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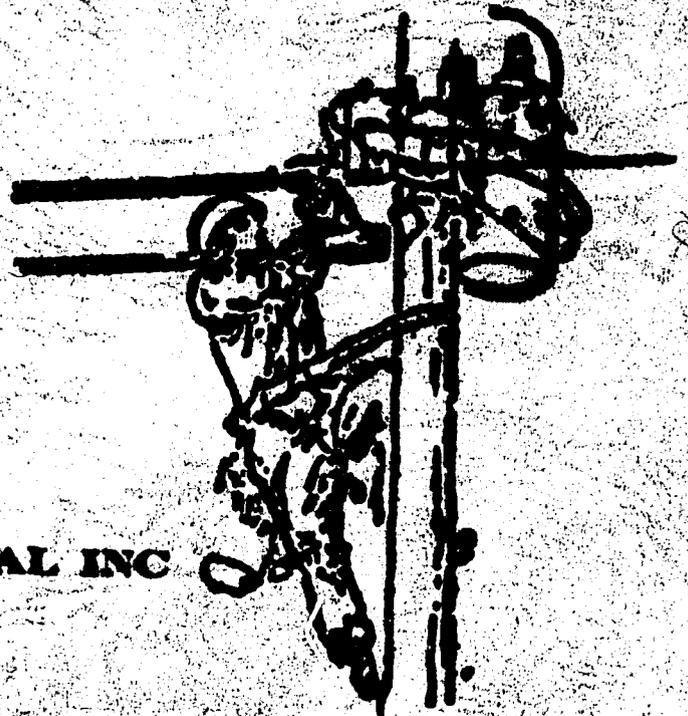
DIRECTORATE GENERAL OF COOPERATIVES

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

**MONTHLY REPORT
FOR OCTOBER 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

Date : November 10, 1981

Letter No. : R - 2532

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

Attention : Mr. J.D. Baird
Project Officer

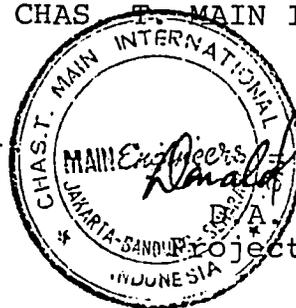
Subject: Rural Electrification
Contract No. AID/ASIA-C-1357
MONTHLY REPORT October 31, 1981

Gentlemen:

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

Very truly yours,

CHAS. T. MAIN INTERNATIONAL, INC.,



E. A. Dowling
Projects Manager

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 PDO/RE, w/6 copies
Mr. Peter McNeill - NRECA, w/1 copy
Mr. A.J. Curran - CTM, Boston, w/2 copies

/jd

R E P O R T

NO. 24

RURAL ELECTRIFICATION PROJECT - INDONESIA
UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT

LOAN NO. 497-T-052

MONTHLY REPORT

OCTOBER 1981

SUBMITTED BY

CHAS. T. MAIN INTERNATIONAL, INC.

RURAL ELECTRIFICATION PROJECT

MONTHLY REPORT

OCTOBER 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 area-wide 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 1647 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.

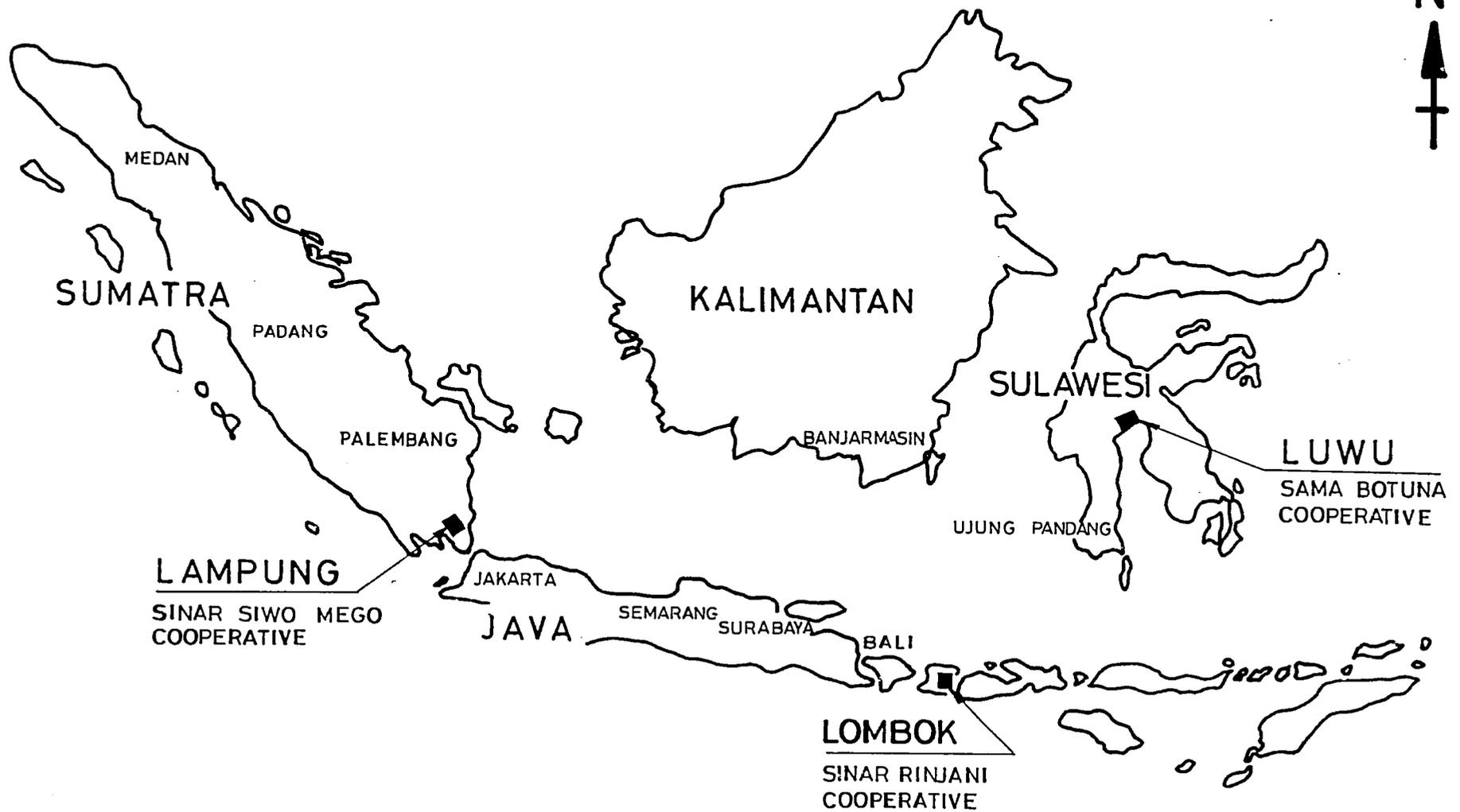
Each of the PROJECT service areas shall include a Headquarters Complex consisting of a Cooperative administrative office building, a warehouse operations building containing an operations office and vehicle maintenance facilities, as well as covered and open material and equipment storage areas.

