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**PERUSAHAAN UMUM LISTRIK NEGARA
JAKARTA, INDONESIA**

**WEST JAVA
ELECTRIC TRANSMISSION PROJECT**

QUARTERLY REPORT NO. 17

APRIL - JUNE 1978

WEST JAVA I PROJECT

CONTRACT NO. PJ 013/PST/74

AID LOAN NO. 497 - H - 028



CHAS. T. MAIN INTERNATIONAL, INC.

BOSTON, MASSACHUSETTS U.S.A.

BANDUNG, INDONESIA

MAIN
Engineers

PERUSAHAAN UMUM LISTRIK NEGARA CONSULTANT
CHAS. T. MAIN INTERNATIONAL, INC.
BANDUNG - TROMOLPOS 89, TEL. 88889, JL. PROGO 32
JAKARTA - P.O. BOX 100, KBT KEBAYORAN TIMUR, TEL. 776925, JL. WIJAYA 1/61
SEMARANG - P.O. BOX 26, TEL. 27108, JL. SLAMET 1

3 October 1978

Letter No. B - 7688

Ir. Djurzan Hamid

PERUSAHAAN UMUM LISTRIK NEGARA

Proyek Induk Jaringan Jawa Barat & Jakarta Raya

Jl. Cililitan Besar No. 1

Jakarta.

Subject : Contract No. Pj.013/PST/74

Quarterly Report No. 17.

Dear Ir. Djurzan ;

In accordance with Article 7.1 (1) of the subject Contract,
we are hereby enclosing three (3) copies of ENGINEER'S
Quarterly Report No. 17 for the period 1 April 1978 through
30 June 1978.

Very truly yours,

CHAS. T. MAIN INTERNATIONAL INC.


C.J. Whitby

Acting Project Manager

CJW/1a.

cc : DIRBANG - PLN Pusat (1)
USAID - JKT (4) ✓
MAIN - USA

WEST JAVA ELECTRIC TRANSMISSION PROJECT NO. I.

QUARTERLY PROGRESS REPORT NO. 17

FOR THE QUARTER 1 APRIL 1978 - 30 JUNE 1978

SECTION I

GENERAL PROJECT INFORMATION

A. Loan Agreement

USAID has agreed to lend up to US \$ 17.2 million to the Government of Indonesia for relending to Perusahaan Umum Listrik Negara (PLN) to finance the reasonable foreign exchange cost of the West Java Electric Transmission Project. USAID Loan No. 497-H-028 was established to cover the cost of improved capital equipment and related engineering and training services. The Government of Indonesia has agreed to provide Rupiah in the estimated equivalent of US \$ 5.8 million to meet local currency expenditures.

B. Contract

In accordance with the above Loan Agreement and with USAID concurrence, PLN and Chas.T.Main International Inc. (ENGINEER) Boston, Massachusetts, U.S.A. entered into Contract No. Pj.013/PST/74, dated 16 February 1974. This Contract, in general terms, requires ENGINEER to perform consulting services which will result in reliable and economical electric power system in West Java. The Contract became effective 1 July 1974 for a period of 4 years. An Amendment signed by both parties on 12 March 1977 extends the Project through 1979.

C. Letter of Commitment and Credit

Upon request by Government of Indonesia, USAID issued Letter of Commitment No.497-H-02801, dated 15 May 1974 and amended 4 May 1977. Subsequently, Letter of Credit 0103/2844/PL was issued in favor of ENGINEER in the amount of US \$ 1,366.452.00 and later increased to the amount

of US \$ 2,956,448. ENGINEER was notified that the Letter of Credit was opened through the Irving Trust Company, New York, with an effective date of 1 July 1974.

D. Objectives of the Project

In addition to the general objective referred to above, other objectives of the Project include establishing the basic engineering criteria, standards and specifications by which future extensions of the system can be readily coordinated with the newly constructed system.

They also include training of PLN personnel so that they may continue performance of the engineering design and construction management for future extension of the system. This project is closely associated with other electric power projects currently being implemented in West Java.

E. Description of the Project

The overall Project covers the design, procurement, construction supervision, technical assistance, managerial assistance and training required in connection with :

1. Approximately 185 Km of new 150 Kv double circuit transmission lines connecting Tegal, Cirebon and Bandung ;
2. New 150 Kv substation at Ujungberung and switching facilities at Tegal;
3. Installation of power line carrier communications systems ;
4. Installation of adequate protection system for transmission and substation system ;
5. Provision of tools and services equipment for system operation and maintenance ;
6. Furnish PLN a library of technical books related to the electric power industry.

F. General Scope of Services of ENGINEER

The Scope of Services to be provided by ENGINEER under the Contract include but are not limited to the following items

- 1. General**
- 2. Engineering and Design Services**
- 3. Procurement Services**
- 4. Construction Planning and Pre-Contracting Services**
- 5. Engineering Supervision and Inspection Services**
- 6. Construction Project Management and Supervision Services**
- 7. Initial Operation and Testing**
- 8. Training**

SECTION II
FINANCE AND ADMINISTRATION

A. Finance Information

1. US Dollar Cost

Invoices in the amount of US \$ 2,161,262.78 have been submitted to PLN Pusat. Appended as Exhibit A is the Financial Plan and Cash Flow by Project Quarters. Categories by Work Item and Cash Flow by Project Quarters are based on the revised Scope of Work embodied in an Amendment to the Original Contract. These data will be revised as necessary. Statistical data in chart form for the Progress Schedule are appended as Exhibit B.

2. Indonesian Rupiah Costs

Invoices in amount of Rp. 145.820.654,- for local cost incurred have been submitted to PLN.

Exhibit C, Financial Plan and Cash Flow for Indonesian Rupiah costs and Exhibit D, Progress Schedule are appended.

Categories by Work Item and Cash Flow by Project Quarters are also based on the Amendment as indicated above and are subject to later revisions.

3. Invoices Submitted and Payments Received

These data are appended as Exhibit B.

