

PD-ABA-670

862011

*Monthly Progress Report
for December 1993*

Presented by: Jim R Palmore

Contract No.: 263-0194-C-00-1035-00

Project No. : 263-0194.01

*Alexandria Electrical Network Modernization
Distribution System*

Black & Veatch International/Sabbour Associates

USAID/Cairo

12 January 1994

CONTENTS

- I. **Summary**
- II. **Project administration**
- III. **Project activities**
- IV. **Procurement**
- V. **Training**
- VI. **Design**
- VII. **Schedule**
- VIII. **Manhour Budget**
- IX. **Expenditures**
- X. **Attachments**

Appendices

- A Manhour Budget Status
- B Low Tension Overhead Network Design
- C Low Tension Overhead Network Design, Percent Complete
- D Low Tension Overhead Network Construction
- E Low Tension Overhead Construction, Percent Complete
- F Service Box Rehabilitation
- G Service Box Construction, Percent Complete
- H 11 kV Cable Construction
- I 11 kV Cable Construction, percent complete
- J Fault Indicator Construction, precent complete
- K Capacitor Program, Status
- L Project Procurement, Percent Complete

Progress - 9 January 1994

M Project Design, Percent Complete

N Project Monthly Status, Percent Complete

I. Executive Summary

The purpose of this report is to present project activities during December and project status through December 1993. Project activities during the period includes Low Tension Overhead Networks Rehabilitation, Service Box Rehabilitation, Medium Tension Cable Construction Monitoring, Capacitor Design, Preparation of Procurement Documents, and other tasks being implemented to help improve the distribution system operation.

Through December the project is 2.7 percent behind schedule. The rate of progress was above schedule during December. It is anticipated progress will be above schedule for the next several months. The project is behind schedule because procurement was delayed initially while USAID resolved the security requirement with AEDC and authorized AEDC for administration of a Host Country Contract. It has not been possible to get procurement back on schedule due to unanticipated obstacles occurring. The most severe, the requirement to rebid two IFB's due to all tenders being evaluated non-responsive. USAID did an excellent job of expediting the approval for award of six contracts and approval for issuance of one IFB for bid during December. This made the rate above schedule for the month and will allow procurement to advance during the next several months. Design has been shifted in order to place more effort on construction that was initiated ahead of schedule, utilizing surplus material remaining from earlier phases of the project. Overhead Low Tension and Service Box construction is ahead of the original Work Plan schedule. The construction was initiated with surplus material from the previous phase and as the surplus material is exhausted AEDC procures additional material through local sources. Procurement is the most important phase to the overall project and emphasis is placed on getting all IFB's out for bid. While the project is behind schedule there are no items to the condition that will delay completion of the project work plan. There are not any unresolved obstacles holding up progress at the present. The important item that is behind schedule is procurement.

Through November, the allocated professional manhour budget is 57.6 percent of the total budget. Through this period the manhours expended is 38.8 percent of the total budget. Through this same period the scheduled completion was 57.6 percent and the actual completion was 54.8 percent. We have completed 95.1 percent of the assigned effort while expending

only 67.3 percent of the allocated budget. While the project is behind schedule, the expenditure is well below the budget amount.

II. Project Administration

1. The BVI staff did not change during this period. The current staff includes the following positions
 - Resident Project Manager
 - Resident Distribution Engineer
 - Resident Construction Specialist

2. The Sabbour Associates staff did not change during this period. The current staff includes the following positions
 - Project Coordinator (part time)
 - Assistant Resident Project Manager (Part time)
 - Three Distribution Engineers
 - Financial and Administration Director
 - Assistant Financial Director
 - Draftsman
 - Secretary
 - Executive Secretary (Part Time)
 - Executive Secretary
 - Secretary/Receptionist

III. Project Activities

1. Low Tension Overhead Network Rehabilitation for the Low Tension Overhead System continued with design and construction. During November the districts conducted a survey to identify all Transformer Points that require rehabilitation. These surveys identified 60 additional Transformer Points in 10 districts that require rehabilitation. The majority of these Transformer Points provide service to semi-rural areas in villages outside the City of Alexandria. The design schedule was updated to incorporate the additional Transformer Points, with the design completion moved from December 1993 to September 1994. Through December design is 93.4 percent complete which is 1.2 percent ahead of schedule. Low Tension Overhead Network Construction was initiated during December 1991. The AEDC district construction crews are carrying out construction in their respective

districts. During December construction was completed in 11 Transformer Points, in 8 districts, with construction in progress on 22 Transformer Points in 14 districts. Through December construction is 42.9 percent complete which is 9.5 percent behind schedule.

2. Low Tension Underground Network Rehabilitation of the Low Tension Underground System involves application of proper electrical connections and installation of new Service Boxes. The design effort includes identification of the Service Boxes for rehabilitation and preparation of work orders itemizing the material required to complete the work.

Construction for rehabilitation of Service Boxes is in progress utilizing surplus materials procured on the previous project. The AEDC district construction crews initiated construction in June 1991 with the monthly rate improving as construction was implemented in additional Districts. During January 1992 the districts conducted a detailed survey of the number of Service Boxes that require rehabilitation. During the survey the districts evaluated the rate they could carry out the construction. Based on that evaluation the construction schedule was updated to reflect the revised quantity of service boxes and the more realistic rate of construction. Through December construction is 87.3 percent complete which is 4.5 percent ahead of schedule.

3. Medium Tension (11kV) Cable effort this month includes Construction Monitoring.

AEDC identified 62 Km of cable for placement during the 1993/1994 digging season. This will require issuing 79 Work Orders. The design is complete for selecting routes, verifying constructability, and Preparing Work Orders for the circuits that have been identified. Through December design is 55.8 percent complete which is 2.2 percent behind schedule.

Construction for the 1993/1994 digging season was initiated during July 1993. Through the end of December 39.5 Km has been placed under construction, 26.9 Km of cable has been placed, and 3.7 km of cable has been energized. Through December construction is 59.5 percent complete which is 15.4 percent ahead of schedule.

All underground cable installed under this project will be local purchase of cable produced in Egypt. The project developed a design guide for use in installation of cable under this project. This guide will be developed as a standard for AEDC use in their cable installation design. The data presented in the guide has been accepted by AEDC and is in use for the project 11kV design and AEDC is using the data for cable rating applications.

4. Capacitor work and system analysis project activity related to the capacitor study includes recording power factor and reactive power, and performing economic analysis. Recordings taken through August 1992 are for data to use in preparing the system analysis input to the Capacitor Study. Starting in September 1992 the recording data obtained will be utilized for determining the placement of capacitors.

The capacitor program is 83.1 percent complete which is 0.4 percent ahead of schedule. The capacitor study identified where capacitors are required. There are a number of capacitors remaining from the previous project. Design and construction are underway to install these units while the new supply is being procured. The IFB for purchase of capacitors was issued for AEDC technical review during August. AEDC comments were incorporated and the complete IFB was issued for AEDC and USAID review on October 25. The IFB was approved by USAID on December 30.

IV. Procurement

1. US Dollar Purchase

Activity relating to USAID financed material involved the following items.

1.1 IFB#1

Bid documents for construction tools was issued for AEDC and USAID review on October 23, 1991. All shipments of items procured under this IFB have been received. The

Performance Guaranty's were returned to the issuing banks for cancellation during December.

1.2 IFB#2

This IFB was to include 11kV and 380V Cable accessories, including splices, terminations, fault indicators, and other items not available from the local market. The IFB technical section was reviewed by AEDC during May 1992. The document was updated to incorporate AEDC requirements, commercial section added, and issued for final AEDC and USAID review and approval on June 23. USAID approved the document and transmitted the Commerce Business Daily announcement on July 28, with a bid opening date of September 27. The announcement was included in the CBD on July 30, 1992. BVI, Kansas City, sold six sets of tender documents. The bid opening was held on September 27, with four suppliers submitting bids.