The power requirements of the completed distribution system 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 Timur	Sinar Rinjani	196	32	14,000
Luwu Sulawesi	Samabotuna	477	50	14,500
		<u>1,647</u>	<u>190</u>	<u>51,500</u>

LOCATIONS OF PROJECT SITES



3

II. ENGINEER'S SCOPE OF WORK

On 18 September 1978, CONTRACT AID/ASIA-C-1357 was executed between the United States Agency for International Development (USAID) and Chas. T. Main International, Incorporated (MAIN). MAIN's scope of work, as described in this CONTRACT and as amended by Amendment No.1 to said CONTRACT, is as followss :

A. ENGINEERING/DESIGN

MAIN will be responsible for all phases of the Cooperative distribution systems, including field surveys, electrical design studies and the preparation of material, equipment and construction specifications. The design and construction management of Headquarter Complexes at each of the three Cooperative sites will also be MAIN's responsibility.

B. PROCUREMENT

Procurement activities to be performed by MAIN shall include the preparation and issuance of tender documents, evaluation of proposals received, recommendations for award of CONTRACTS, preparation and administration of Supply CONTRACTS and assistance to PDO/RE and the Cooperatives in the receiving, inspection, storage and accounting of PROJECT material and equipment.

C. CONSTRUCTION

MAIN shall be responsible for administrative procedures relevant to the construction of the Cooperative distribution systems and headquarter complexes. Responsibilities shall include the pre-qualification of local construction contractors, the preparation and issuance of construction tender documents, bid evaluations for award of CONTRACTS, and the preparation and administration of construction CONTRACTS.

Construction records to be maintained by MAIN shall include distribution systems construction inventories, as-built construction drawings, construction schedules and documentation of payments to the construction Contractor. MAIN shall also be responsible for construction supervision and inspection of all aspects of the Contractor's construction activities.

D. TRAINING

The PDO/RE staff will increase their administrative and technical skills through active participation in MAIN'S PROJECT activities. This transfer of technology through On The Job Training is concentrated primarily on the six Electrical Engineers and four Design Draftsmen which were assigned to MAIN's production staff by Amendment No. 1.

III. FINANCIAL

A. Following is a summary of USAID costs invoiced through 10 September 1981 and DGC/PDO costs invoiced through 31 October 1981 :

	<u>BUDGET</u>	<u>INVOICED TO DATE</u>	<u>PAID TO DATE</u>
USAID	\$ 5,355,261	3,289,304	2,797,328
DGC/PDO		Rp. 45,489,,589.40	45,489,589.40

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

<u>Description</u>	<u>Budget</u>	<u>Cost To Date</u>		
		<u>PLN</u>	<u>DGC</u>	<u>TOTAL</u>
Salaries & Wages	\$ 1,484,257	489,913	529,308	1,019,221
Fringe Benefits	278,636	78,359	79,136	157,495
Allowances	382,355	112,024	131,333	243,357
Travel & Transportation	959,825	243,519	232,236	475,755
Other Direct Costs	450,037	46,101	178,335	224,436
Overhead	1,390,151	458,287	493,497	951,784
Fee	410,000	104,763	112,493	217,256
T O T A L	\$ 5,355,261	1,532,966	1,756,338	3,289,304

IV. ENGINEERING

A. SYSTEM DESIGN

The office design of the electrical distribution systems of the three (3) cooperative service areas is complete. Preparation of maps and staking sheets for these areas commenced during this report period. Sub-heading A. This section of the Monthly Report will indicate from now on, the previous, current and total progress of mapping, survey and staking sheet preparation for each service area, Lampung, Lombok and Luwu.

A. STATUS REPORT OF MAPS, SURVEY AND STAKING SHEETS INDICATING SELECTED KEY QUANTITIES

FOR THE SERVICE AREA : Lombok

<u>DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>	<u>PREVIOUSLY COMPLETED</u>	<u>PROGRESS THIS REPORT PERIOD</u>	<u>COMPLETED TO DATE</u>
1. Key Maps _____	1	5 %	5 %	10 %
2. Detail Maps _____	7	0	0	0
3. Centerline Staking Kilometers _____	196	196	0	196
4. Pole Staking Kilometers _____	196	142	8	150
5. Line Restaking Kilometers (Resurvey) _____	25	0	0	0
6. Staking Sheets _____	250	0	62	62
A) Checked _____	250	0	0	0
B) Approved _____	250	0	0	0
C) P o l e s _____	2,600	0	0	0
D) Pole Line Kilometers _____	196	0	0	0
Da) Primary _____	148	0	0	0
Db) Secondary _____	48	0	0	0
Dc) Underbuild _____	54	0	0	0

B. STATUS REPORT OF MAPS, SURVEY AND STAKING SHEETS INDICATING SELECTED KEY QUANTITIES

FOR THE SERVICE AREA : L u w u

	<u>DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>	<u>PREVIOUSLY COMPLETED</u>	<u>PROGRESS THIS REPORT PERIOD</u>	<u>COMPLETED TO DATE</u>
1.	Key Maps _____	1	6 %	2 %	8 %
2.	Detail Maps _____	30	0	0	0
3.	Centerline Staking Kilometers _____	477	477	0	477
4.	Pole Staking Kilometers _____	477	477	0	477
5.	Line Restaking Kilometers (Resurvey) _____	50	0	0	0
6.	Staking Sheets _____	415	0	50	50
	A) Checked _____	415	0	0	0
	B) Approved _____	415	0	0	0
	C) P o l e s _____	7,500	0	0	0
	D) Pole Line Kilometers _____	477	0	0	0
	Da) Primary _____	263	0	0	0
	Db) Secondary _____	214	0	0	0
	Dc) Underbuild _____	214	0	0	0

C. STATUS REPORT OF MAPS, SURVEY AND STAKING SHEETS INDICATING SELECTED KEY QUANTITIES

FOR THE SERVICE AREA : Lampung

	<u>DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>	<u>PREVIOUSLY COMPLETED</u>	<u>PROGRESS THIS REPORT PERIOD</u>	<u>COMPLETED TO DATE</u>
1.	Key Maps _____	1	10 %	0 %	10 %
2.	Detail Maps _____	35	0	0	0
3.	Centerline Staking Kilometers _____	974	974	0	974
4.	Pole Staking Kilometers _____	974	173	21	194
5.	Line Restaking Kilometers (Resurvey) _____	100	0	0	0
6.	Staking Sheets _____	850	0	12	12
	A) Checked _____	850	0	0	0
	B) Approved _____	850	0	0	0
	C) P o l e s _____	12,700	0	0	0
	D) Pole Line Kilometers _____	974	0	0	0
	Da) Primary _____	563	0	0	0
	Db) Secondary _____	411	0	0	0
	Dc) Underbuild _____	424	0	0	0

D. TOTAL DESIGN CONCEPT

The preparation of the D.G.C. Specifications and Construction Standards progressed satisfactorily during the month of October. Thirty nine of the estimated quantity of eighty one were completed this month and it is anticipated that the set will be finished by the end of December. This set of Standards will also contain Construction Specifications as well as information on the preparation of Staking Sheets by the Cooperatives and how they are to be used in line construction by contractors or cooperative linemen.