B. Administrative Information

1. Contract Data (Signed Contracts)

- | | |
|---|--------------------|
| (1) No. Pj.153/PST/77 | 5 September 1977 |
| Irby Costruction Company | US \$ 2,531,335.58 |
| Tower Steel, Insulators and Accessories | |
| (2) No. Pj.202/PST/77 | 28 November 1977 |

	Copperweld Industries	US \$ 284,289.50
	Shieldwire	
(3)	No. Pj.203/PST/77 Southwire Company Conductor	28 November 1977 US \$ 1,906,391.70
(4)	No. Pj.050/PST/78 Tension Stringing Equipment Wire Stringing Equipment	10 March 1978 US \$ 369,473.98
(5)	No. Pj.051/PST/78 Ohio Brass Company Lightning Arrestors	10 March 1978 US \$ 87,852.00
(6)	No. Pj.052/PST/78 Irby Construction Company Substation Equipment Maintenance Tools and Equipment	10 March 1978 US \$ 4,499,800.74
(7)	No. Pj.053/PST/78 General Electric Company Substation Equipment	11 March 1978 US \$ 2,452,391.40
(8)	No. Pj.087/PST/78 Motorola Radio Equipment	11 May 1978 US \$ 395,819.20
(9)	No. SPj.016/PLN/PI RING/77 Sumber Jaya Grounding Material	4 July 1977 Rp. 54.245.000,- For Both Projects
(10)	No. SPj.016/PLN/PI RING/77 P.T. Arcon Stub Angles	13 August 1977 Rp. 40.100.000,- For Both Projects

- | | |
|--|--------------------------------------|
| (11) No. SPj.022/PLN/PI RING/77
Tikon Abadi
Foundations - Section I | 27 October 1977
Rp. 199.278.000,- |
| (12) No. SPj.023/PLN/PI RING/77
Gunung Kencana
Foundations - Section IIA | 27 October 1977
Rp. 153.445.000,- |
| (13) No. SPj.024/PLN/PI RING/77
Dharma Niaga
Foundations - Section IIB | 27 October 1977
Rp. 164.789.000,- |

2. Contract Data (Pending Contracts)

1. Power Line Carrier - No Report

SECTION III

GENERAL INFORMATION

A. CONFERENCES AND EVENTS

1. Project Meeting Number 11 was held 29 April in Cirebon. Progress reports were given on each phase of the Project operations and many of the attendees toured maintenance, storeyard and foundation construction sites.
2. Project Meeting No. 12 was held on 10 June in ENGINEER's Bandung office. Construction, Engineering and Administrative progress reports were given and general Project matters discussed.
3. Mr. C.C. Noble, Group Vice-President in charge of Construction Management, and Mr. P.J. Bracken, Project Coordinator, both from ENGINEER's Boston office arrived in Indonesia on 23 June. They visited various office locations, construction sites and the training area. Meetings were held with PLN officials in Jakarta and Bandung.

B. PROBLEM AREAS

1. Foundation Contractors are having severe financial problems. Meetings are held on a periodic basis to discuss and resolve the difficulties.

SECTION IV

PERSONNEL

A. ENGINEER

1. On 2 February, ENGINEER requested from PLN the assignment of Mr. James P. Radda as Administrative Assistant, for both Projects. On 25 April, PLN approved the assignment and Mr. Radda joined the Projects on 19 June.
2. On 4 March, ENGINEER requested from PLN the assignment of Mr. Charles V. Silman as Construction Supervisor for the Project. On 3 April, PLN approved the assignment and Mr. Silman joined the Project on 1 June.
3. On 25 May, ENGINEER requested from PLN the assignment of Mr. James R. Knowles as Supervisor of Equipment Maintenance for both Projects. On 12 June, PLN approved the assignment and Mr. Knowles is expected to join the Projects in July.
4. Mr. E.H. Knight, former Distribution Engineer, completed his assignment and departed Indonesia on 29 April.
5. As of 30 June, ENGINEER's staff was as follows :

<u>NAME</u>	<u>TITLE</u>	<u>ARRIVAL DATE</u>
H.W. De Klerk	Project Manager (1)	22 Nov. 1976
W.L. Rush	Manager of Constr. (1)	24 Apr. 1978
C.J. Whitby	Manager of Administration (1)	10 Sep. 1974
W.A. Villogas	Supervisor of Stores (1)	25 Jul. 1977
C.C. Guico	Electrical Engineer (1)	17 Sep. 1976
J.C. Harkey	Substation Engineer (1)	15 Oct. 1977
D.L. Frye	Transmission Engineer (1)	3 Jan. 1978
N.P. Dennis	Survey Engineer (1)	13 Jun. 1977
J.P. Radda	Administrative Assistant (1)	19 Jun. 1978
R.C. Van Nest	Superintendent of Const.	17 Feb. 1977

W.A. Arnold	Construction Supervisor	1 Sep. 1977
Zainal Saur	Construction Supervisor	16 Mar. 1978
C.V. Silman	Construction Supervisor	1 Jun. 1978

(1) Performs the same function for the West Java II Project.

B. PLN

1. As of 30 June, the Project staff was as follows :

<u>JOB TITLE</u>	<u>NUMBER</u>
Transmission Liaison Engineer (1)	1
Logistics Coordinator (1)	1
Drivers (1)	13
Draftsmen (1)	6
Secretaries (1)	5
Survey Crew Personnel	14

(1) Performs the same function for the West Java II Project.

C. PERSONNEL MANMONTHS

1. ENGINEER and PLN Personnel Manmonths expended on the Project to date are shown on the appended Exhibit F.

D. BUDGET

1. Comparison of Budget vs. Actual Manmonths and Salaries expended on the Project to date are appended as Exhibits G and H.

SECTION V

DESIGN AND FIELD PROGRESS

A. DISTRIBUTION

1. ENGINEER had previously inventoried and made final corrections to all Distribution Standards and all Design Criteria Drawings. Agreement was reached to provide PLN with one reproducible and five copies of all original drawings. Reproduction work was completed during the period. There were some 1400 original drawings and 10,316 copies were made and submitted to PLN.
2. Work is underway on the Final Report.

B. TRANSMISSION

1. Transmission line design has been finalized and essentially all related work has been completed and submitted.
2. Final quantities of tower steel have been submitted.
3. Observation of tower footing construction continued during the period, assistance rendered when required and As-built reports are being checked.
4. A program of checking the quality of concrete in the tower footings by using core drilled samples was instituted during the period.
5. Routine checking of span lengths and elevations against Plan and Profile continues. Spans checked to date are 378 out of a total of some 471 spans.

C. SUBSTATIONS

1. Grounding and Equipment Arrangement drawings for the Ujungberung Substation were marked with final line entry locations and returned to ENGINEER's Charlotte office.

