT NO.</u>	<u>BID CATEGORY</u>	<u>STATUS</u>
01/KLP/LA/81	1,3,7,8,13	Awaiting approval by PDO of Consultants Tender Evaluation after rebid.
02/KLP/LA/81	2,4,10,14	Awaiting Material Delivery.
03/KLP/LA/81	9	Contractor withdrew - wants price increase.
04/KLP/LA/81	5	Awaiting Material Delivery.
05/KLP/LA/81	12	Contractor requested second increase - refused - awaiting his reply - may retender.
06/KLP/LA/81	11	L/Comm or DRA in process.
07/KLP/LA/81	6	Awaiting Material Delivery.
08/KLP/LA/81	15	Same as Contract 01/KLP/LA/81 above.

<u>LUWU CONTRACT NO.</u>	<u>BID CATEGORY</u>	<u>STATUS</u>
01/KLP/LW/81	1	L/Comm or DRA in process.
02/KLP/LW/81	2,5	Awaiting Material Delivery.
03/KLP/LW/81	3	Contractor withdrew prices without price increase - SEKNEG decision not resolved.
04/KLP/LW/81	4	PDO has requested approval from BAPPENAS.
05/KLP/LW/81	6	L/Comm or DRA in process.
06/KLP/LW/81	7	Awaiting Material Delivery.
07/KLP/LW/81	8	Waiting for confirmation of price after change in quantity.
08/KLP/LW/81	9,15	Awaiting price change information from Contractor after change of quantities.
09/KLP/LW/81	10,14	L/Comm or DRA in process.
10/KLP/LW/81	11	L/Comm or DRA in process.
11/KLP/LW/81	12	Awaiting Material Delivery.
12/KLP/LW/81	13	Contract never finalized.

<u>LOMBOK CONTRACT NO.</u>	<u>BID CATEGORY</u>	<u>STATUS</u>
01/KLP/LO/81	1,2,5,6,8,10,13,15	Awaiting approval by PDO & AID of Consultants Tender Evaluation after rebid.
02/KLP/LO/81	7	Will be requoted.
03/KLP/LO/81	12	PDO has requested approval from BAPPENAS.
04/KLP/LO/81	3,9,14	Contractor has withdrawn prices - wants price increase.
05/KLP/LO/81	4	Contractor has not signed Contract.
06/KLP/LO/81	11	Same as Contract 04/KLP/LO/81 above.

B. HOUSEWIRING AND METERING MATERIAL

The Bid Evaluation was completed for the Housewiring and Metering IFB by the Consultants, and submitted to PDO for their review, approval or comments. Bid Category 2 of the IFB was unquoted, therefore, specific quotations from interested parties shall be requested by the Consultant on a limited basis.

C. TOOLS AND EQUIPMENT

Evaluation by the Consultant of the IFB for Tools and Equipment will be completed in August.

D. P O L E S

The Consultants Tender Evaluation on the Pole IFB was forwarded to PDO on March 20, 1981. No decision has yet been made by PDO on award of the Contract. The Consultant during the month of July requested tenderers who had submitted bids on the Pole IFB, to extend their bid validity period. No replies from the Bidders were received by the end of this reporting period.

E. COMMUNICATIONS EQUIPMENT

Single Side Band Radio Communication equipment has been purchased for the 3 cooperative locations plus the Jakarta Office of the Consultant. The necessary permits have been requested from the Department of Telecommunications as well as the frequency allocation. It is anticipated that the equipment will be operational in the month of November.

V. CONSTRUCTION

1. LAMPUNG

The REI Lampung dedications ceremony was held on 13 July. The following installations have been completed on this particular demonstration project for actual membership usage.

Members having Service Drops	925
Members with Meters and Service Drops	844
Members receiving Service	800
Poles set	838
Transformers set	41
Guys installed	149

The Linemen trained and in training on this project, in fact performed the actual construction of the REI Lampung project.