Sag and tension computer runs were received this month from the Consultant's Home Office. This received information is based upon the conductor to be utilized on this Project and on weather conditions prevalent in Indonesia. The vast amount of information received has been condensed and arranged as charts that will be utilized by the cooperative line designers (final sag and tension charts) and by line construction contractors (initial sag and tension charts).

The receipt of the conductor sag and tension data brought about a review of pole strength and lengths required to satisfy the electrical and mechanical integrity of the systems to be installed. The conclusions drawn from the study indicate that the length and strength of poles purchased in accordance with Indonesian Wood Pole Standards for the Project may be as follows.

<u>LENGTH IN METERS</u>	<u>INDONESIAN STANDARD POLE CLASSIFICATION</u>
9	9
11	7
11	8
12	7
12	8
14	7

The reduction in strength and number of lengths should reduce the system cost for poles. A decrease in pole types will make line design simpler and will permit each cooperative to carry a smaller pole inventory for maintenance purposes.

E. HEADQUARTER COMPLEX DESIGN

A letter was sent during the month of September to USAID at the request of PDO to inquire if prequalification of civil contractors presently prequalified by local authorities in the service areas where the headquarter complexes are to be built, is actually necessary. The reply was transmitted, during October, that prequalification is required through the use of the standard US AID contractors prequalification form. The reply also suggested that the major category to check was the firm's financial status, to insure their ability to pursue the work to the end. The Consultant then requested, by letter, that PDO return the signed letter of transmittal for the prequalification questionnaires, so that the letters and forms may be sent to the respective contractors that are to be asked to submit for prequalification.

The draft Vol. I - Invitation For Bids for construction of the Headquarter Complexes was submitted to PDO and USAID during the month of September for review and approval. It was returned by USAID indicating suggested changes.

These changes will be incorporated into the Vol. I text and resubmitted for approval.

Vol. II - Technical Specifications of the IFB for construction of the Headquarter Complexes was submitted during this report period to PDO and USAID for review and/or approval. Discussion between the Consultant and USAID officials indicate that only minor changes will be suggested for incorporation in the final draft of this Volume of the IFB.

The Architect under contract to the Consultant has been delayed in submitting the final plans due to numerous changes required in order to reduce the total complex cost and the fact that during the month of October he was in the process of relocating his offices. He has promised the final plans no later than 7 November, together with the estimated construction cost for each of the 3 complex locations.

F. FIELD TRIP

During the month, Mr. G. Saniel, Distribution Engineer, travelled to the Lampung Cooperative Service Area to start the preparation of "As-Built" Staking Sheets for the Lampung REIL Project.

The As-Built Staking Sheets and the Acceptance Report will enable the cooperative to transfer the installed material and equipment and their costs to plant records.

G. LOCAL PERSONNEL ASSIGNMENTS

During this report period, one of the three Draftsmen on assignment by PDO to the Consultant's Project Staff was reassigned by DGC to another office in their organization. The reduction in the number of drafting personnel assigned to this Project by this reassignment will adversely affect the output capability of the Consultant's schedule for completion of Maps, Standards, Specifications and Staking Sheets.

V. PROCUREMENT

A. DISTRIBUTION LINE MATERIAL AND EQUIPMENT

A report was transmitted during the month to PDO and USAID indicating on an item by item basis for each of the three cooperative service areas and for each bid category; 1. The quantity of each item to be procured. 2. The minimum quantity actually required and 3. The quantity originally indicated in the IFB.

The Consultant's recommendation made during the month with regard to standardization of pole lengths and strengths will probably result in a revision to the Pole IFB and in all probability will require the re-issue of that particular IFB.

During October on the suggestion of USAID, the Consultant contacted various suppliers (under contract to PDO for supply of material and/or equipment) and bidders (who have furnished unit price category quotations which are still valid for one or more of the cooperatives) to ascertain if they would supply to one or more of the other cooperatives at the stated original unit prices. Positive replies were received from some of the suppliers by the end of this report period.

USAID personnel conferred with GOI officials as to the requirement by SEKNEG that all PDO tender evaluations must be forwarded to SEKNEG for approval. The conference confirmed that only evaluation of awards which exceeds Rp. 500,000,000.- must be submitted to SEKNEG by PDO for approval.

The following pages indicate the status of material and equipment procurement. A short summary of the Up-To-Date-Status for each Service Area is first and then a Status Review for each Service Area.

LAMPUNG SERVICE AREA

<u>BID CATEGORY</u>	<u>UP TO DATE STATUS</u>
1. Line Hardware	Low Responsive Tenderer asked to extend Bid and Bid Bond validity.
2. Steel Strand	OK
3. Conductor, Bare	Consultant recommends re-bid by original tenderers.
4. Conductor, Insulated	OK
5. Conductor, Bare Special	OK
6. Conductor, Insulated Special	OK
7. Conductor Accessor- ries	Inquired of Tenderer/Contractor if their original unit prices would be valid for this service area.
8. Connectors	Low responsive Tenderer asked to extend Bid and Bid Bond validity.
9. Insulators	Informed Contractor that Contract would be terminated if they did not supply at original unit prices.
10. Protective Devices	OK
11. Transformers	OK
12. Reclosers	Inquired of Tenderer/Contractor if their original unit prices would be valid for this service area.
13. Street Lighting Equipment	Low responsive Tenderer asked to extend Bid and Bid Bond validity.
14. Wood Products (less poles)	OK
15. T & M Equipment	Low responsive Tenderer asked to extend Bid and Bid Bond Validity.