2. Final Control House drawings were received from the Bandung Institute of Technology (ITB). After ENGINEER's local review, the drawings were forwarded to ENGINEER's Charlotte office for analysis.
3. Comments on the IFB for civil work at the Ujungberung Substation were incorporated into the IFB and the document was forwarded to ENGINEER's Charlotte office for review.
4. During the period, ENGINEER met with PLN Distribusi III in Bandung to discuss distribution cable egress from the various Substations. Distribusi agreed to provide electric service during construction.
5. Work continued on Substation specifications and associated cost estimates.
6. Forms to permit import of radio equipment into Indonesia were processed during the period.

CONSTRUCTION

1. Section I Foundations - Contractor : Tikon Abadi
 - a. Foundations for ninety - three (93) towers have been poured to date. Total towers in this section are 165.
 - b. During the period, a meeting was held with TIKON ABADI and DHARMA NIAGA. It was agreed to assign 50 tower locations to DHARMA NIAGA in Section I. When this section is completed both contractors will move to the Bandung North section.
 - c. Financial difficulties continue to make increased production doubtful.
 - d. Heavy, unseasonable rains have delayed progress also.
2. Section IIA Foundations - Contractor : Gunung Kencana
 - a. Foundations for ninety-six (96) towers have been poured to date. Total towers in this Section are 154.
 - b. More equipment is needed to ensure greater tower foundations and clean-up work which had previously been stressed by ENGINEER continued.

3. Section IIB Foundations - Contractor : Dharma Niaga

- a. Foundations for eighty-four (84) towers have been poured to date. Total towers in this Section are 148 but some 60 are from Ujungberung to Bandung Utara and have not been located as yet.

4. Other Construction

- a. Construction on the warehouse at Sunyaragi (Cirebon) was interrupted briefly during the period but now is underway again. Inside storage racks are being fabricated. Additional Storeyard area for Conductor and Shield wire was secured.
- b. The Maintenance Shop at Cigereleng (Bandung) is approximately 80% completed. Work proceeds well.

SECTION VI
TRAINING ACTIVITIES

A. GENERAL

1. The tower erection training course began 8 May at the UDIKLAT Training Center in Cibogo. Twenty-eight (28) personnel are attending the course which includes tower steel identification and layout, tower erection, Technical English and job safety. Graduation is scheduled for early July.

**WEST JAVA
FINANCIAL PLAN
U.S. DOLLAR**

No.	WORK ITEM	ALLOCATION		COMMIT- MENTS	1974		1975	
		INITIAL	REVISED		3	4	1	2
	TOTAL	23,788	15,596	15,088	63	106	106	118
1	150 KV. TRANSMISSION -							
1A	TEGAL - CIREBON	2,814	1,675	1,630				
1B	CIREBON - BANDUNG	5,338	3,112	2,092				
2	150 KV. SUBSTATIONS							
2A	TEGAL	864	492	492				
2B	BANDUNG - LUNG BERING	6,181	3,158	3,158				
2C	BANDUNG - BANDUNG UTARA	3,829	-	-				
3	POWER-LINE CARRIER	409	-	-				
4	MOBILE RADIO	139	395					
5	CONSTRUCTION MAINTENANCE EQUIP	1,458	1,847	1,800				
6	CONSTRUCTION SERVICES	2,921	2,921	2,921	63	106	106	118
		35	35	35			5	1

NO	WORK ITEM	WEIGHTED PERCENT OF PROJECT	ITEM PERCENT COMPLETED	PROJECT PERCENT COMPLETED	1974			
					3	4	1	2
	TOTAL	100.0	-	13.8				
1A	150 KV TRANSMISSION - TEGAL - CIREBON	10.8						
1B	150 KV TRANSMISSION - CIREBON - BANDUNG	20.0						
2A	150 KV SUBSTATION - TEGAL	2.9						
2B	150 KV SUBSTATION - BANDUNG - UJUNG BERUNG	33.1						
2C	150 KV SUBSTATION - BANDUNG - DAGO	-						
3	POWER LINE CARRIER	-						
4	MOBILE RADIO	2.5						
5	CONSTRUCTION/MAINTENANCE EQUIPMENT	11.8						
6	ENGINEERING SERVICES	18.7	73.5	13.7				
7	TRAINING/LIBRARY	0.2	37.1	0.1				

WEST JAVA I
FINANCIAL PLAN AND
INDONESIAN RUPIAH

No	WORK ITEM	ALLOCATION		COMMIT- MENTS	1974		197	
			REVISED		3	4	1	2
	TOTAL	2,147	2,174		14	12	12	11
1	150 KV. TRANSMISSION							
1A	TEGAL - CIREBON	372	326					
1B	CIREBON - BANDUNG	690	605					
2	150 KV. SUBSTATIONS							
2A	TEGAL	12	12					
2B	BANDUNG - UJUNG BERUNG	160	232					
2C	BANDUNG - BANDUNG UTARA	117	-					
3	POWER LINE CARRIER	34	-					
4	MOBILE RADIO	11	11					
5	CONSTRUCTION/MAINT EQUIP	605	807					
6	ENGINEERING SERVICES	144	178		14	12	12	11
7	TRAINING/LIBRARY	2	3					

PROJECT
PLAN AND CASH FLOW
IN MILLION (000.000)