All four Tenders were declared non-responsive during bid evaluation. The IFB was cancelled and a new IFB 02A, will be issued to obtain new bids. The IFB -02A was issued for AEDC review on November 9, 1992 and forwarded for USAID review on November 24, 1992. On February 16 USAID issued instructions to rewrite the IFB according to USAID model IFB for commodities. The IFB commercial and technical sections are rewritten. The IFB was issued for AEDC review on April 4, and forwarded for USAID review on April 15. The IFB was advertized in the CBD on July 1, with bid opening held on September 1. Seven bidders submitted bids. The engineer's bid evaluation was submitted to AEDC on October 5. AEDC transmitted the bid evaluation to USAID for approval on November 10. The bid evaluation was approved by USAID on December 16 and AEDC issued two contracts on December 19.

1.3 IFB#3

Bid documents were completed for construction vehicles, including bucket trucks, crane trucks, and fork lift trucks and issued for AEDC technical specifications review on March 26, 1992. A technical review was held with AEDC on 3 May. AEDC requirements, including quantities, were incorporated and the document was issued for final review by AEDC and USAID on July 14. The Guarantee sections of section 3 was revised to meet

USAID requirements and reissued on September 21. USAID requested an additional addition to section 3, which was incorporated and transmitted on October 29. USAID transmitted the advertisement to CBD and the announcement was published on November 27, 1992 with a bid opening date of February 8, 1993. Bid opening was held on February 8 with 10 companies submitting tenders.

The Bid Evaluation and recommendation was completed and transmitted to AEDC on March 21. AEDC forwarded the evaluation to USAID on April 14. USAID did not concur that the bid evaluation and recommendation meets USAID regulations as it was presented by BVI and AEDC. Implementation letter No. 19C, dated June 13, provided USAID requirements. The bid evaluation was updated to comply with USAID requirements and transmitted to USAID on June 29. The recommendation is to issue a contract with one supplier for item 1 & 2, issue a second contract with a second supplier for item 3, and rebid item 4. Contract 17841-03, Parts 1 & 2 was issued to Sargent International on August 18, 1993 for purchase of the Aerial Lift Trucks and Articulating Hydraulic Crane Trucks. Contract 17841-03, Part 3 was issued to Inter-Marketing Group on August 18, 1993 for purchase of Diesel Engine Forklifts. The Aerial Lift Trucks have arrived in Alexandria, twelve units have been moved to Amaria Warehouse and 13 units are under customs clearance.

1.4 IFB#4

Technical specifications for test equipment have been prepared, the test equipment includes equipment for testing all types of power apparatus. The specification include a van equipped for testing and location of faults in underground cable. The IFB was issued for AEDC and USAID final review in September 1992. During December USAID instructed AEDC that specific items must be changed before they will approve the IFB. The changes were incorporated and the revised section issued to AEDC on December 14 and AEDC transmitted to USAID on December 24. USAID approved advertising of the IFB on 24 January and transmitted the advertisement for publication in the Commerce Business Daily with a bid opening date of 21 April. The bid opening was held on 21 April with seven bids received. The bid evaluation was completed during May. The bid evaluation was transmitted to USAID on June 17. All tenders were declared non-responsive due to no bid security, bid security not according to IFB

requirement, not meeting source of origin requirement, not technically acceptable, or price not reasonable. The recommendation is to cancel the IFB and reissue for bid. USAID issued agreement to cancel the IFB on September 14, 1993. The IFB was revised to the new commodity specifications and issued, as IFB-04A, to USAID for approval on August 16. The IFB was approved and advertised for bids in the CBD on November 1. The bid opening is scheduled for January 10, 1994.

1.5 IFB#5

This IFB is for purchase of overhead material and miscellaneous material and equipment. The technical specifications and a list of quantities was prepared and the document submitted for AEDC technical review on September 30. A meeting was held with AEDC on October 21, for review of the specifications and quantities. AEDC Comments was incorporated and the IFB issued for AEDC review on 26 November. AEDC transmitted to USAID on December 22. On February 16 USAID issued instructions to rewrite the IFB according to USAID model IFB for commodities. The rewritten IFB was issued for AEDC review on April 22 and forwarded to USAID on May 5. The advertisement for bids was published in the CBD one July 15 with a bid opening date of September 15. Addendum 01 which added new items and extended the bid closing date until September 27 was issued on September 12. The bids were opened on September 27 with nine bidders submitting bids. The Engineer's bid evaluation was transmitted to AEDC on November 1. There are responsive bids for all line items. AEDC transmitted the bid evaluation to USAID on November 7 and draft Contracts were transmitted to USAID on November 30. The bid evaluation was approved by USAID on December 9 and AEDC issued four contracts on December 12.

1.6 IFB#6

This IFB is for purchase of capacitors, capacitor equipment, and Load Break Switches. The technical specifications and list of quantities were delivered to AEDC on September 2, 1993. AEDC comments were received on October 21, were incorporated and the entire document was issued for AEDC and USAID review on October 25. USAID approved the IFB on December 30.

2.0 Local Purchase

AEDC will finance and procure a major part of material and equipment from local sources, with payment in Egyptian Pounds. Material for local purchase will include LTOH cable, underground cable, transformers, switchgear, and miscellaneous hardware.

BVI/SA will prepare the technical specifications and bill of material for these purchases. AEDC will receive bids and issue purchase orders according to their standard purchase procedures. Items of material included in the Work Plan for USAID financing that will be procured from local manufacturer's must be inspected and tested to assure they are produced to acceptable quality standards. BVI/SA will assist AEDC in establishing test requirements and witnessing the tests.

BVI/SA accompanied AEDC on inspection trips to witness production and testing of insulated cable being purchased for installation by the project. Two separate trips were made to Electro-Cable for inspection and testing of low tension overhead cable. Based on observations during the trips BVI/SA provided AEDC the acceptance test requirements that are required to verify the cable quality. Electro-cable is issuing factory production test and the cable is being checked as it is received by AEDC. During December the BVI Construction Specialist accompanied AEDC engineers for inspection of quadruplex cable.

3.0 Status

Project procurement is 56.6 percent complete through December which is 8.2 percent behind schedule. There are several reasons procurement is behind schedule. USAID requires that IFB's allow the Supplier to choose the type of security they provide. AEDC insisted that the security be in the form of a bank guarantee. This issue required a considerable amount of time and effort to resolve. Initially, IFB's could not be issued until AEDC was authorized to administer a Host Country Contract. The requirement to declare tenders for two IFB's non-responsive and cancel the IFB's has delayed procurement further. These difficulties caused the procurement to fall more than six months behind. With the excellent amount of completion during December the schedule was

reduced to less than five months below schedule. With IFB's in the procurement process and other IFB's being processed the rate of progress will continue above the scheduled rate until all contracts have been placed.

V. Training

Training AEDC personnel in proper operation and maintenance procedures is a vital part of this project. The major portion of training will be conducted by AEDC personnel actually performing the work assignments with the guidance of BVI/SA personnel. At the end of December AEDC has eight employees assigned to the project. The following is a listing of titles for the personnel.

<u>Number</u>	<u>Title</u>
1	Manager
1	Manager (Autocad)
1	11kV Cable Engineer
3	Capacitor Engineers
2	Warehouse Inventory

The project Work Plan requires autocad training to commence the first of October 1991. The AEDC Provided Computers required for Autocad training were delivered on December 24 and the network was installed during January 1992. Autocad training was implemented the first of February 1992. Two engineers and three technicians were assigned to the first group to receive autocad training. AEDC has equipped the Information Department with Autocad equipment. Five of the trainees have been assigned to produce drawings on this equipment. During the one year the BVI Autocad Specialist was in Alexandria three groups, consisting of four engineers and nine technicians were trained. Since the departure of the BVI Autocad specialist two classes of trainees have been conducted.

The Trainees in advanced training performing production work are producing Single Line Diagrams of Distribution Points and digitizing city maps. The digitized data is utilized for preparation of maps showing facility location and cable routing. Construction drawings for 11kV cable and capacitor banks are being prepared by Autocad. At the end of December there are 12 AEDC engineers and technicians assigned to AutoCad work.