LOMBOK SERVICE AREA

<u>BID CATEGORY</u>	<u>UP TO DATE STATUS</u>
1. Line Hardware	Low responsive Tenderer asked to extend Bid and Bid Bond validity.
2. Steel Strand	Inquired of Tenderer/Contractor, if their original unit prices would be valid for this service area.
3. Conductor, Bare	Consultant recommended re-bid re-bid by original tenderers.
4. Conductor, Insulated	L/Com and conditional L/C requested.
5. Conductor, Bare (Special)	Inquired of Tenderers/Contractors if their original unit prices would be valid for this service area.
6. Conductor, Insulated (Special)	Inquired of Tenderers/Contractors if their original unit prices would be valid for this service area.
7. Conductor Accessories	Re-bid validity expires in less than one month - PDO has not forwarded their evaluation recommendation to USAID.
8. Connectors	Low responsive Tenderer asked to extend Bid/Bid Bond validity.
9. Insulators	Tender withdrew his quoted prices. If New World Research Corp. is awarded this category they will be requested to supply at the same unit price for this service area.
10. Protective Devices	Low responsive Tenderer asked to extend Bid and Bid Bond validity.
11. Transformers	Inquired of Tenderer/Contractor, if their original unit prices would be valid for this service area.
12. Reclosers	L/Comm. and conditional L/C requested.
13. Street Lighting Equipment	Low responsive Tenderer asked to extend Bid and Bid Bond validity.

- | | |
|-------------------------------------|---|
| 14. Wood Products
(less poles) | Inquired of Tenderer/Contractor
if original unit prices would
be valid for this service area. |
| 15. T and M Equipment | Low responsive Tenderer asked
to extend Bid and Bid Bond
validity. |

LUWU SERVICE AREA

<u>BID CATEGORY</u>	<u>UP TO DATE STATUS</u>
1. Line Hardware	DRA issued, but USAID has not so informed the Contractor.
2. Steel Strand	An Amendment is in process.
3. Conductor, Bare	Consultant recommends re-bid by original tenderers.
4. Conductor, Insulated	Performance Bond must be amended in accordance with USAID regulations.
5. Conductor, Bare (Special)	OK
6. Conductor, Insulated (Special)	OK
7. Conductor Accessories	OK
8. Connectors	Contract Amendment in process.
9. Insulators	PDO has not forwarded their re-bid evaluation to USAID.
10. Protective Devices	OK
11. Transformers	Delivery Commenced.
12. Reclosers	An Amendment has been signed.
13. Street Lighting Equipment	Original Contract not finalized. If Irby Construction Co. is awarded this category for Lampung and Lombok they will be requested to supply at the same unit price for this service area.
14. Wood Products (less poles)	OK
15. T and M Equipment	PDO has not forwarded their re-bid evaluation to USAID.

LAMPUNG SERVICE AREA

<u>BID CATEGORY</u>	<u>STATUS REVIEW</u>
1. Line Hardware	<p>The original Contract was awarded to Ohm International. They did not consummate the Contract when the Letter of Credit was not opened in the time specified. The category was then rebid by the firms who participated in the original Bid. Hayden International Corp. was the lowest responsive bidder on the rebid. The Consultant recommended award to Hayden Int'l., but the Bid validity period lapsed. During October Hayden was asked if their bid prices were still valid and if so to extend their Bid and Bid Bond for 60 additional days.</p>
2. Steel Strand	<p>This Contract 02/KLP/LA/81 was awarded to New World Research Corp. The L/C was opened. The Consultant telexed the supplier requesting approval of required changes in quantity. Supplier could not comply since items were ready for shipment.</p>
3. Conductor, Bare	<p>The original Contract was awarded to Ohm Int'l. They did not consummate the Contract when the L/C was not opened in the time specified. The category was rebid by the firms who participated in the original Bid. The Consultant recommended that the quoted prices for the items in this category were excessive and that no award be made. The Consultant suggests another rebid of category 3 that would cover this category for all 3 service areas, since no valid Contract exists for any of the cooperatives.</p>

4. Conductor, Insulated The information in this case is the same as per category 2, 10 and 14 with New World Research Corp. being the supplier.

5. Conductor, Bare
 (Special) This Contract 04/KLP/LA/81 was awarded to Graybar Electric Co. The L/C has been opened. During the month, the supplier was notified about the quantity of each item that is needed in this category. He agreed to the changes in quantities at the original unit prices. An Amendment has been prepared.

6. Conductor, Insulated
 (Special) This Contract 07/KLP/LA/81 was awarded to P.T. Kabelindo Murni. A DRA was issued which establishes a delivery schedule.

7. Conductor Accessories The original Contract was awarded to Ohm Int'l. They did not finalize the Contract when the opening of the L/C was delayed in excess of the time specified. The category was rebid by the firms who participated in the original Bid. The Consultant recommended that the prices quoted in the rebid for items in this category were excessive and that no award be made. During the report period the Consultant contacted Preformed Line Products Co. inquiring if they would supply this category for Lampung at the original unit price as per the Luwu contract.

8. Connectors The original contract for this category was awarded to Ohm Int'l. They did not consummate the contract on late opening of the L/C. The Category was rebid and the Consultant recommended that award be made to Irby Construction Co. The bid validity has expired. During this report period Irby Construction Co. was contacted by the Consultant inquiring if their unit prices were still valid and if so to extend the Bid validity and furnish a new Bid Bond.

14. Wood Products
(less poles)

The information for this category is the same as that indicated for categories 2, 4, and 10.

15. T & M Equipment

The information for this category is the same as that shown for categories 8 and 13.

LOMBOK SERVICE AREA

Bid Category

Status Review

1. Line Hardware
The original Contract was awarded to Ohm International. They did not consummate the Contract when the Letter of Credit was not opened in the time specified. The category was then re-bid by the firms who participated in the original bid. Joslyn Co. was the lowest responsive Bidder on the rebid. The Consultant recommended award to Joslyn, but the bid validity period lapsed.
During October Joslyn was asked if their bid prices were still valid and if so to extend their bid and Bid Bond for 60 additional days.
2. Steel Strand
This contract also awarded to Ohm International as above. The category was rebid by the firms who participated in the original Bid. The Consultant recommended that the prices quoted for the items in this category were excessive and that no award be made.
During this report period the Consultant requested Copperweld Ind. Int'l. Inc. to state if they will supply for this Lombok category at the same price they are supplying this category for Luwu.
3. Conductor, Bare
This Contract awarded to Futura Trading Co., but after considerable delay in finalizing the contract the supplier withdrew his quoted prices.
The Consultant recommends a rebid as suggested under this category for Lampung.
4. Conductor, Insulated
This Contract 05/KLP/LO/81 was awarded to New World Research Corp. An L/Comm and conditional Letter of Credit have been requested.