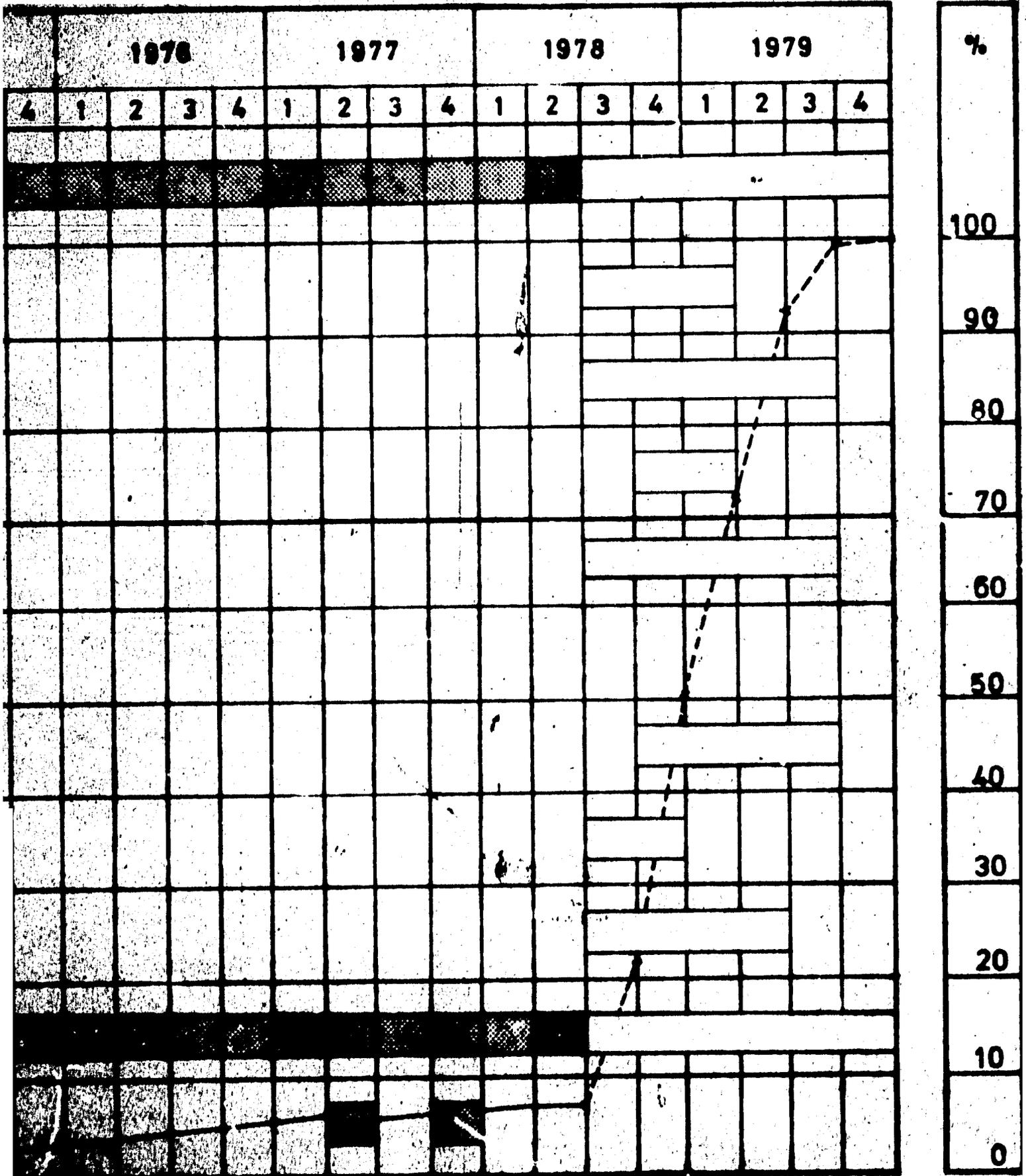
FUNDS REQUIRED TO COMPLETE PROJECT																			
1975				1976				1977				1978				1979			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
12	11	9	10	5	2	1	2	7	8	9	11	17	16	424	541	498	390	173	2
														100	126	100			
														120	120	120	120	125	
																	6	6	
														56	44	44	44	44	
														6	5				
														132	233	221	221		
12	11	9	10	5	2	1	2	7	7	9	9	17	16	10	7	7	5	4	2
									1		2								

No	WORK ITEM	WEIGHTED PERCENT OF PROJECT	ITEM PERCENT COMPLETED	PROJECT PERCENT COMPLETED	1974		
					3	4	1
	TOTAL	100.0	-	6.7			
1A	150 KV TRANSMISSION - TEGAL - CIREBON	15.0					
1B	150 KV TRANSMISSION - CIREBON - BANDUNG	27.8					
2A	150 KV SUBSTATION - TEGAL	0.6					
2B	150 KV SUBSTATION - BANDUNG - UJUNG BERUNG	10.7					
2C	150 KV SUBSTATION - BANDUNG - BANDUNG UTARA	-					
3	POWER LINE CARRIER	-					
4	MOBILE RADIO	0.5					
5	CONSTRUCTION/ MAINTENANCE EQUIPMENT	37.1					
6	ENGINEERING SERVICES	8.2	80.3	6.6			
7	TRAINING/LIBRARY	0.1	100.0	0.1			

SCHEDULED
ACTUAL

SCHEDULED

No	WORK ITEM	WEIGHTED PERCENT OF PROJECT	ITEM PERCENT COMPLETED	PROJECT PERCENT COMPLETED	1974		
					3	4	1
	TOTAL	100.0	-	6.7			
1A	150 KV TRANSMISSION - TEGAL - CIREBON	15.0					
1B	150 KV TRANSMISSION - CIREBON - BANDUNG	27.8					
2A	150 KV SUBSTATION - TEGAL	0.6					
2B	150 KV SUBSTATION - BANDUNG - UJUNG BERUNG	10.7					
2C	150 KV SUBSTATION - BANDUNG - BANDUNG UTARA	-					
3	POWER LINE CARRIER	-					
4	MOBILE RADIO	0.5					
5	CONSTRUCTION/ MAINTENANCE EQUIPMENT	37.1					
6	ENGINEERING SERVICES	8.2	80.3	6.6			
7	TRAINING/LIBRARY	0.1	100.0	0.1			



WEST JAVA I PROJECT
 INVOICES SUBMITTED AND
 PAYMENTS RECEIVED
 QUARTER ENDED 30 JUNE 1978

EXHIBIT E

CHAS.T. MAIN INTERNATIONAL INC.

	U S DOLLARS		INDONESIAN RUPIAH	
	INVOICES SUBMITTED	PAYMENTS RECEIVED	INVOICES SUBMITTED	PAYMENTS RECEIVED
PREVIOUS	\$1,890,278.89	\$1,667,694.20	Rp130.165.389	Rp126.790.008
REPORT PERIOD	\$ 270,983.89	\$ 200,489.66	Rp. 15.655.265	Rp. 13.950.196
TOTAL	\$2,161,262.78	\$1,868,183.86	Rp145.820.654	Rp140.740.204

CONTRACTOR COMPOSITE

	U S DOLLARS		INDONESIAN RUPIAH	
	INVOICES SUBMITTED	PAYMENTS RECEIVED	INVOICES SUBMITTED	PAYMENTS RECEIVED
PREVIOUS				
REPORT PERIOD				
TOTAL				

CHAS.T. MAIN INTERNATIONAL INC.

