

PD-ABP-667

95370

FINAL REPORT
August 31, 1997

Part 1

Presented by: Michael Wiltanger

Contract No.: 263-0194-C-00-0135-00
Project Nos.: 263-0194.01
263-0215.05

***Alexandria Electrical Network
Modernization***

Distribution System

Black & Veatch International (BVI) / Sabbour Associates (SA)

USAID/Cairo

August 14, 1997



Alex. 1977

August 24, 1997

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

Att.: Mr. Hosam Ismail, P.E.
Project Officer.

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

Sub.: Project Final Report

Dear Mr. Ismail:

Attached are four copies of the Project Final Report, as required
under section F.S.5.3 of the Contract.

Expenditures in Appendix N are only through May 1997, due to two
plus months lag in billing.

If you have any questions regarding this report, please contact
me at BVI Kansas City.

Very truly yours,

Mike Wiltanger

Mike Wiltanger,
Resident Project Manager

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Executive Summary

USAID entered into a contract with BVI January 15, 1991 to provide engineering services for the Alexandria Electrical Network Modernization Project.

The project was implemented over a seventy eight month period ending August 31, 1997.

Staffing was initially provided by BVI's subcontractor, Sabbour Associates; and followed by BVI engineers starting from January 27, 1991. The project was mobilized in temporary AEDC offices until renovation was completed for a permanent office at 722 Al-Horreya Rd.

The project was completely mobilized in December 1991.

BVI's project work statement included two items, the Alexandria Electrical Distribution Network Modernization and an Energy Loss Reduction Study.

These two items are known as Work Plans 263-0194.01 and 263-0215.05.

The Alexandria Electrical Distribution Network Modernization project included rehabilitation of selected areas of the existing distribution system. This is to complete the renovation of the whole electrical distribution network of Alexandria City. The BVI budget for this portion of the work was \$5,233,408.

For the Energy Loss Reduction Study, BVI critiqued the loss analysis study prepared by the Egyptian Power System Company. The BVI budget for this portion of the work was \$159,618.

The Network Modernization project occupied the overwhelming majority of BVI activities. During the course of the project the Alexandria Network which started with fourteen districts grew to sixteen districts. Data is presented in the appendices for sixteen districts. Most recently the network has expanded to twenty districts.

Engineering services were provided for; Planning and Study Reports, Procurement, and Supervision of Construction Work. Technology transfer and improving the engineering practice of AEDC technical staff were implemented by BVI/Sabbour during the life time of the project.

The Planning and Study Reports provided the back up documentation required for the procurements; otherwise known as, Invitation For Bid (IFB).

Of special significance the IFB's were constructed using line items. The line items were then evaluated on their individual merit and the lowest price could then be obtained for specific materials. Individual Contracts were then issued for the contracted line items.

Attached at the end of this Executive Summary is a table containing the Construction Work Achieved through July 1997. Three items remain to be completed by AEDC after BVI/SA departure.

Of the nine IFB's ultimately issued, the time elapsed between advertizing in the Commercial Business Daily (CBD) and Contract Completion was approximately thirteen and one half months.

Four of the IFB's, namely 02, 04, 06 and 08 had to be reissued. Average time elapsed between initial CBD offering and Contract Completion was twenty four and one half months. The longest elapsed time was thirty two months for IFB-08 rewritten as IFB-08A. These elapsed times are indicated in Appendix H.

During the life of the project, eight IFB's and three Small Value Procurements (SVP's) were issued bringing the total USAID funding to \$12,403,265 not including Consultants fees. The Consultant fees were in the form of a Grant to AEDC.

Total contribution by the AEDC thru June 1997 was LE 71,056,051 (\$20,960,487) ((1 USD = 3.39 LE))

The contributions by AEDC were very instrumental in freeing up USAID monies that could then facilitate the procurement of Load-break Switches valued at \$1,728,032 and the Communication System valued at \$2,119,064.

AEDC engineers, technicians, and accountants were trained on the computer for use in their regular work. The distribution engineers in the 16 districts in AEDC were trained to design the low tension overhead networks, both manually and thru computer aided design. A total of 707 overhead networks were designed by AEDC engineers under BVI/Sabbour supervision.

During the project, training of AEDC personnel was of vital importance, especially in the use of AutoCad. A total of 71 Engineers and 75 Technicians/Draftsmen had received training by the end of the project.

AEDC engineers were also trained on the preparation of Work Orders. This preparation included site surveys, materials estimates, and preparation of sketches. These sketches were turned over to AutoCad personnel for final drafting. These work orders greatly enhanced check out of material and the construction activities.

An Integration Plan was introduced during the course of the project to give AEDC personnel experience in "Day to Day" operations of the project. The Consultant offered guidance and assistance during this phase of the program. This plan was initiated on February 1, 1997.