2. LOMBOK

The Field Supervisor assigned to this area is presently concentrating his efforts in the training of cooperative linemen. An extension to the REI Lombok Project was completed during this report period and energized on 31 July.

3. LUWU

Construction of the REI Luwu Project started in July. Forty seven poles were set in the area and conductor installed on the Main Street. It is anticipated that pre-energizing tests will be performed in the second week of August and an Energization Ceremony during the third week of August. A shortage of construction equipment, (compression tools, dies, come-alongs) and service drop material is being handled by the Consultant with the help of all bodies involved in the project.

The linemen trained and in training under the field supervisor are doing the installation of material and equipment on this project.

Personnel Assigned to the Project as of 31 July 1981

D.A. Dowling	- Project Director
G.G. Smith	- Lead Engineer
E.S. Leffler	- Electrical Engineer
P.V. Wilson	- Material Coordinator
C.J. Whitby	- Administrator
E.V. Borja	- Electrical Design Engineer
T.L. Resabal	- Electrical Design Engineer
G.S. Sanial	- Electrical Design Engineer
D.K. Hoffer	- Drafting Supervisor
F.P. Cachin	- Field Distribution Engineer
C.T. Nuez	- Field Distribution Engineer
R.M. Garcia	- Field Distribution Engineer
V.H. Sydlongco	- Civil Engineer
Srie Rahaju Wiludjeng	- Secretary

Personnel Details

Mr. Eugene Leffler arrived in Jakarta on 27 July and began work on the Project 28 July. He will fill the position of Lead Engineer when Mr. Smith completes his assignment on 1 October 1981.

Mr. John D. Kerr is scheduled to arrive 19 August to fill the position of Electrical Engineer.

Mrs. P.J. Korin, former Administrative Assistant, terminated her assignment on 22 July.

JOB CLASSIFICATIONS & MANMONTHS

THROUGH : MAY 21, 1981

JOB CLASSIFICATIONS	LOCATION	AGENCY		PERSONNEL ASSIGNED	MANMONTHS		% CONS.	% REMAIN
		PLN	DGC		ALLOCATED	CONSUMED		
Project Director	Jakarta	x	x	D.A. Dowling	40	30.6	76.5	23.5
Business Manager	Semarang	x	x	R.N. Key	39	30.3	77.7	22.3
Administrative Ass't.	Jakarta	x	x	P.J. Korin	24	9.7	40.4	59.6
Area Manager	Semarang	x		H.E. Johnson	24	7.5	31.2	68.7
Lead Elect. Engineer	Semarang	x		F.W. Hill	38	26.9	70.8	29.2
Civil Engineer	Semarang	x		B.R. Morrow	24	18.9	78.8	21.2
Architect	-	x		-	3	-	-	-
Distrib. Const. Sup'r.	Semarang & Jakarta	x	x	J.W. Pitts	37	29.2	78.9	21.1
Field Supervisor	Semarang	x		J.J. Bennett	34	25	73.5	26.5
Field Supervisor	Semarang	x		J.V. Hardman	35	25.8	73.7	26.3
Lead Electrical Eng.	Jakarta		x	G.G. Smith	39	27.4	70.3	29.7
Electrical Engineer	Jakarta		x		24	24.0	100.0	- 0 -
Distribution Engineer	Jakarta		x	E.V. Borja	24	9.3	38.8	61.2
Distribution Engineer	Jakarta		x	G.S. Sanial	24	11.1	46.3	53.7
Distribution Engineer	Jakarta		x	T.L. Resabal	24	5.8	24.2	75.8
Civil Engineer	Jakarta		x	V.H. Sydiongco	24	11.3	62.5	52.9
Senior Draftsman	Jakarta		x	D.K. Hoffer	24	15.0	62.5	37.5
Field Supervisor	Lampung		x	F.P. Cachin	35	28.5	81.4	18.6
Field Supervisor	Lombok		x	C.T. Nuez	35	23.2	66.3	33.7
Field Supervisor	Luwu		x	R.M. Garcia	35	28.8	82.3	17.7
Materials Supervisor	Jakarta		x	P.V. Wilson	12	2.7	22.5	77.5
Admin. Manager	Jakarta	x	x	C.J. Whitby	-	0.8	-	-
Boston Office					90	50.9	56.5	43.5
					<u>688</u>	<u>442.7</u>	64.3	35.7
					=====	=====		

Mr. Whitby has been approved by U.S. AID for work on this Project. Provision for this position will be included in a future contract amendment.