5. Bare, Conductor (Special) The information for this category is the same as per category 2 above.
6. Conductor, Insulated (Special) The original Contract was awarded to Ohm International. The Contract was not finalized. In October the Consultant asked P.T. Kabelindo Murni if they would supply against this category as they are doing for Lampung and Luwu at the same unit price.
7. Conductor Accessories The original Contract was awarded to A.B. Chance Co. Prices were withdrawn and a rebid was opened on 25 August. The Consultant recommended that Irby Construction Co. be awarded the rebid contract. PDO has not sent their evaluation to USAID for approval as of 31 October and the bid validity expires in one more month.
8. Connectors This information is the same as shown for Bid categories 8, 13 and 15 of Lampung.
9. Insulators Futura Trading Co. withdrew their quoted prices. In the event that New World Research Corp. is awarded a Contract for Luwu for the category they will be contacted as to the validity of their Luwu unit prices for Lampung and Lombok.
10. Protective Devices Originally awarded to Ohm International. The Consultant recommended that the rebid award be made to McGraw Edison, but to date PDO has not sent their evaluation to USAID for approval. The Bidder has agreed to hold his price, but must have L/C opened by 31 January 1982.
11. Transformers This Contract awarded to Futura Trading Co., but after considerable delay in finalization of the Contract the supplier withdrew his quoted prices. This month the Consultant contacted Daewoo Ind. Co. Ltd. to see if they will supply this category at the same unit price they are supplying transformers on Contract No. 10/KI.P/LW/81 for Luwu.
12. Reclosers Contract awarded to McGraw Edison Co. L/Com and conditional L/C have been requested.

13. Street Lighting
Equipment
- The same information as shown for category 8.
14. Wood Products
(less poles)
- The original contract was awarded to Futura Trading Co., but they withdrew their quoted prices. This month the Consultant contacted New World Research to see if they will supply this category for Lombok at the same unit prices they are supplying wood products to Lampung and Luwu on Contracts 02/KLP/LA/81 and 09/KLP/LW/81.
15. T and M Equipment
- Same information as indicated for categories 8 and 13.

LUWU SERVICE AREA

<u>BID CATEGORY</u>	<u>STATUS REVIEW</u>
1. Line Hardware	<p>The Contract was finalized with P.T. Sidohita Co. Ltd. They were notified as to the change of quantity They have agreed to the increased quantities, but not to decreased quantities. The DRA was issued 20 August. The Consultant has assisted, as much as possible, Sidohita in opening an L/C as required by their manufacturer in Taiwan.</p> <p>USAID has not yet notified the supplier that the DRA has been issued.</p>
2. Steel Strand	<p>Awarded to Copperweld Ind. Int'l. Inc. L/C opened and the supplier has been notified about final quantities and he has agreed. An Amendment is being finalized.</p>
3. Conductor, Bare	<p>The original award to Haitai Int'l Inc. was subsequently withdraw when Haitai demanded a price increase. The Consultant suggests a rebid as mentioned under this category for Lampung.</p>
4. Conductor, Insulated	<p>Implementation proceeding and Walsin Lihwa has been requested on numerous occasions to amend their Performance Bond in accordance with USAID regulations.</p>
5. Conductor, Bare (Special)	<p>The same information as indicated for category 2.</p>
6. Conductor, Insulated (Special)	<p>Same as per category 6 of Lampung except the Contract number is 05/KLP/LW/81.</p>
7. Conductor Accessories	<p>Contract awarded to Preformed Line Products Co. and they have started material delivery. They have been contacted by the Consultant about increase in quantity and have agreed. Contract Amendment is in process.</p>

8. Connectors Contract being implemented. An Amendment to the Contract is necessary and is awaiting signature.
9. Insulators The original Contract awarded to Maison International who demanded a price increase after a delay in Contract formalities. The demand was denied and the category rebid on 30 September 1981. The Consultant recommended award be made to New World Research Corp., but to date PDO has not sent their recommendation to USAID.
10. Protective Devices Awarded to New World Research Corp. and they have been informed by the Consultant of quantity changes.
11. Transformers Awarded to Daewoo Ind. Co. Ltd. and they have commenced delivery. The Consultant requested approval of quantity changes at the same unit prices.
12. Reclosers Awarded to McGraw Edison Co and they have been notified by the Consultant of quantity changes and have agreed at the original unit prices. An Amendment to the Contract has been signed.
13. Street Lighting Equipment The Contract award to Westinghouse Corp was not finalized. This month the Consultant asked Irby Construction Co. who had a low rebid price for this category in Lampung and Lombok if they would supply at those unit prices for this service area.
14. Wood Products (less poles) Same information as shown for category 10.
15. T and M Equipment Same as Category 9.

B. HOUSEWIRING AND METERING MATERIAL

PDO and USAID have agreed with the Consultant's Bid Evaluation Report. Notices of Award of Contract have been sent to General Electric and P.T. Intra Sapta.

C. TOOLS AND EQUIPMENT

PDO and USAID have agreed with the Consultant's Bid Evaluation Report with the exception of Bid Category 8 - Trucks. Contracts will be awarded in early November for Categories 1 through 7.

D. POLES

No contracts have been awarded on the IFB for Wood Poles opened on June 30, 1980.

During this report period, NRECA personnel made a study as to the advisability of the use of treated versus untreated wood for poles. The result of the study indicated that from financial and operational viewpoints the use of untreated wood for poles would be unwise.

The Consultant this month recommended that there should be a standardization of pole types utilized in DGC Cooperative electric system. The recommendation if accepted may result in the re-issue of the Pole IFB for re-tender. Refer to part D of this report Section IV for additional clarification on the Consultant's pole strength and length recommendation.

E. COMMUNICATION EQUIPMENT

The Single Side Band Communication Equipment has been received at the Port of Entry. There is a possibility that installation presently scheduled for November, may be delayed until December due to problems in Customs clearance.

VI. CONSTRUCTION

A. LAMPUNG

The installations completed during the month and total installations on the Lampung REIL Project are as follows :

	<u>PREVIOUS</u>	<u>OCTOBER</u>	<u>TOTAL</u>
Signed Members	1,692	0	1,692
Service Drops	1,420	12	1,432
Houses Wired	1,444	0	1,444
Members Served	1,420	12	1,432
Meters Set	1,426	6	1,432
Poles Set	838	0	838
Guys Installed	359	0	359
Transformers Set	43	0	43
Maximum Demand	* 150 KW	150 KW	150 KW

* Meter Repaired this month

The Consultant developed a chart for use in this service area that will indicate the Liters of Diesel Fuel remaining in the Generator Station Supply Tank at all level readings.