VI Design

Project design through this period involves design of Low Tension Network and design for capacitor bank installation. Low Tension Overhead Design includes rehabilitation of 637 Transformer Points. Low Tension Underground design includes rehabilitation of 9,856 Service Boxes. Capacitor design includes design for installation of 148 capacitor banks with a total of 49 MVAR of capacitors.

The composite design for all project design requirements is 71.3 percent complete through December, which is 4.7 percent behind schedule. Project design is behind schedule due to greater effort being placed on procurement and construction activities. While design is behind schedule it is not creating any delay to the overall project. The design is well ahead in issuing documents for construction.

VII Schedule

Project planned and actual schedules are presented in earlier sections under their respective categories. The overall schedule for the entire project is 56.61 percent complete through December, which is 2.66 percent behind schedule. The overall project is 2.66 percent behind schedule compared with 2.80 percent in November. The progress rate was above schedule in December. There are several factors that have contributed to the project being behind schedule. Design is behind schedule due to more effort placed on monitoring construction. The project plan scheduled design to be essentially complete before initiation of construction. Construction was initiated ahead of schedule in order to utilize surplus material from the previous project and to make the construction duration longer to enable the construction to be carried out by AEDC crews without the use of contractors. During the period while the conflict over conditions in the Commercial Section of the IFB was being resolved and AEDC was not authorized to administer a Host Country Contract no IFB'S were issued. Procurement is being delayed due to two IFB'S being cancelled because of non-responsive tenders.

All issues have been resolved, certification approved, IFB'S are being issued, and material is being procured. With IFB'S being issued the rate of procurement progress will be above schedule for the next several months. With autocad and other computer training advancement to where project personnel are utilizing computers for production of project activities overall progress will improve.

VIII Manhour Budget

The overall project manhour expenditure is 67.3 percent of the scheduled budget through November. Through this same period 38.8 percent of the total budget was expended, compared with the scheduled expenditure of 57.6 percent. The main reason expended time is below schedule is due to AEDC providing staff to some of the positions scheduled to be staffed by Sabbour Associates personnel. The Capacitor Engineer Position transferred from Sabbour Associates to AEDC at the end of June 1991. The 11kV Distribution Engineer was not assigned until September 1992. Appendix A provides the status of expenditure for each position included in development of the project.

IX Expenditures

1.0 U.S. Dollar Expenditures

The following is a summary of U.S. dollar expenditures, except for consultant services.

<u>Item</u>	<u>Committed</u>	<u>Expended</u>	<u>Total</u>
17841 S.F.#1		24,135.20	24,135.20
IFB 17841-01			
Parts 1 & 2		424,399.30	424,399.30
Part 3		78,069.29	78,069.29
IFB 17841-02A			
Parts 1 & 2	1,227,000.00		1,227,000.00
Part 3	474,000.00		474,000.00
IFB 17841-03			
Parts 1 & 2	136,845.78	1,409,777.78	1,546,623.54
Part 3	272,428.20		272,428.20

<u>Item</u>	<u>Committed</u>	<u>Expended</u>	<u>Total</u>
IFB 17841-04A			
IFB 17841-05			
Parts 1 & 5	236,000.60		236,000.60
Parts 2 & 6	28,942.50		28,942.50
Part 3	76,725.00		76,725.00
Part 4	14,660.00		14,660.00
IFB 17841-06			
IFB 17841-07			
TOTAL	\$2,466,602.06	\$1,936,381.57	\$4,402,983.63

2.0 L.E Expenditures

The following is a summary of L.E. expenditures through September 1993.

In-Kind Contribution	796,959.97
Cash Payment	48,636,232.50
TOTAL	L.E 49,433,192.47

Note:

The total L.E expenditure includes L.E. 11,103,587 for local purchase of Quadraplex cable manufactured in Egypt. The original implementation plan called for this item to be purchased with USAID funds.

X Attachments

To provide more in depth details of project activities and a graphical display of progress for the various activities appendices A through N are attached.

File:28.0200
PC File:PROGRESS
O.E.

Appendix A

BVI/SA
December 1993

ALEXANDRIA NETWORK MODERNIZATION
DISTRIBUTION SYSTEM
USAID PROJECT NO. 263-0194.01

MANHOUR BUDGET STATUS

Expended Through: November 1993	Expenditure		Total Budget
	Actual	Scheduled	
Black & Veatch International			
Field Staff			
Resident Project Manager	5,424	5,367	12,020
Resident Distribution Engineer	5,454	3,680	6,500
Resident Autocad Specialist	2,056	1,904	1,904
Resident Construction Specialist	2,854	2,427	6,270
Sub Total	15,788	13,378	26,694
Home Office Staff			
Project Manager	913	733	1,300
Distribution Engineer	310	1,364	1,560
Inspection Engineer	32	215	467
Procurement Specialist	258	846	1,300
Subcontract Administrator	69	233	560
Sub Total	1,582	3,391	5,187
Total BVI	17,370	16,769	31,881
Sabbour Associates			
Project Coordinator	1,947	2,780	4,144
Assistant Resident Manager	3,131	5,562	10,214
Distribution Engineer 11 KV	2,401	6,198	7,916
Distribution Engineer (1)	5,380	6,198	10,840
Distribution Engineer (2)	5,412	6,198	10,840
Capacitor Engineer	777	6,198	9,680
Financial & Administration Director	5,400	5,562	10,012
Asst. Administration Director	0	5,562	9,694
Asst. Financial Director	4,735	5,562	9,694
Materials Inventory Specialist	0	1,907	4,609
Home Office Engineer	0	693	693
Total Sabbour	29,181	52,422	88,336
Project Total	46,551	69,190	120,217