LEGEND

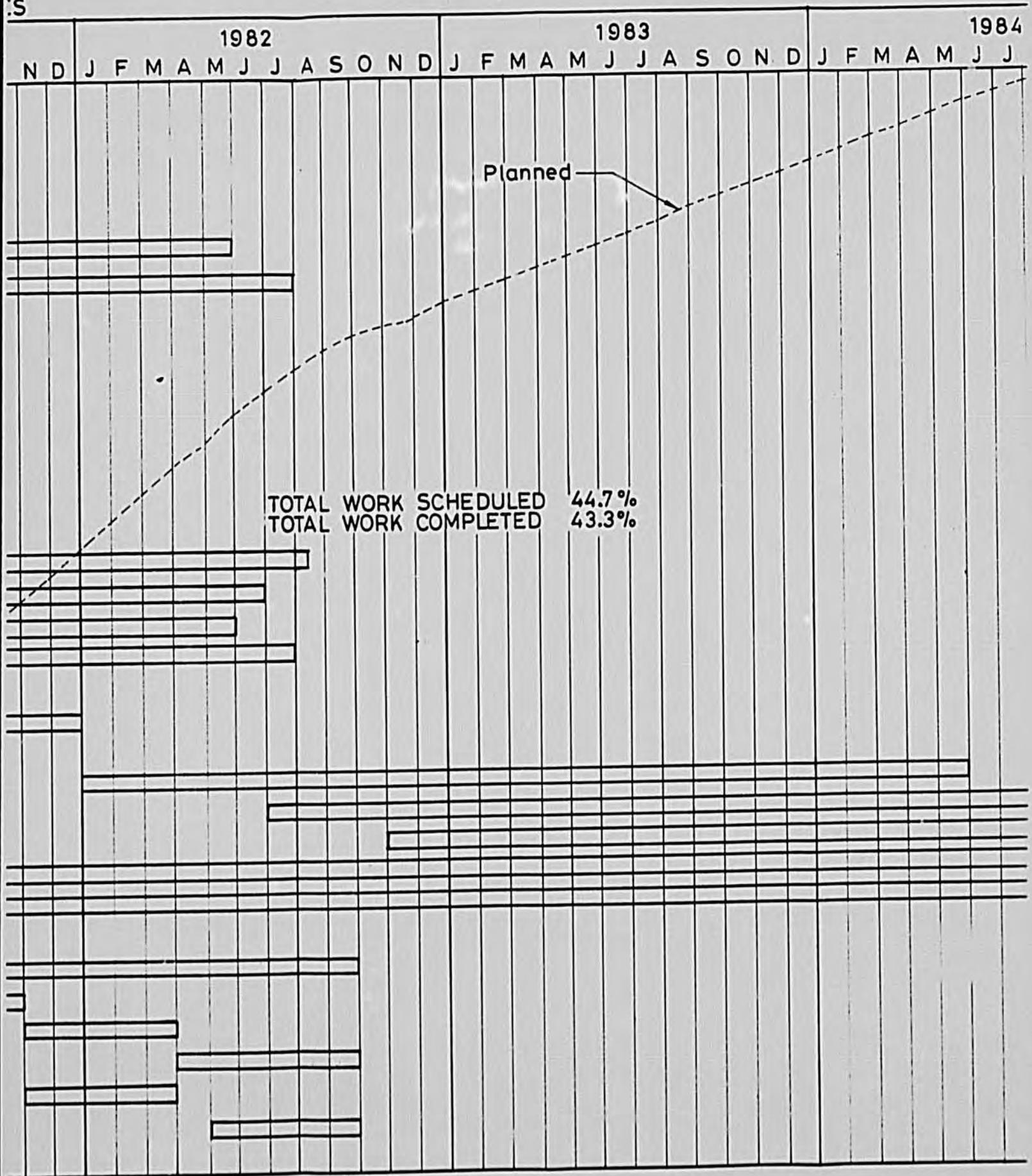
 Prior work accomplished

 Work accomplished during reporting period

 Work performed after scheduled completion date of the activity

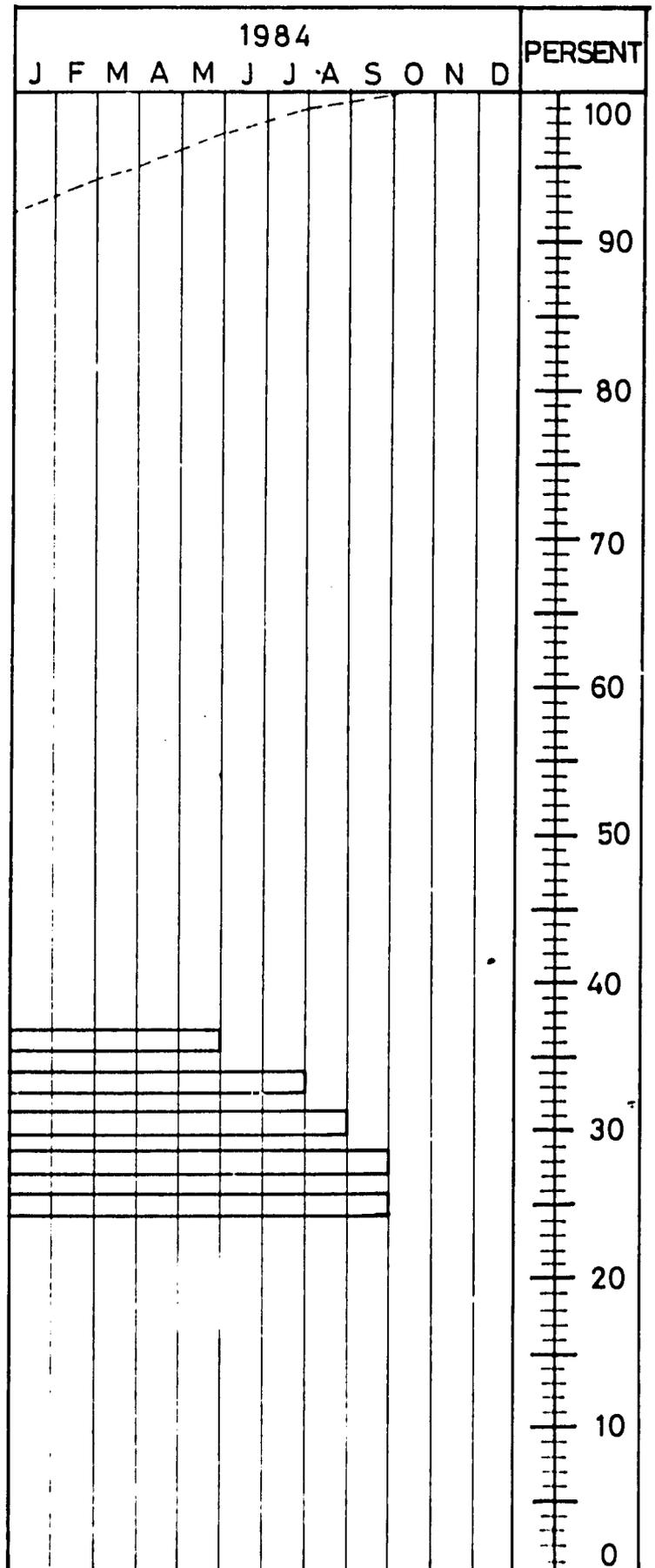
ACTIVITY	% OF PROJECT	1978				1979								
		S	O	N	D	J	F	M	A	M	J	J	A	S
<u>ENGINEERING</u>														
DEMONSTRATION PROJECT DISTRIBUTION SYSTEM	3													
CENTERLINE STAKING SYSTEM DESIGN	7													
CONSTRUCTION DRAWINGS HEADQUARTERS COMPLEX	5.2													
A&E SERVICE	1.6													
SITE INVESTIGATION	.5													
PRELIMINARY DESIGN	.7													
FINAL DESIGN	.9													
CONSTRUCTION DOCUMENTS	.5													
<u>PROCUREMENT & DELIVERY</u>														
DEMONSTRATION PROJECT LINE MATERIAL	3													
POLES	6.8													
TOOLS & EQUIPMENT	8.3													
HOUSEWIRING MATERIAL & METERS	4.7													
	5.8													
<u>CONSTRUCTION</u>														
DEMONSTRATION PROJECT DISTRIBUTION SYSTEM	2.5													
CONTRACTOR SERVICES	6													
LINE CONSTRUCTION	5.2													
LINE TESTING	4.8													
HOUSEWIRING & METERS SERVICES	10.3													
	10.3													
HEADQUARTERS COMPLEX														
CONTRACTOR SERVICES	3													
SITE DEVELOPMENT	.6													
FOUNDATIONS	1													
STRUCTURES	1.3													
SUPPORT SYSTEMS	1													
FINISH DETAILS	1													