B. LOMBOK

The installations completed during the month and total installations on the Lombok REIL Project are as follows :

	<u>PREVIOUS</u>	<u>OCTOBER</u>	<u>TOTAL</u>
Signed Members	2,240	0	2,240
Service Drops	1,830	0	1,830
Houses Wired	1,973	0	1,973
Members Served	1,933	0	1,933
Meters Set	1,933	- 150	1,783
Poles Set	392	0	392
Guys Installed	184	0	184
Transformers Set	9	2	11
Maximum Demand	220 KW	234 KW	234 KW

During this report period the Consultant was requested to prepare a design and a Bill of Material relevant to the installation of a 50 KW Generator Set for daytime use in the Lombok Service Area.

The Consultant's Field Supervisor who comes to Jakarta once each month for the Consultant's Monthly Staff Meeting was directed to report early so that he could assist in this task.

The design sketch and Bill of Material was completed and submitted to PDO.

The Bill of Material and material cost estimate requested by PDO that could be used to provide electric service for the village of Suralaqa was submitted to PDO during this report period.

C. L U W U

The installations completed during the month and total installations on the Luwu Mini REIL Project are as follows :

	<u>PREVIOUS</u>	<u>OCTOBER</u>	<u>TOTAL</u>
Signed Members	383	32	415
Service Drops	383	0	383
Houses Wired	383	0	383
Members Served	283	0	283
Meters Set	283	0	283
Poles Set	96	0	96
Guys Installed	62	0	62
Transformers Set	0	0	0
Maximum Demand	30 KW	32 KW	32 KW

D. OVERALL FIELD SUPERVISOR ACTIVITY

Systems are now in operation in each of the three project service areas. The Consultant's Field Supervisors are now constantly on call to provide operational help, guidance and supervision for these systems as well as the services they were normally providing on system field design.

The Consultant suggests that consideration be given to moving all Field Supervisors and a Distribution Engineer temporarily to the Lampung Service Area to complete staking and field design in that area as quickly as possible. This temporary relocation will not adversely affect line design and staking sheet production in the other two areas, since the work in those areas is far ahead of the Lampung Service Area.

Personnel Assigned to the Project as of 31 October 1981

D.A. Dowling	- Project Manager
E.S. Leffler	- Project Lead Engineer
J.D. Kerr	- Electrical Engineer
R.N. Key	- Business Manager
P.V. Wilson	- Material Coordinator
C.J. Whitby	- Administrator
E.V. Borja	- Distribution Engineer
T.L. Resabal	- Distribution Engineer
G.S. Saniel	- Distribution Engineer
D.K. Hoffer	- Drafting Supervisor
F.P. Cachin	- Field Supervisor
C.T. Nuez	- Field Supervisor
R.M. Garcia	- Field Supervisor
V.H. Sydiongco	- Civil Engineer
Srie Rahayu Wiludjeng	- Secretary

Personnel Details

Mr. E.S. Leffler replaced G.G. Smith as Project Lead Engineer 3 October 1981 on Mr. Smith's departure from the Project.

Mr. P.V. Wilson - Material Coordinator returned from vacation on 9 October 1981.

Mr. N.G. Popov - Chas. T. Main's, Manager International Projects arrived in Jakarta on 28 October 1981 to review project status.

JOB CLASSIFICATIONS & MANMONTHS

Through : 10 September 1981

JOB CLASSIFICATIONS	LOCATION	PLN	DGC	PRESENT PERSONNEL ASSIGNED	MANMONTHS		% CONS.	% REMAIN
					ALLOCATED	CONSUMED		
Project Manager	Jakarta	x	x	D.A. Dowling	40	34.8	87.0	13.0
Business Manager	Semarang	x	x	R.N. Key	39	33.2	85.1	14.9
Administrative Ass't.	Jakarta	x	x		24	10.6	44.2	55.8
Area Manager	Semarang	x		H.E. Johnson	24	11.1	46.3	53.7
Lead Elect. Engineer	Semarang	x			38	27.7	72.9	27.1
Civil Engineer	Semarang	x		E.M. Downing	24	20.4	85.0	15.0
Architect		x			3	0.0	0.0	100.0
Field Supervisor	Semarang	x		H.E. Earl	37	31.0	83.8	16.2
Field Supervisor	Semarang	x		J.J. Bennett	34	27.7	81.5	18.5
Field Supervisor	Semarang	x		J.V. Hardman	35	27.4	78.3	21.7
Lead Electrical Eng.	Jakarta		x	G.G. Smith	39	31.9	81.8	18.2
Electrical Engineer	Jakarta		x	E.S. Leffler/J.D.Kerr	24	25.6	106.7	(6.7)
Distribution Eng.	Jakarta		x	E.V. Borja	24	12.9	53.8	46.2
Distribution Eng.	Jakarta		x	G.S. Sanial	24	14.7	60.8	39.2
Distribution Eng.	Jakarta		x	T.L. Resabal	24	9.0	37.5	62.5
Civil Engineer	Jakarta		x	V.H. Sydiongco	24	13.4	55.8	44.2
Senior Draftsman	Jakarta		x	D.K. Hoffer	24	17.5	72.9	27.1
Field Supervisor	Lampung		x	F.P. Cachin	35	32.1	91.7	8.3
Field Supervisor	Lombok		x	C.T. Nuez	35	26.1	74.6	25.4
Field Supervisor	Luwu		x	R.M. Garcia	35	32.4	92.6	7.4
Material Coordinator	Jakarta		x	P.V. Wilson	12	6.3	52.5	47.5
Administration Manager	Jakarta		x	C.J. Whitby	-	2.6	-	-
Home Office	Boston	x	x	Various	90	57.0	63.4	36.6
TOTALS :					688	505.4	73.5	26.5
					=====	=====		

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
ENGINEERING														
DEMONSTRATION PROJECT DISTRIBUTION SYSTEM	3													
CENTERLINE STAKING	7													
SYSTEM DESIGN	5													
CONSTRUCTION DRAWINGS	5.2													
HEADQUARTERS COMPLEX														
A&E SERVICE	1.6													
SITE INVESTIGATION	.5													
PRELIMINARY DESIGN	.7													
FINAL DESIGN	.9													
CONSTRUCTION DOCUMENTS	.5													
PROCUREMENT & DELIVERY														
DEMONSTRATION PROJECT	3													
LINE MATERIAL	6.8													
POLES	8.3													
TOOLS & EQUIPMENT	4.7													
HOUSEWIRING MATERIAL & METERS	5.8													
CONSTRUCTION														
DEMONSTRATION PROJECT DISTRIBUTION SYSTEM	2.5													
CONTRACTOR SERVICES	6													
LINE CONSTRUCTION	5.2													
LINE TESTING	4.8													
HOUSEWIRING & METERS	10.3													
SERVICES	10.3													
HEADQUARTERS COMPLEX														
CONTRACTOR SERVICES	3													
SITE DEVELOPMENT	.6													
FOUNDATIONS	1													
STRUCTURES	1.3													
SUPPORT SYSTEMS	1													
FINISH DETAILS	1													