Of special importance this plan has prepared the AEDC Resident Project Manager to follow up on Warranty Issues, after August 31, 1997 which is the termination date of the project.

Alexandria Electrical Network Modernization
Distribution System

Construction Work Achieved

District	M. V. Net.	L.V. O. H. Net.	L.V. U. G. Net.	M. V. Net.	M. V. Net.	M. V. Net.	M. V. Net.	Comm. System	Comm. System
	No of Cap. Banks	No of T. P.	No of S. B.	11 & 20 kV Cables, km	No of D. P.	No of F. I.	No of L.B.S.	No of Base Stations	No of Fixed Stations
Abukir	9	20	107	15	1	155	9	1	11
Mandara	18	124	59	12	0	232	14	1	4
Sidi Bishr	12	43	296	9	0	348	12	0	5
Siouf	10	117	809	13.5	2	267	10	0	11
Saba Pasha	15	54	1824	20.4	0	343	21	0	11
Abis	8	47	98	11	1	203	3	0	3
Semouha	13	23	348	4.7	1	284	7	0	9
Ibrahimia	6	31	452	17.6	0	240	24	1	5
Moharam Bey	17	57	257	25.9	3	642	30	0	8
Gomork	15	85	278	30.2	0	430	11	1	7
Kabbary	11	13	191	16.2	0	74	0	0	4
Dekhela	2	15	0	6.4	0	35	0	1	4
Amria	0	20	2037	32.6	4	165	0	1	13
Agami	12	16	2782	18.7	1	246	6	0	7
Borg El - Arab	0	15	0	46.3	9	169	0	1	18
Hammam	0	10	0	0	1	95	0	0	1
TOTAL	148	690	9,538	279.5	23	3928	147	7	121
% Complete	100	97.6	100	100	100	100	89.6	78	93.1

Introduction

This Final Report is being issued to convey project status to USAID (the United States Agency for International Development). The report is required under section F.5.3 of the contract.

Of particular emphasis in this report is the preparation of Invitation For Bid (IFB). These IFB's accounted for the vast majority of the time expended by USAID, AEDC and BVI/SA during the course of the project.

BVI/SA and AEDC also spent a considerable amount of time and effort in the preparation of studies and reports to show the need for procurement items.

Project Summary

The project was implemented over a seventy eight month period beginning January 15, 1991, extending through August 31, 1997. Training of AEDC (the Alexandria Electricity Distribution Company) personnel was a major objective of the project. In the early stages AEDC staff performed the activities under supervision of the Consultant's staff. With the Integration Plan in place February 1, 1997 AEDC began to manage the day to day activities of the project with the consultant available for consultation when required.

USAID entered into a contract with Black & Veatch International (BVI), Kansas City, Missouri, as the Consultant to administer this project.

The Consultant's Task was to provide engineering and procurement services to support AEDC in the implementation of this project.

Progress

The project was initiated on January 15, 1991. Major project activities throughout the contract period have been:

- * Capacitor Work
- * Harmonic Study
- * Warehouse and Inventory Control
- * Load Management
- * Communication System
- * Training
- * Computer Aided Design
- * AutoCad Work
- * Integration Plan

- * Procurement (Preparation of IFB's - Invitation for Bid)
- * Low Tension Network Rehabilitation
- * Medium Tension Network Rehabilitation
- * Medium Voltage Distribution Points
- * 20kV Network Design
- * 11kV Fault Indicators
- * Loadbreak Switches

Staffing and Mobilization

The BVI subcontractor, Sabbour Associates (SA), assigned a staff consisting of the Project Coordinator, Assistant Resident Project Manager, three engineers, a draftsman, and the Financial and Administration Director on January 19, 1991. A secretary was assigned in February, a second secretary, in March, and an assistant financial manager at the beginning of April, and a receptionist/secretary in May.

The Black & Veatch International Resident Distribution Engineer was assigned to the project on 27 January 1991. The Resident Project Manager was assigned on 4 March 1991. The AutoCAD Specialist was assigned in January 1992 and the Construction Specialist in June 1992.

The project was mobilized in temporary office space provided by AEDC January 19, 1991. AEDC renovated a villa at 722 Al-Horreya Rd. for a permanent office location. The project staff moved to this permanent location on April 21, 1991.

Transportation for project personnel was provided by rental vehicles, provided by AEDC from project start until the project vehicles were available on November 15, 1991.

AEDC was responsible for provision of all office equipment, including computers for word processing, engineering, and AutoCAD application. BVI/SA issued AEDC the computer technical requirements in late September, 1991 and the computers were delivered on December 24, 1991, and installed during January, 1992.

Delivery of project computers completed mobilization of project office space, vehicles, and office equipment.