Appendix B

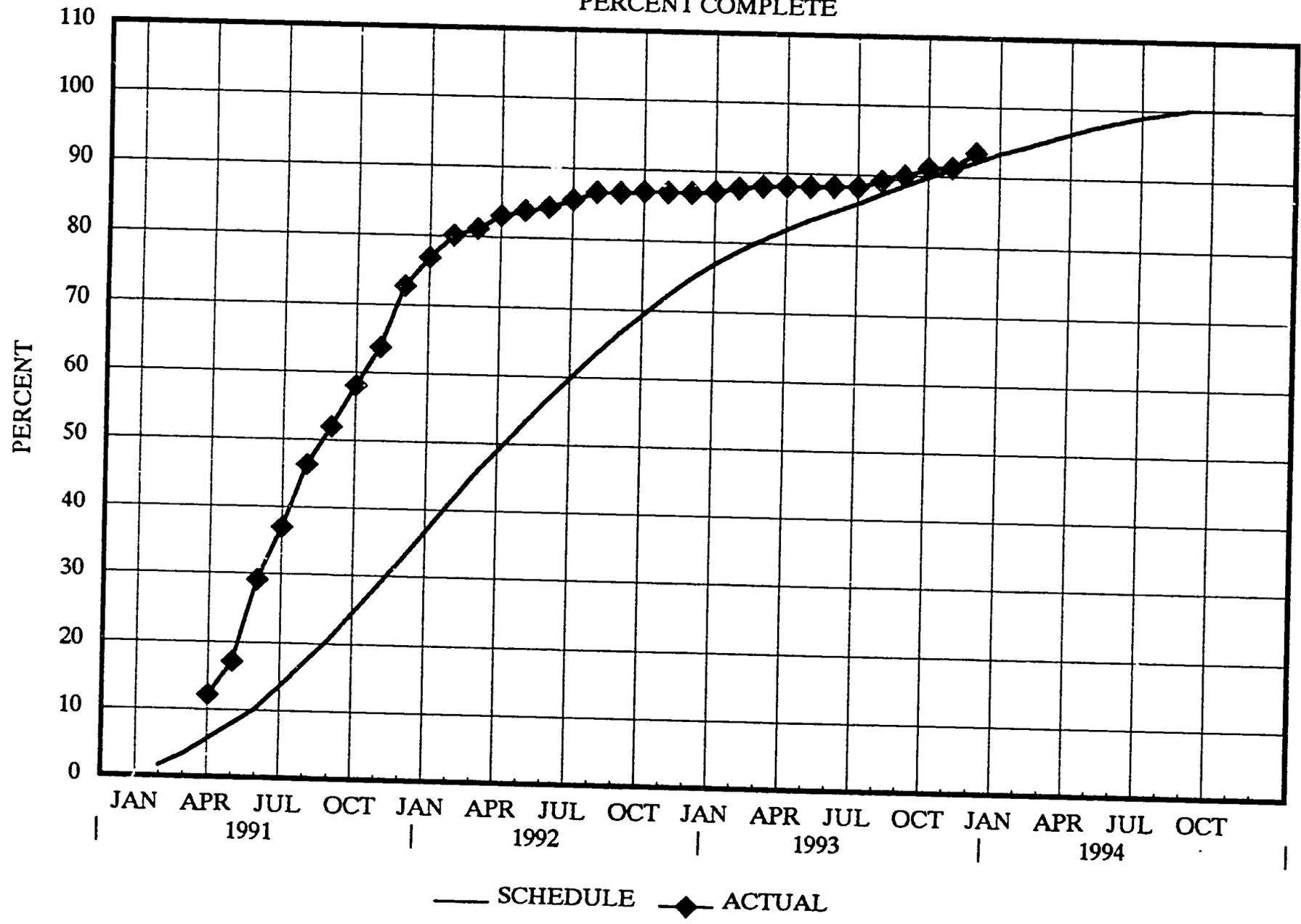
BVI/Sabbour
Month: December 1993

Low Tension Overhead Network Design

District	Estimated Number of T.P.'s	Completed This Month				Completed To Date				
		Working Maps Prepared	Field Surveys Complete	Design Complete	Work Order Complete	Working Maps Prepared	Field Surveys Complete	Design Complete	Work Order Complete	
East/Central Zone										
Abukir	17	1	1	-	-	17	17	21	21	
Mandara	120	2	2	1	1	111	111	126	126	
Sidi Bishr	35	-	-	-	-	35	35	41	41 *	
Slouf	97	-	-	-	-	97	97	118	118 *	
Saba Pasha	50	-	-	-	-	50	50	55	55 *	
Abis	41	-	-	-	-	37	37	45	45	
Semouha	21	2	2	2	2	12	12	13	13	
TOTAL	381	5	5	3	3	359	359	419	419	
Central/West Zone										
Ibrahimia	31	1	1	-	-	30	30	32	32	
Moharem Bey	57	3	3	3	-	47	47	51	48	
Gomrok	85	2	2	2	-	78	78	80	78	
Kabbary	8	1	1	1	-	8	8	8	7	
Dekhela	15	-	-	1	1	15	15	15	15	
Amria	18	-	-	-	-	13	13	17	17	
Agami	17	3	3	2	2	13	13	12	12	
Borg ElArab	15	-	-	-	-	8	8	10	10	
Hammam	10	2	2	2	2	8	8	8	8	
Total	256	12	12	11	5	220	220	233	227	
Grand Total	637	17	17	14	8	579	579	652	646	

* Design completed

LOW TENSION OVERHEAD NETWORK DESIGN
PERCENT COMPLETE



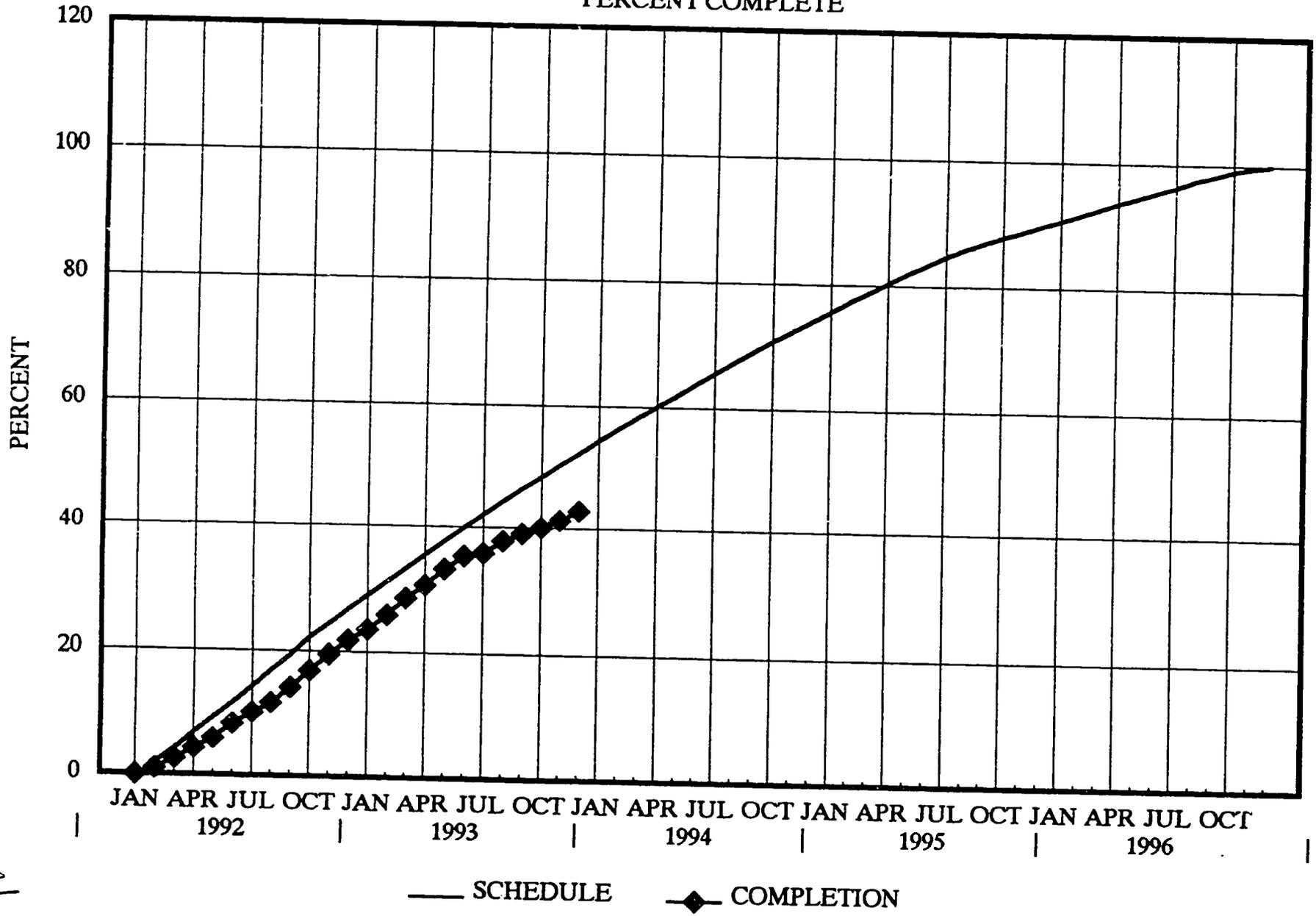
Appendix C

Low Tension Overhead Network Construction

District	Estimated Number of T.P.'s	Status This Month			Status To Date		
		Transformer Points			Transformer Points		
		Monthly Rate	Under Construction	Construction Complete	Scheduled Completion	Construction Complete	Status *
East/Central Zone							
Abukir	22	1	1	1	18	14	Bh.S.
Mandara	138	2	4	2	31	27	Bh.S.
Sidi Bishr	41	1	1	1	31	30	Bh.S.
Slouf	118	2	3	2	46	41	Bh.S.
Saba Pasha	55	1	1	1	23	24	Ah.S.
Abis	50	1	1	-	17	16	Bh.S.
Semouha	23	1	1	-	8	8	A.S.
TOTAL	447	9	12	7	174	160	
Centra/West Zone							
Ibrahimia	35	1	1	1	21	22	Ah.S.
Moharem Bey	63	2	3	-	39	42	Ah.S.
Gomrok	88	2	2	2	43	44	Ah.S.
Kabbary	8	-	-	-	7	7	A.S.
Dekhela	15	1	1	-	15	13	Bh.S.
Amria	23	1	1	1	14	12	Bh.S.
Agami	18	1	1	-	9	8	Bh.S.
Borg El-Arab	19	1	1	-	8	4	Bh.S.
Hammam	12	-	-	-	0	0	A.S.
Total	281	7	10	4	155	152	
Grand Total	728	16	22	11	329	312	
Percent Complete	100	2.2	3	1.5	45.2	42.9	

* A.S. : According to schedule; Ah.S. : Ahead of schedule; Bh.S.: Behind schedule.