S



MAIN

REPORTING PERIOD : July 1981





LINE SURVEY WORK - LOMPOK

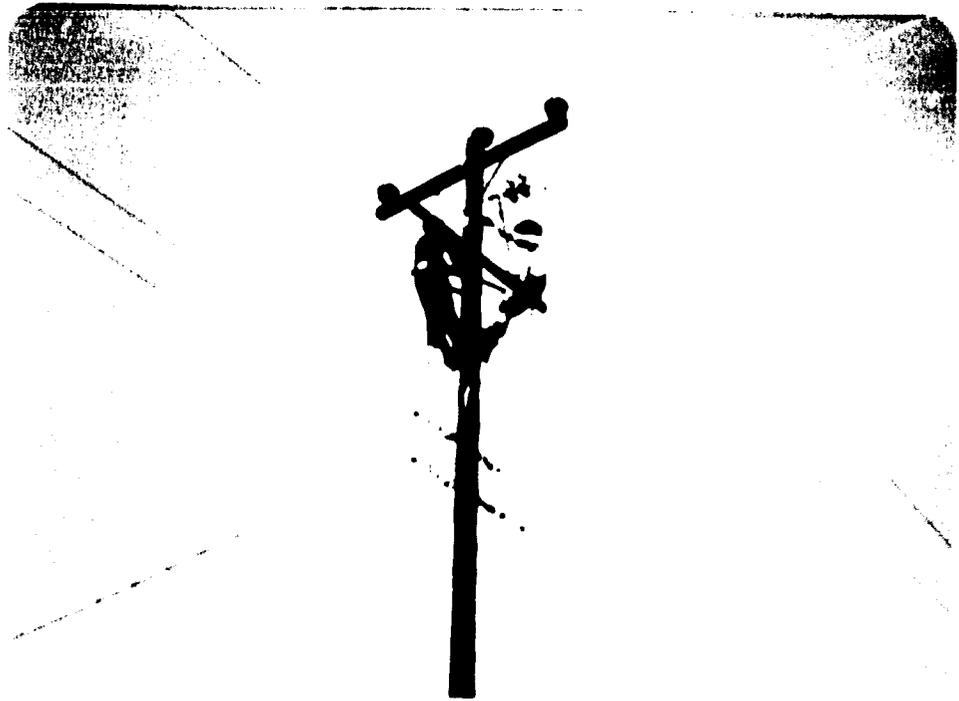


CLEARED RIGHT-OF-WAY - LOMPOK



POLE ERECTION IN LOMBOK





LINE CONSTRUCTION - LOMBOX