PROJECT STATUS
RURAL ELECTRIFICATION

DIRECTORATE GENERAL OF COOPERATIVES

Activity

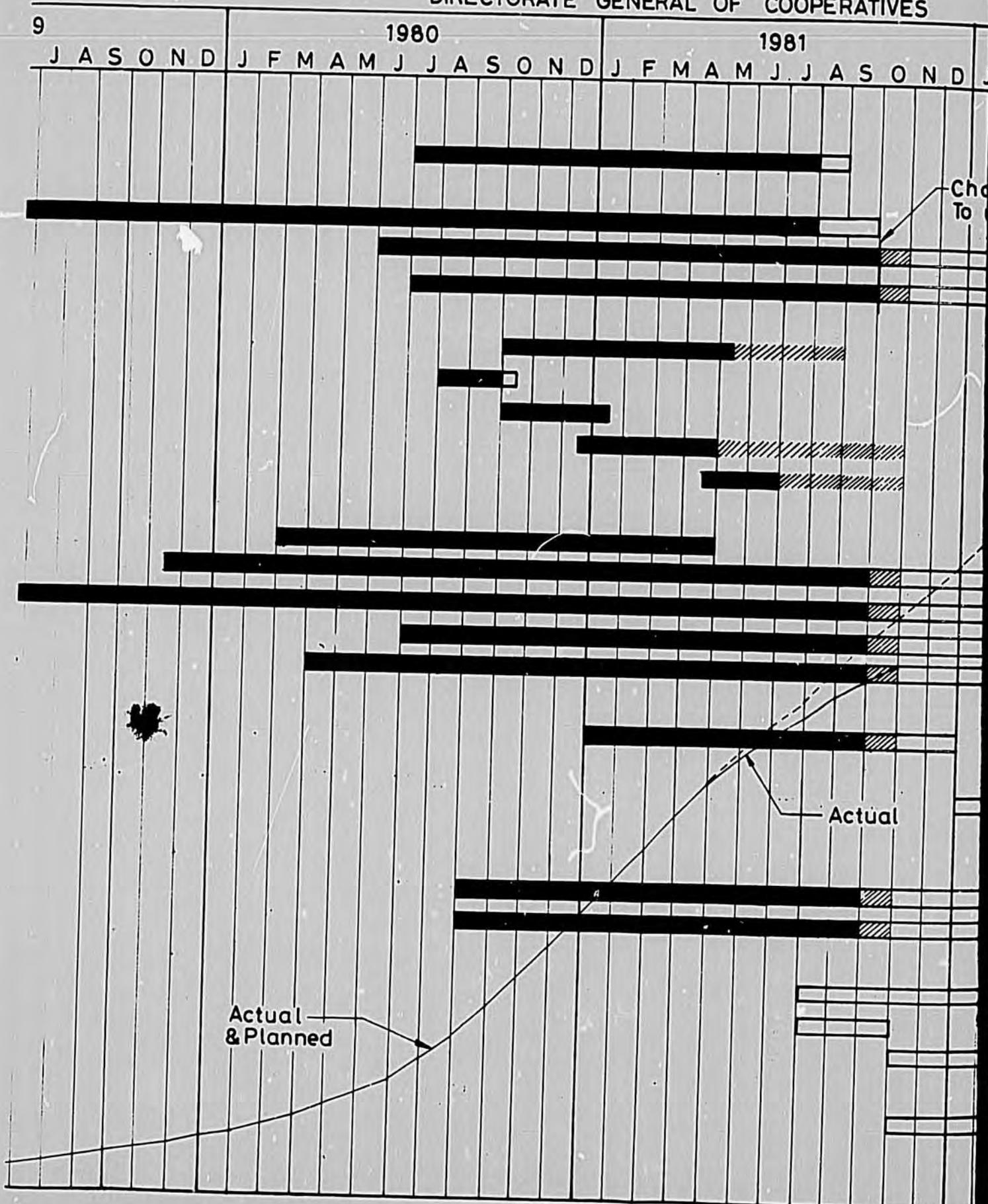
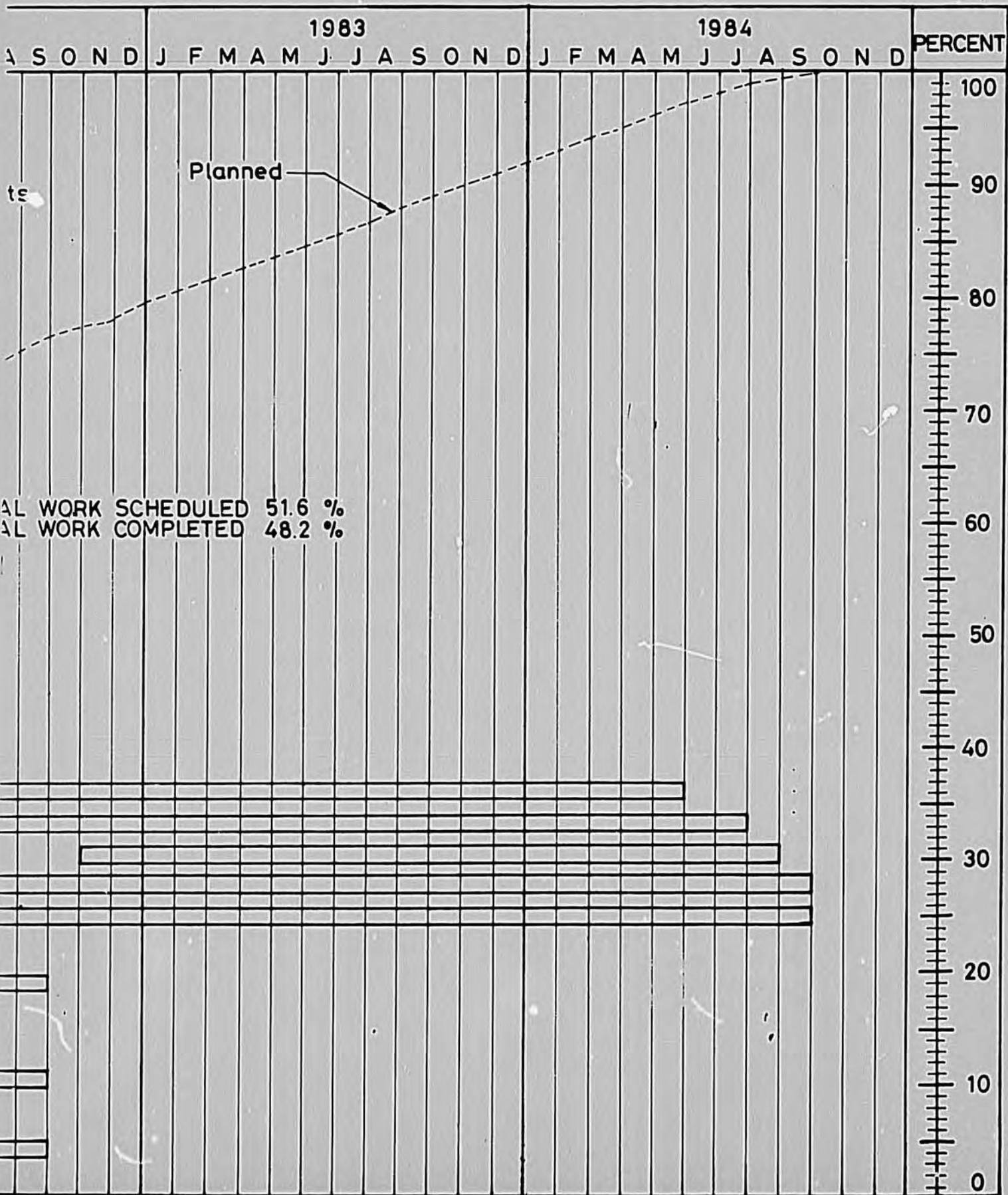