LOW TENSION OVERHEAD CONSTRUCTION
PERCENT COMPLETE



Appendix E

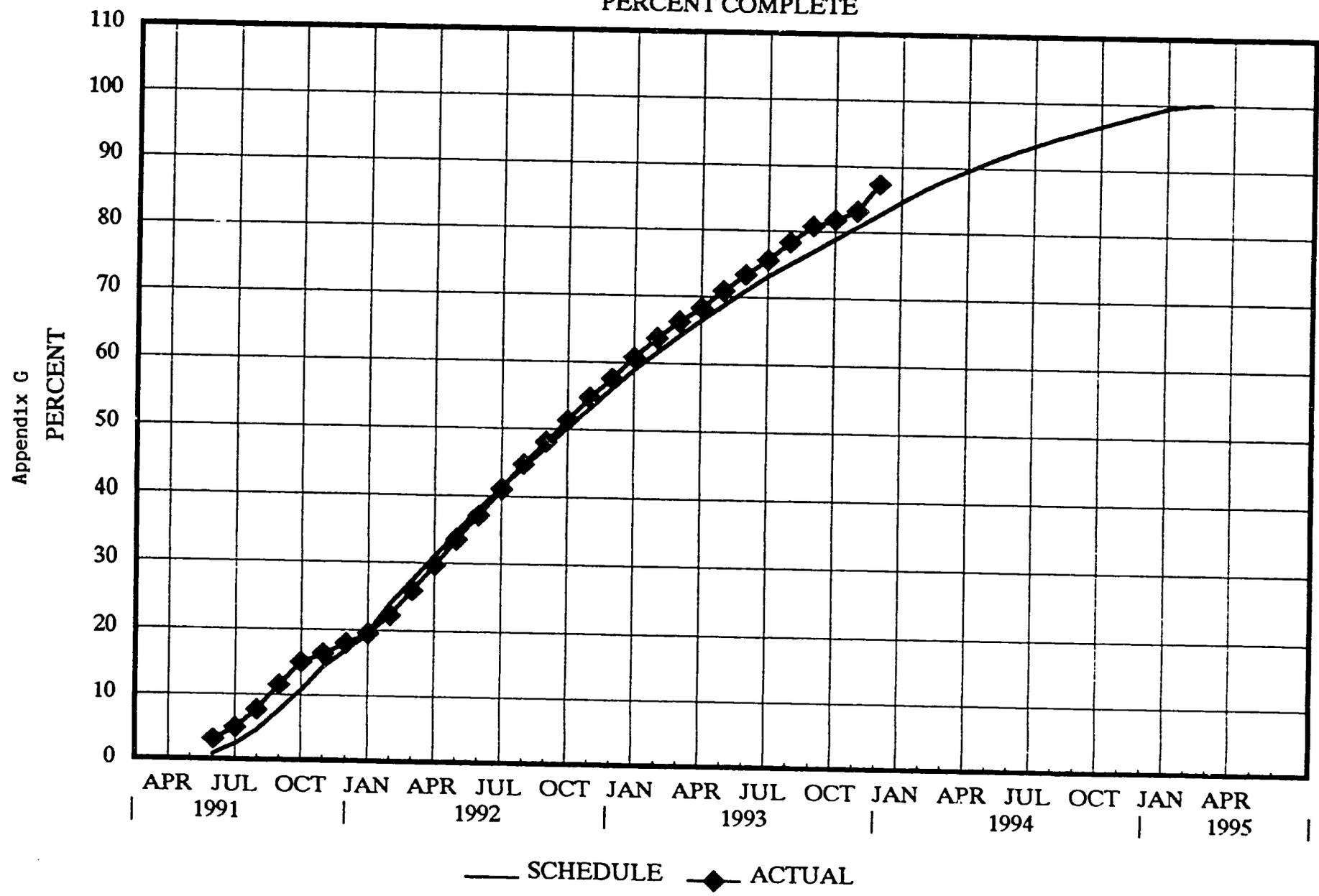
16

Service Box Rehabilitation

District	S.B's To Rehab.	Completed This Month				Completed To Date				Status **
		Work Orders		Construction		Design	Construction			
		No. Issued	No. of S.B.'s	Monthly Rate	S.B.'s Complete	No. of S.B.'s	Scheduled Completion	S.B.'s Complete		
East/Central										
Abukir	107	-	-	-	-	107	107	107	C.C.	
Sidi Bishr	355	-	-	-	-	355	355	355	C.C.	
Slouf	809	-	-	-	-	809	786	809	C.C.	
Saba Pasha	1,824	-	-	40	43	1,824	1,124	1,312	Ah.S.	
Semouha	446	-	-	-	-	446	446	446	C.C.	
Total	3,541	0	0	40	43	3,541	2,818	3,029		
Central/West										
Ibrahimia	452	-	-	11	47	434	443	443	A.S.	
Moharem Bey	257	-	-	-	-	257	257	257	C.C.	
Gomrok	278	-	-	-	-	278	278	278	C.C.	
Kabbary	191	-	-	-	-	191	191	191	C.C.	
Dekheila	-	-	-	-	-	0	-	0		
Agamy	2,782	-	-	80	6	2,782	2,672	2,782	C.C.	
Amria	2,355	-	-	60	302	2,355	1,539	1,623	Ah.S.	
North West Villages	-	-	-	-	-	0	-	0		
Total	6,315	0	0	151	355	6,297	5,380	5,574		
Grand Total	9,856	0	0	191	398	9,838	8,198	8,603	Ah.S.	
Percent Complete	100	-	0	-	4	99.8	83.2	87.3		