WEST JAVA I PROJECT
PERSONNEL MAN MONTHS
AS OF 15 JUNE 1978

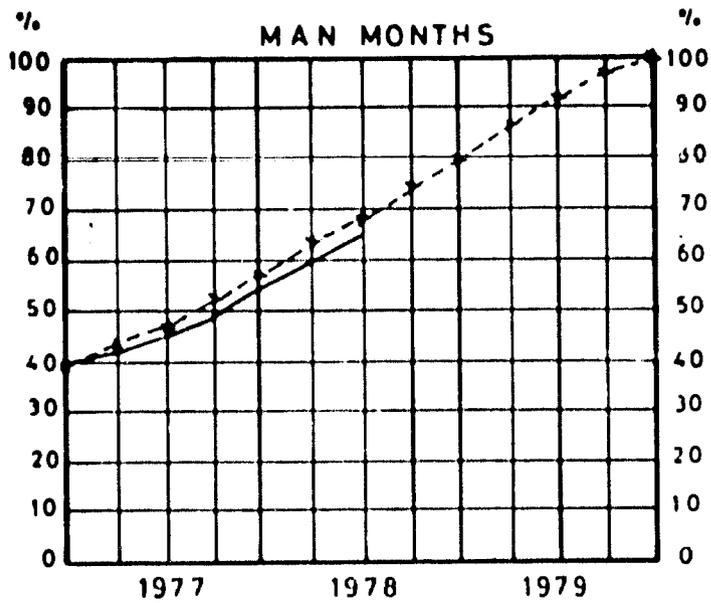
COMPANY	U S	INDONESIAN	THIRD COUNTRY
CHAS.T. MAIN	445.3	—	
P L N	—	2,474.1	
OTHER	—	—	
TOTAL	445.3	2,474.1	

CHAS. T. MAIN INTERNATIONAL, INC

WEST JAW FIELD STAFF MAN MONTHS BUDGET VS ACTUAL

AS OF 15

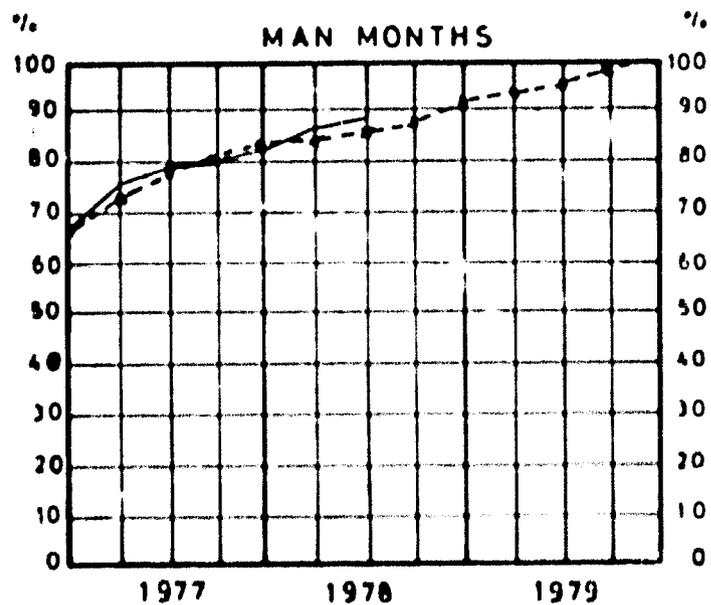
TOTAL FIELD STAFF



	MAN MONTHS			SALARIES (000)		
	BUD	ACT	%	BUD	ACT	%
PREVIOUS	234	227	97	392	390	99
THIS PERIOD	22	25	114	38	43	113
TOTAL TO DATE	256	252	98	430	433	101
TOTAL CONTRACT	380	252	66	616	433	70

----- BUDGET
————— ACTUAL

ENGINEERING ONLY



	MAN MONTHS			SALARIES (000)		
	BUD	ACT	%	BUD	ACT	%
PREVIOUS	117	118	101	178	187	105
THIS PERIOD	6	5	83	4	9	225
TOTAL TO DATE	123	123	100	182	196	108
TOTAL CONTRACT	138	123	89	187	196	105

----- BUDGET
————— ACTUAL

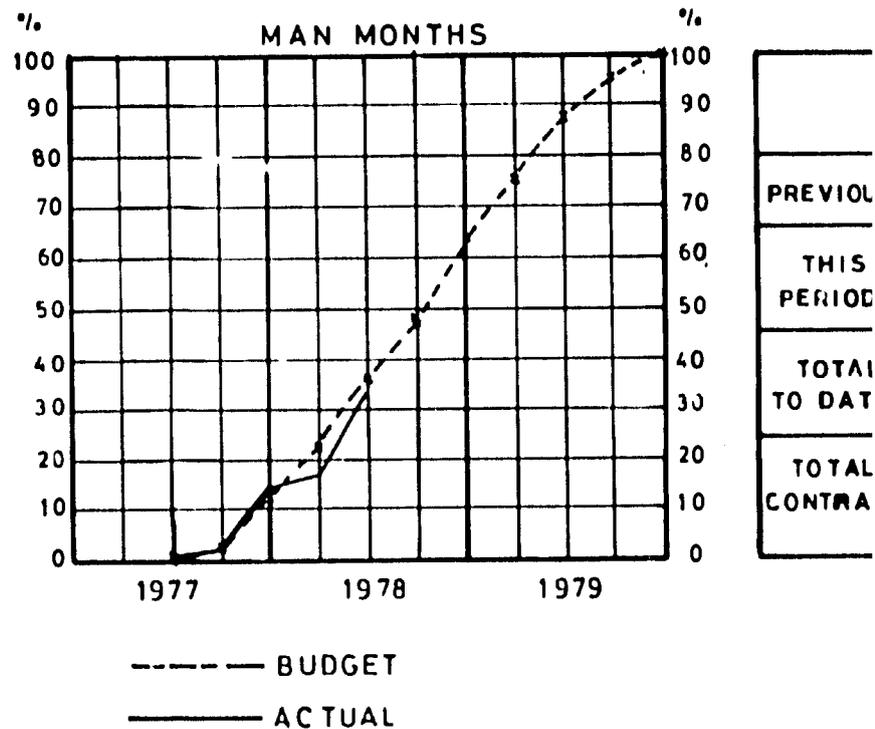
WEST JAVA I FIELD STAFF MAN MONTHS & SALARIES BUDGET VS ACTUAL

AS OF 15 JUNE 1978

ELD STAFF

	MAN MONTHS			SALARIES (000)		
	BUD	ACT	%	BUD	ACT	%
PREVIOUS	234	227	97	392	390	99
THIS PERIOD	22	25	114	38	43	113
TOTAL TO DATE	256	252	98	430	433	101
TOTAL CONTRACT	380	252	66	616	433	70