Chart revised as of July 31, 1981.
 Projected and completed percentages
 based upon activity months.

4

MAIN

REPORTING PERIOD : Oct. 1981





SECONDARY DEAD-END



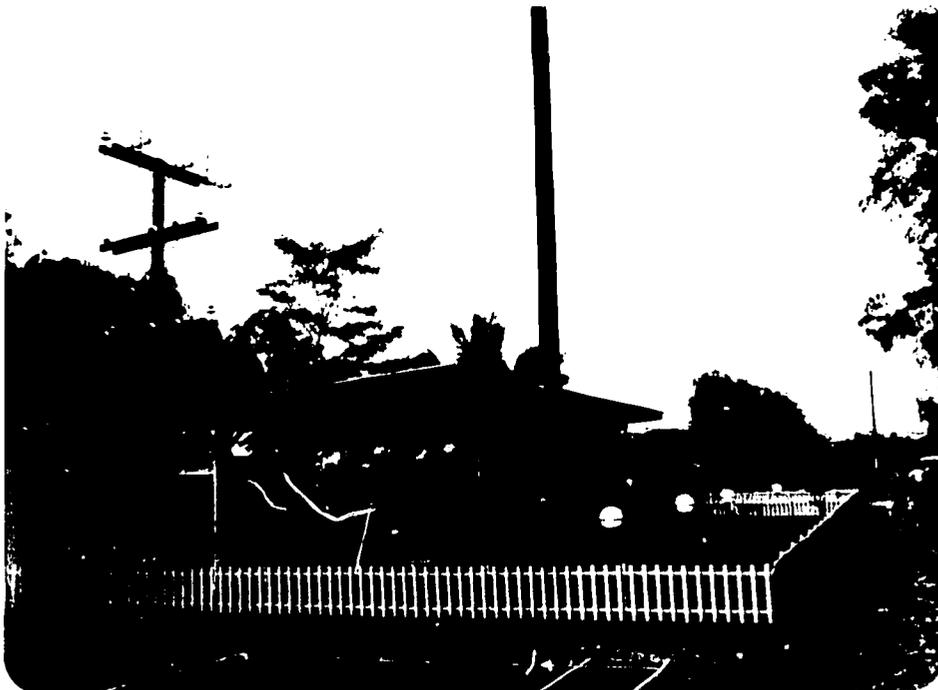
SINGLE PHASE CROSS COUNTRY PRIMARY

AND

LAMPUNG COOPERATIVE SYSTEM



SINGLE PHASE PRIMARY CROSSOVER IN THE LAMPUNG
COOPERATIVE WITH UNDERBUILD CIRCUITS



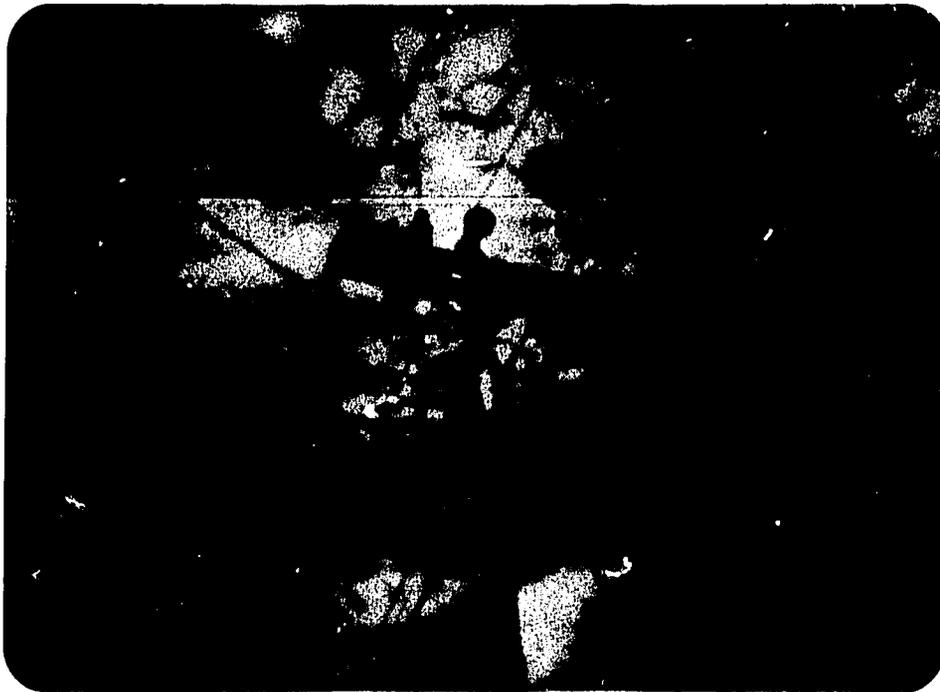
LAMPUNG REIL GENERATION STATION



RURAL SECONDARY LINE IN THE LAMPUNG COOPERATIVE



SERVICE DROP BEING INSULATED AT A RESIDENCE
IN THE LAMPUNG COOPERATIVE



SINGLE PHASE TRANSFORMER INSTALLATION IN
LOMBOK COOPERATIVE ON THREE PHASE LINE



SINGLE PHASE INSTALLATION IN LOMBOK COOPERATIVE
ON SINGLE PHASE LINE