** A.S. According to schedule; Ah.S. Ahead of schedule;
Bh.S. Behind schedule; C.C. Construction completed.

SERVICE BOX CONSTRUCTION PERCENT COMPLETE



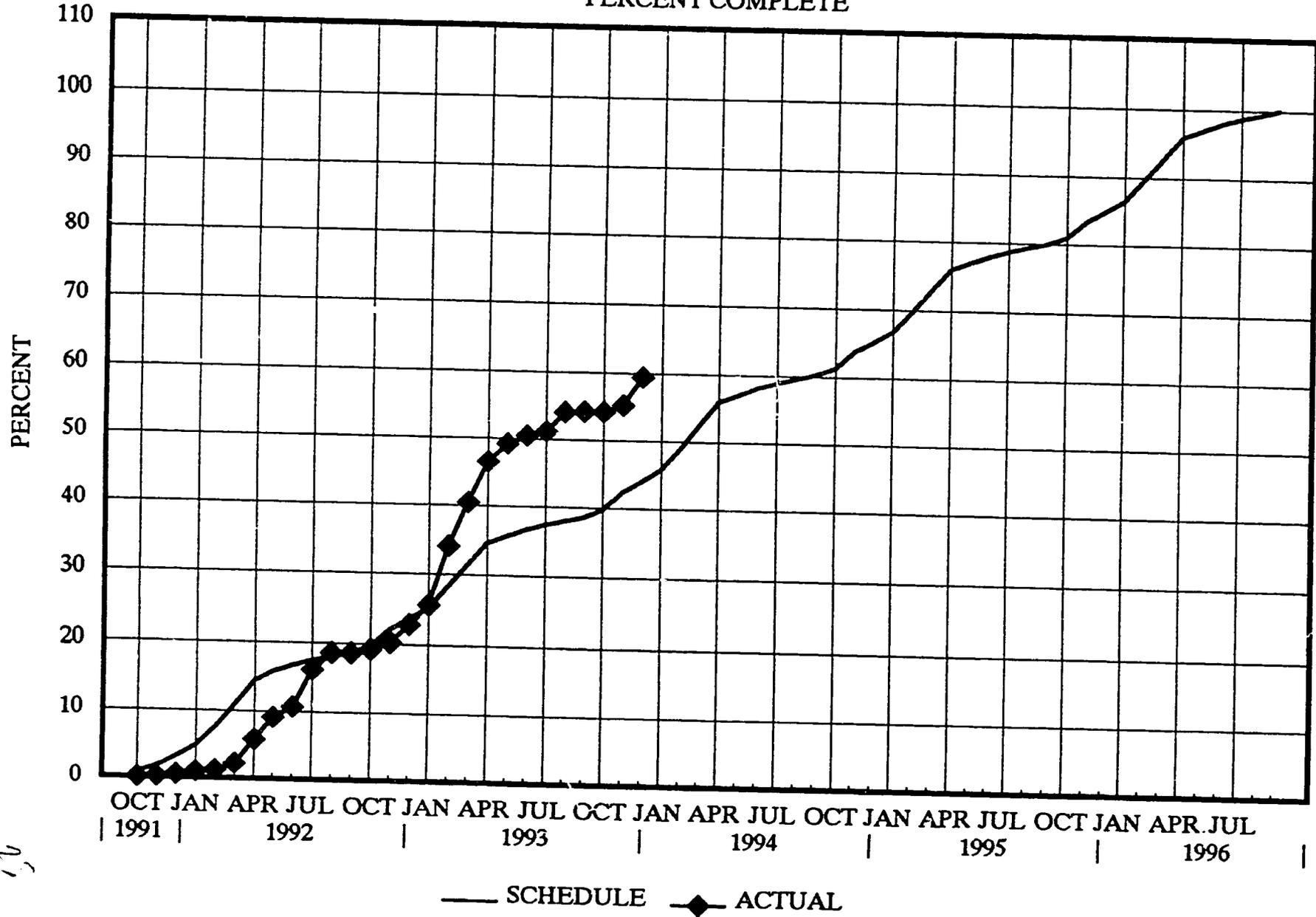
BVI/Sabbour
 Month: December 1993

Appendix H

11 kV Cable Construction

	Estimated Number of km	Completed This Month			Completed To Date		
		Placed Under Const	Cable In Place	Cable Energized	Under Const.	Cable In Place	Cable Energized
Previous Digging Seasons							
	158				158	158	158
Current Digging Season 1993/1994							
East Zone	18	8.85	4.14	1.61	10.99	4.99	1.61
West Zone	44	5.4	9.45	0.55	28.52	21.95	2.05
Total	62	14.25	13.59	2.16	39.51	26.94	3.66
Percent Complete		22.98	21.92	3.48	63.73	43.45	5.9
Detail Plan for Season *							
Month	Oct	Nov	Dec	Jan	Feb	Mar	Apr
km	-	1.5	8.5	15	9	13	3
12 Km were installed prior to digging season							
Remaining Project Requirement							
	** 63						
Project Summary							
Grand Total	283				197.69	184.585	161.66
Percent Complete					69.81	65.18	57.09
** 63 km Planned 94/95							

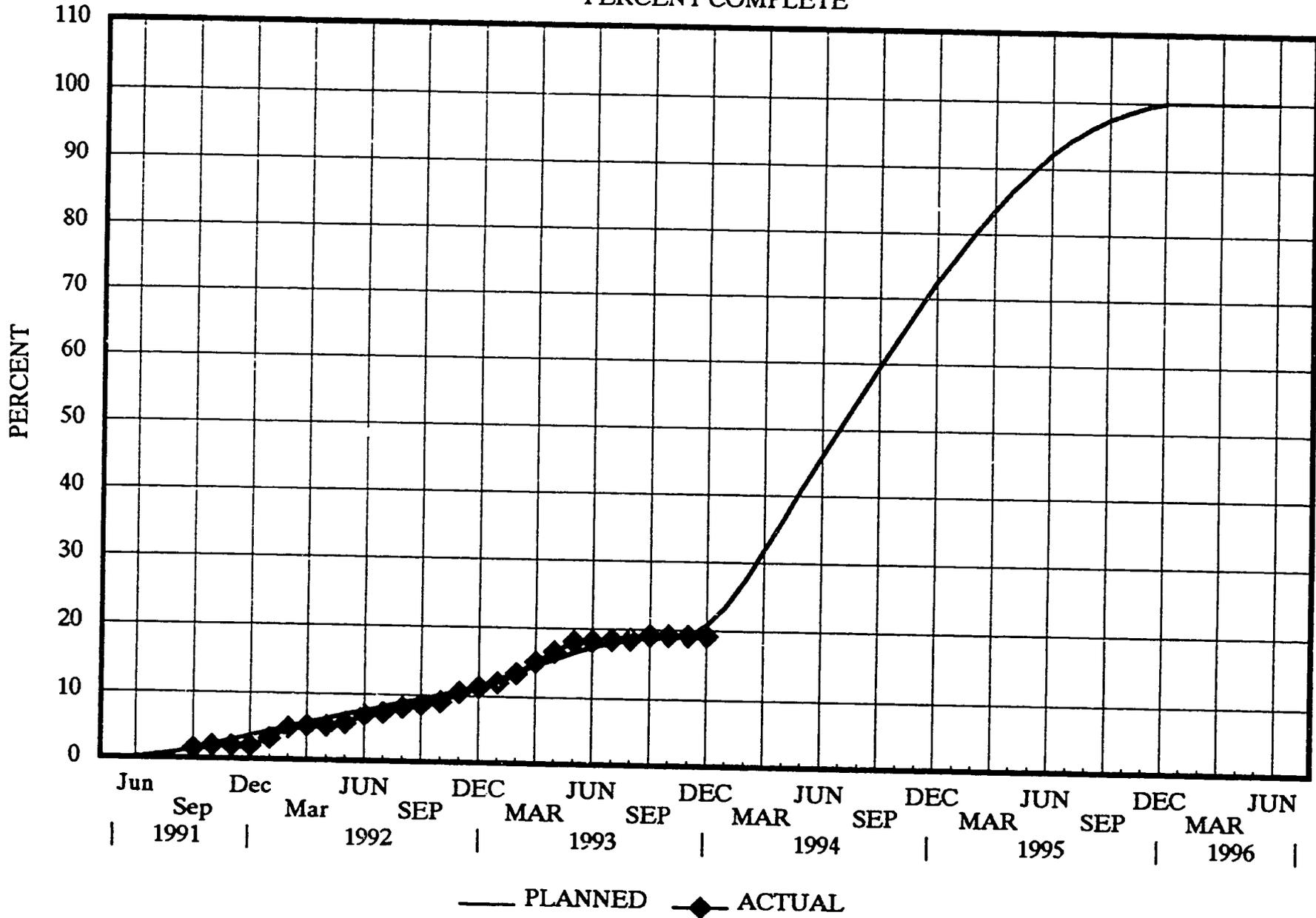
11KV CABLE CONSTRUCTION PERCENT COMPLETE