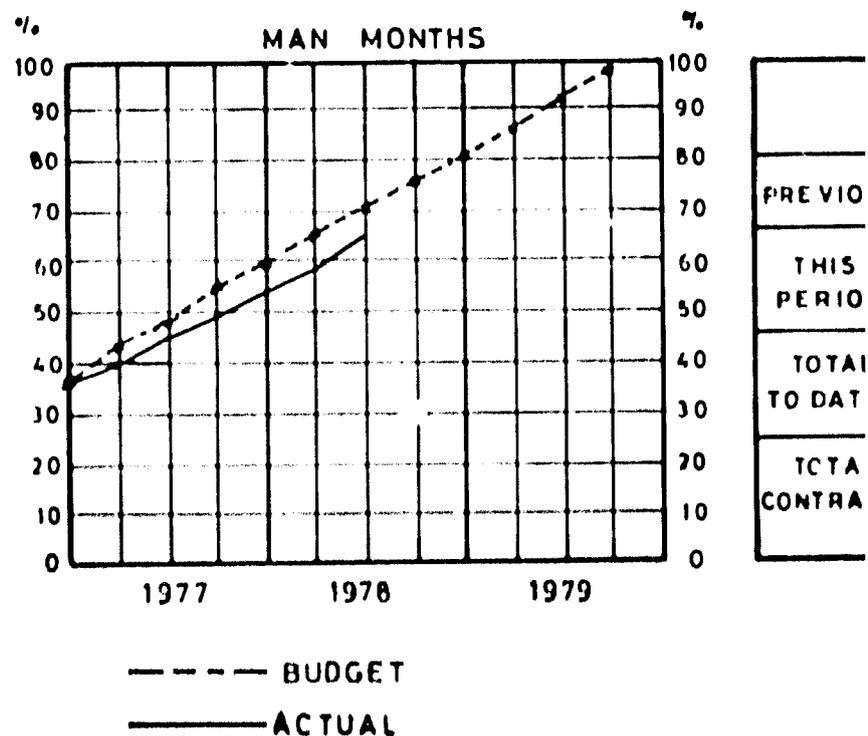
CONSTRUCTION



RING ONLY

	MAN MONTHS			SALARIES (000)		
	BUD	ACT	%	BUD	ACT	%
PREVIOUS	117	118	101	178	187	105
THIS PERIOD	6	5	83	4	9	225
TOTAL TO DATE	123	123	100	182	196	108
TOTAL CONTRACT	138	123	89	187	196	105

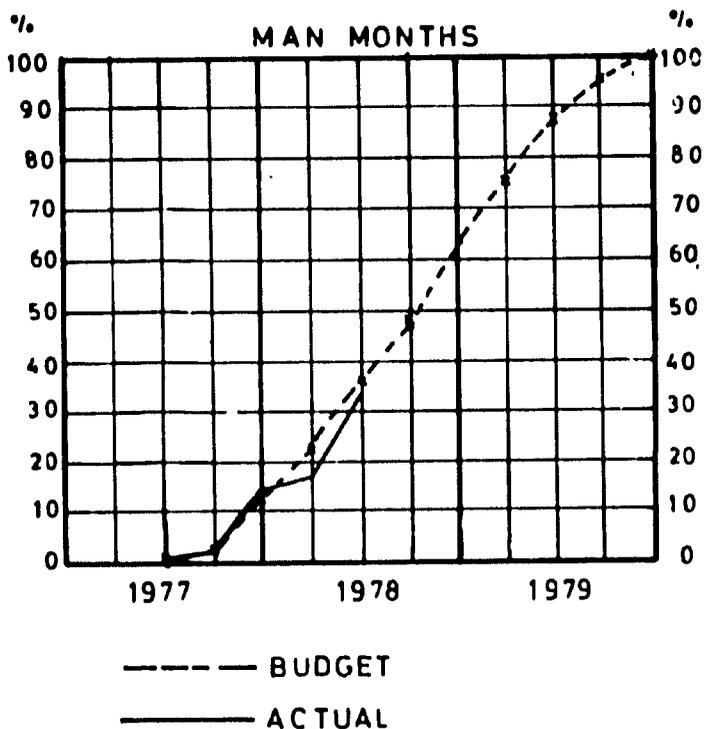
ADMINISTRATIVE



ST JAVA I MAN MONTHS & SALARIES T VS ACTUAL

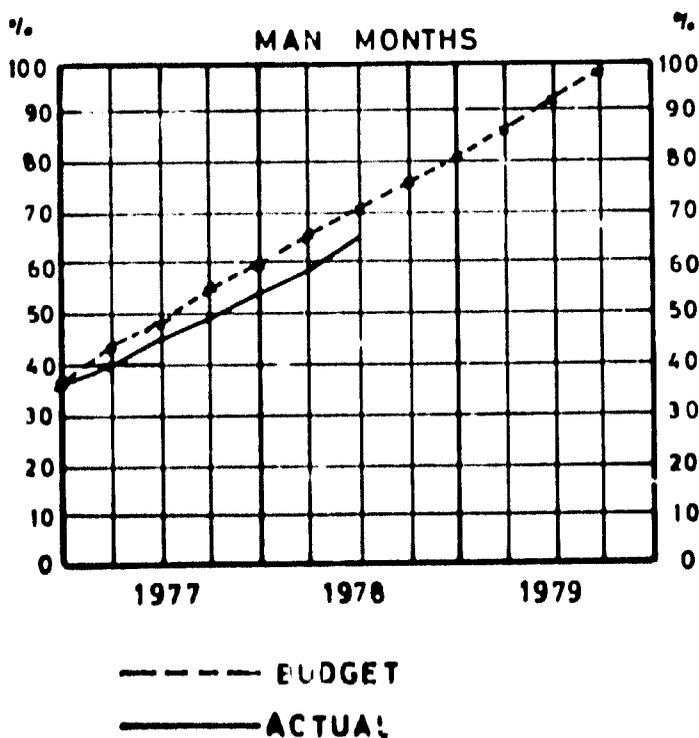
15 JUNE 1978

CONSTRUCTION ONLY



	MAN MONTHS			SALARIES (000)		
	BUD	ACT	%	BUD	ACT	%
PREVIOUS	20	22	110	37	31	94
THIS PERIOD	12	12	100	20	18	90
TOTAL TO DATE	32	34	106	57	49	86
TOTAL CONTRACT	91	34	37	166	49	30

ADMINISTRATION ONLY



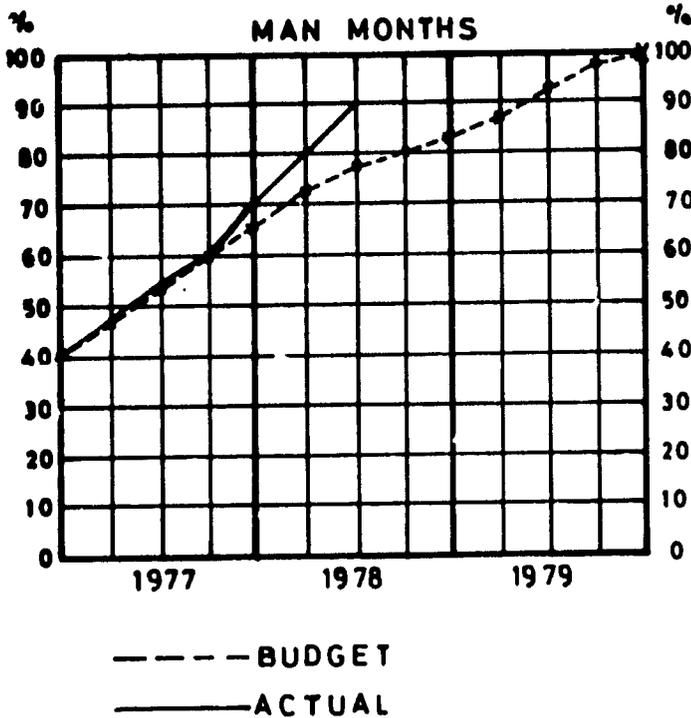
	MAN MONTHS			SALARIES (000)		
	BUD	ACT	%	BUD	ACT	%
PREVIOUS	97	87	90	177	172	97
THIS PERIOD	4	8	200	14	16	114
TOTAL TO DATE	101	95	94	191	188	98
TOTAL CONTRACT	151	95	63	263	188	71

20

WES HOME OFFICE M BUDGE

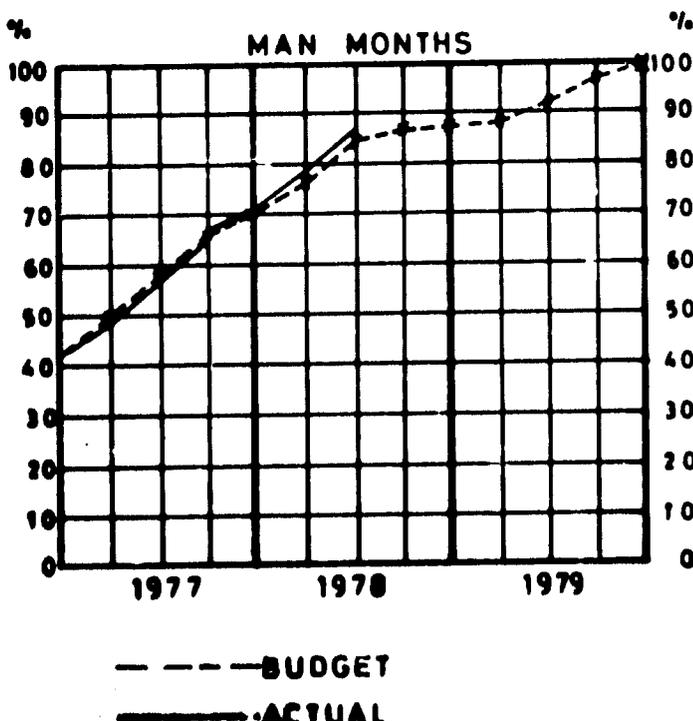
AS OF

TOTAL HOME OFFICE



	MAN MONTHS			SALARIES(000)		
	BUD	ACT	%	BUD	ACT	%
PREVIOUS	157	163	104	252	258	102
THIS PERIOD	12	18	150	23	32	139
TOTAL TO DATE	169	181	107	275	290	105
TOTAL CONTRACT	201	181	90	334	290	87

ENGINEERING ONLY



	MAN MONTHS			SALARIES(000)		
	BUD	ACT	%	BUD	ACT	%
PREVIOUS	92	94	102	155	153	99
THIS PERIOD	6	7	117	7	15	214
TOTAL TO DATE	98	101	103	162	168	104
TOTAL CONTRACT	118	101	86	199	168	84

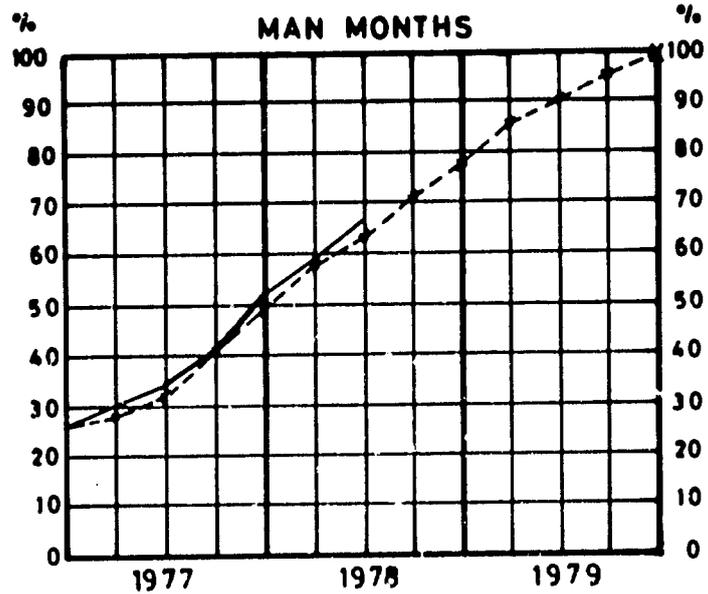
WEST JAVA I HOME OFFICE MAN MONTHS & SALARIES BUDGET VS ACTUAL

AS OF 15 JUNE 1978

FFICE

SUPERVISION ONLY

	MAN MONTHS			SALARIES(000)		
	BUD	ACT	%	BUD	ACT	%
	157	163	104	252	258	102
	12	18	150	23	32	139
	169	181	107	275	290	105
	201	181	90	334	290	87