Appendix I

10

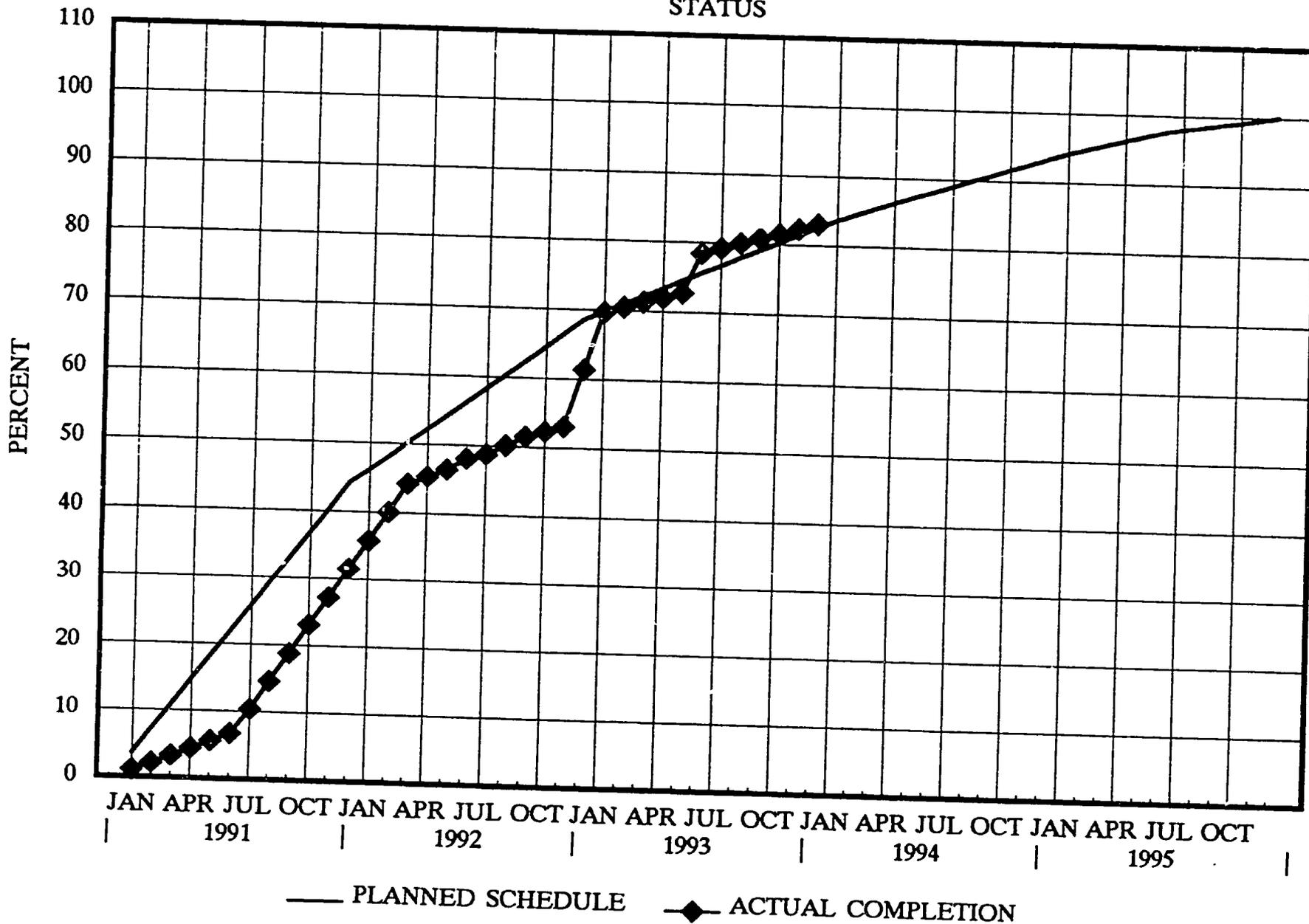
FAULT INDICATOR CONSTRUCTION PERCENT COMPLETE