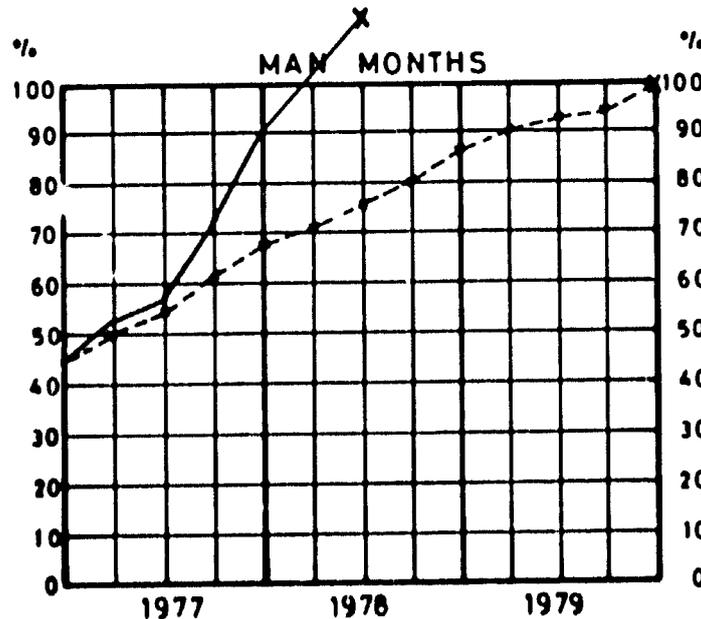
	MAN BUD
PREVIOUS	26
THIS PERIOD	3
TOTAL TO DATE	29
TOTAL CONTRACT	41

- - - - BUDGET
— ACTUAL

ONLY

ADMINISTRATION ON

	MAN MONTHS			SALARIES(000)		
	BUD	ACT	%	BUD	ACT	%
	92	94	102	155	153	99
	6	7	117	7	15	214
	98	101	103	162	168	104
	118	101	86	199	168	84



	MAN BUD
PREVIOUS	39
THIS PERIOD	3
TOTAL TO DATE	42
TOTAL CONTRACT	42

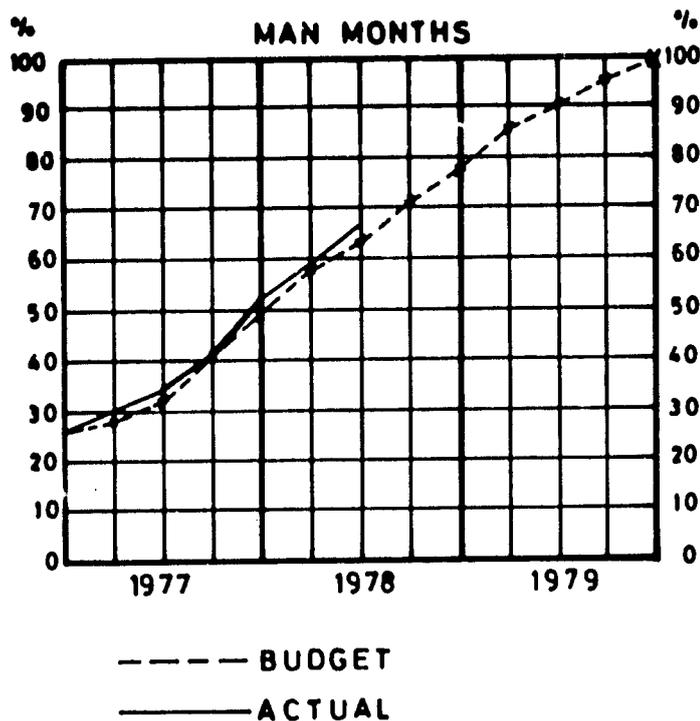
- - - - BUDGET
— ACTUAL

ST JAVA I MAN MONTHS & SALARIES BUDGET VS ACTUAL

EXHIBIT H

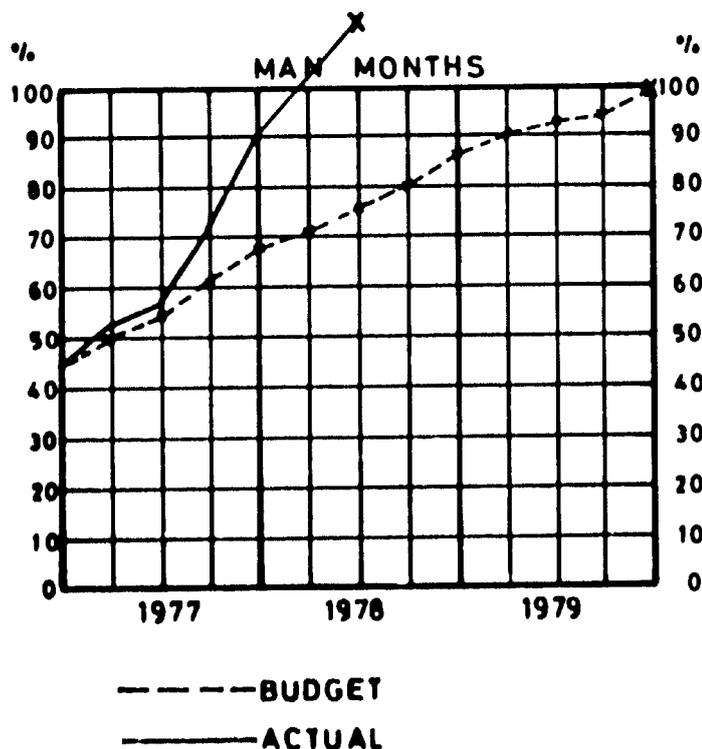
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SUPERVISION ONLY



	MAN MONTHS			SALARIES(000)		
	BUD	ACT	%	BUD	ACT	%
PREVIOUS	26	24	92	49	50	102
THIS PERIOD	3	3	100	8	6	75
TOTAL TO DATE	29	27	93	57	56	98
TOTAL CONTRACT	41	27	66	71	56	79

ADMINISTRATION ONLY



	MAN MONTHS			SALARIES(000)		
	BUD	ACT	%	BUD	ACT	%
PREVIOUS	39	45	115	48	55	115
THIS PERIOD	3	8	267	8	11	138
TOTAL TO DATE	42	53	126	56	66	118
TOTAL CONTRACT	42	53	126	64	66	103