Appendix J

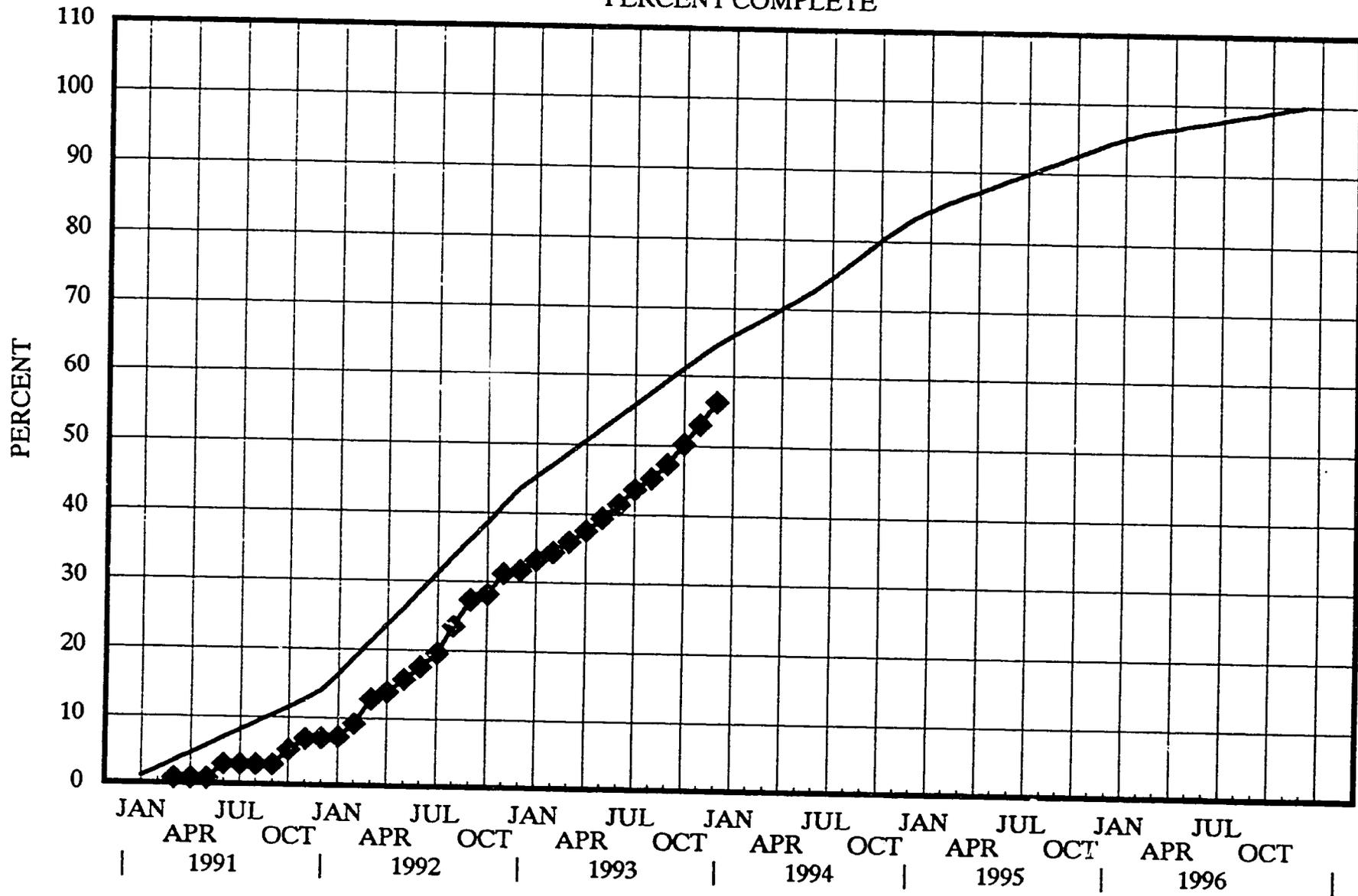
40

CAPACITOR PROGRAM STATUS



Appendix K

PROJECT PROCUREMENT PERCENT COMPLETE

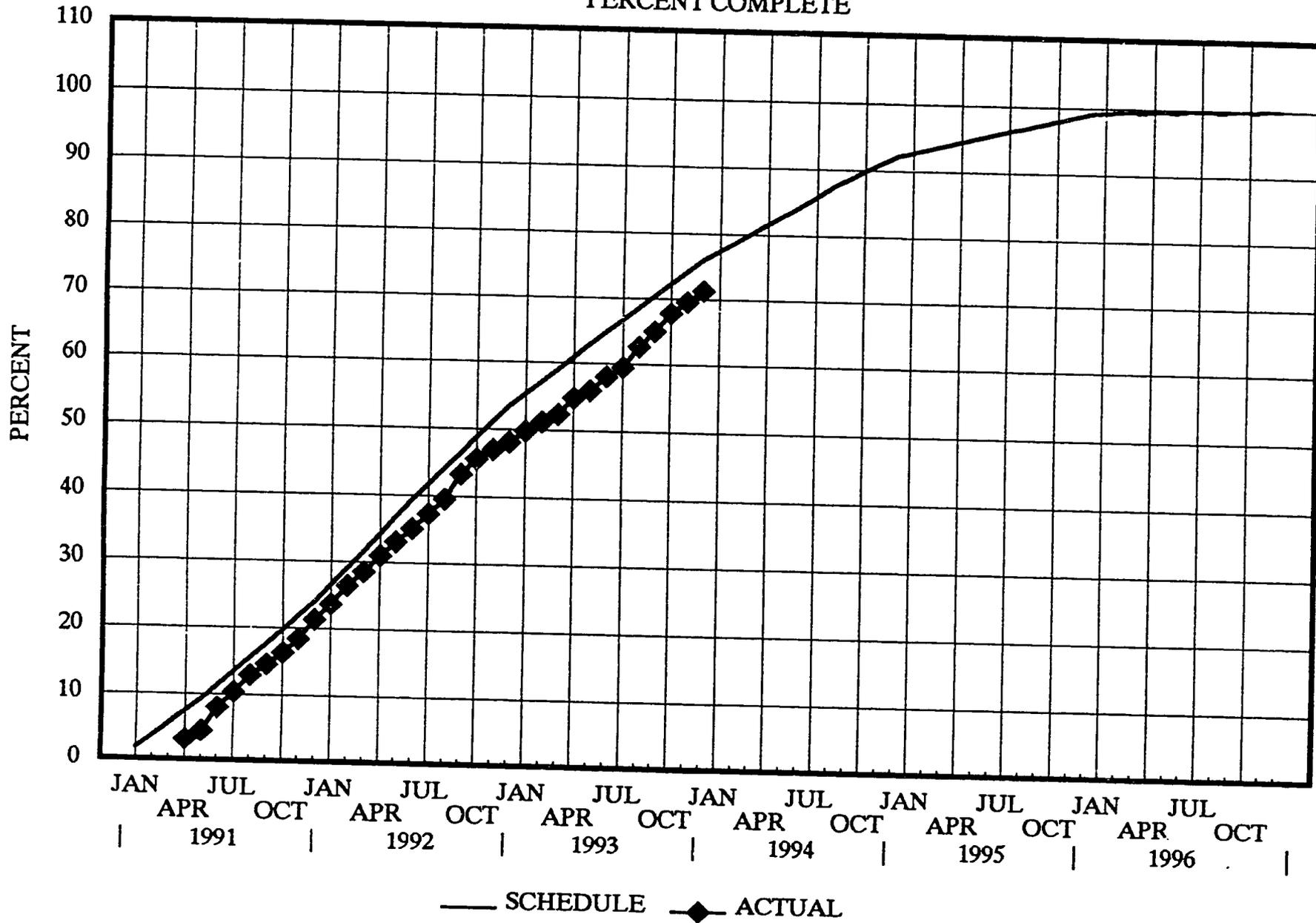


— SCHEDULE —◆— ACTUAL

Appendix L

20

PROJECT DESIGN
PERCENT COMPLETE



Appendix M

Alex. 0949

12 January 1994

United States Agency for International Development,
106 Kasr El-Aini Str.,
Cairo Center Bldg.,
Garden City,
Cairo - Egypt.

Att.: Mr. Hossam Ismail,
Project Officer.

Ref.: Alexandria Network Modernization,
Distribution System,
U S A I D Project no. 263-0194.01
Contract no. 263-0194-C-00-1035-00

Sub.: Monthly Progress Report - December 1993.

Dear Mr. Ismail,

Attached are four copies of the Monthly Progress Report for
December 1993.

Very truly yours,



Jim Palmore,
Resident Project Manager

encls.

cc. Chairman AEDC

M. Hegazi

M. K. Zaki

K. Shaaban

M. Dief

M. Walsh

PPC/CDIE/DI/USAID, Washington (2-copies)

N. Hariri

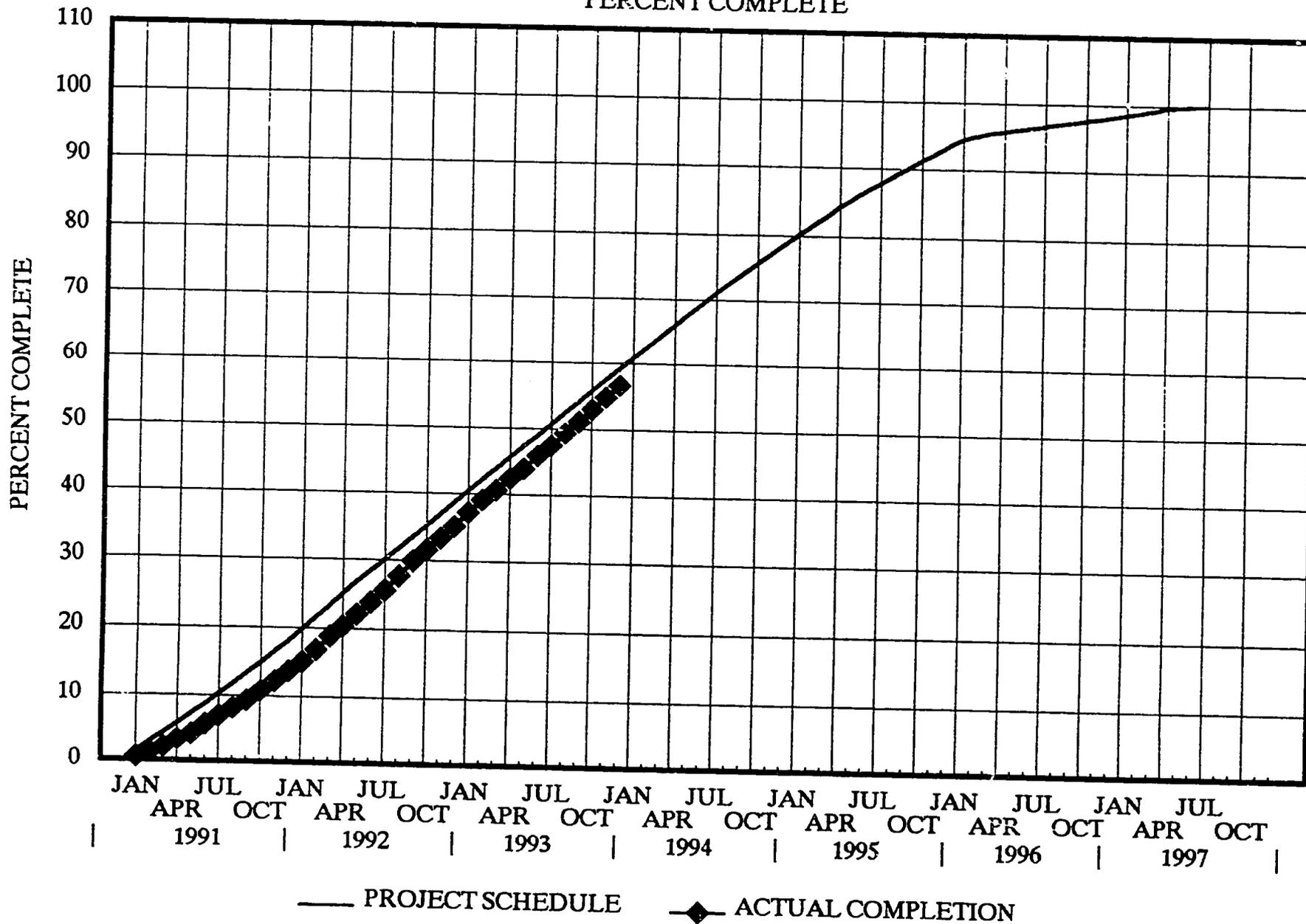
O.H. Oskvig

File: 14.0232

PC File: USAID.CAI

O E.

PROJECT MONTHLY STATUS
PERCENT COMPLETE



Appendix N