Work Statement

The Contract provides information regarding The Work Statement as quoted here:

**USAID Project 263-0194.01
Alexandria Electrical Distribution Network Modernization.**

The Project will consist of the rehabilitation of selected areas of the existing Alexandria distribution network.

The rehabilitation will include renovation of approximately six hundred (600) transformer points with associated three phase overhead circuits, modernization of an estimated seventeen thousand (17,000) service boxes associated with the low voltage underground network, installation of some 250 km of 11kV underground cables, installation of approximately (20) twenty 11kV distribution points, addition of 11kV distribution capacitors as required to maintain distribution system power factor at 95 percent and training of AEDC engineers to optimize the operation and maintenance of their distribution network.

**USAID Project 263-0215.05
Energy Loss Reduction Study**

The Electricity Distribution Authority (EDA) has requested that USAID provide the advisory services of a consultant on an intermittent basis to critique: the Egyptian Power System Company (EPS) loss analysis studies, including data collection and analysis; distribution planning, distribution system design, construction standards and maintenance practices.

Project Work Plan

A Project Work Plan was prepared on the basis of the above requirements. The Plan was prepared in preliminary form, reviewed by AEDC and USAID and issued on 10 June 1991.

Elements of the Work Plan 263-0194

Planning and study Reports

- Capacitor Study
- Warehouse and Inventory Control
- Load Management
- 20kV Network Design
- Communications
- Training

Procurement

- Material
- Low Tension Network
- Medium Tension
- Test Equipment, Tools, & Construction Vehicles

Elements of the Work Plan 263-0215.05

- Critique of EPS Loss Reduction Study

BVI critiqued the loss reduction study prepared by EPS and on 23 April 1993, BVI submitted a final report along with a BVI summary of activities and recommendations.

Capacitor Study

The project team prepared a capacitor study to determine the numbers and types of capacitors required to adjust the power factor of the distribution network to 95 percent. Data gathering was initiated at project implementation.

The data gathering included recording amperage, power factor, and reactive power to establish system conditions to use as a data base for the capacitor study.

A computer analysis program prepared and provided by BVI was utilized to determine the optimum location, size, and type of capacitor banks. The economic analysis part of the study defined the economic advantages of each type of capacitor bank as they applied to each circuit. The economic analysis final report was issued in June 1993.

The previous project purchased larger, 450kVAR and 600kVAR, size capacitor banks that could not be installed without detailed analysis of the circuits. With recordings being carried out and the computer analysis program it was possible to identify circuits where these units could be installed. Design and construction was completed in 1994 for installation of these existing units.

Through IFB-06A the 128 banks of capacitors rated 300kVAR that were recommended by the capacitor study were procured. One hundred and twenty banks were installed by November 96. The remaining eight banks were kept as spare. See Appendix A.

The installation of two 600kVAR, twenty four 450kVAR and one hundred and twenty 300kVAR banks of capacitors during the project period resulted in energy saving in the Alexandria Network worth

580 thousand LE (\$ 171,091) through June 1997. Energy saving will continue in an accumulative manner.

Harmonic Study

As an extension of the capacitor study AEDC became concerned with the "Quality of Power" being distributed. BVI purchased, for AEDC use, harmonic analyzers interfaced with portable notebook computers thru IFB-04A for harmonic recording and analysis.

A plan was prepared for harmonic measurements in the Alexandria Network and AEDC personnel were trained by BVI/Sabbour engineers on making the measurements and carrying out harmonic analysis.

Locations of high harmonic distortion in the network were determined, sources of harmonics were identified and problems were solved. A Harmonic Analysis computer program was procured by BVI, with which AEDC could evaluate Total Harmonic Distortion (THD) and could then design an appropriate filtering scheme.

Warehouse and Inventory Control

Two engineers, one accountant and nine technicians received training on the warehouse and inventory control program.

Training consisted of introduction to the computer and DOS (Disc Operating System) then proceeded to DataBase. Each stock item in every AEDC warehouse was then assigned a material code number. The program continued to be developed for posting and inventory purposes. Inventory limits were developed for reordering.

Data was transferred from the warehouses to the main computer in AEDC Headquarters to assist the Warehouse Manager in making decisions on re-ordering and stocking.

A joint program was developed, within AEDC, between Accounting and Inventory Control to establish the cost of stocked items.

Load Management

A review of the benefits of Load Management was prepared and presented in February, 1994. With the rate structure of purchased energy by AEDC there was no economic justification for AEDC to expend funds and effort, for introduction of a Load Management Program.

Communications

A meeting between AEDC and BVI was held 17 October 1993, to determine the needs of AEDC and assess the quality of the existing communication system. BVI presented a Preliminary Conceptual Design Report to AEDC on 6 January 1994. After review by AEDC a Final Design Report was issued to AEDC on 30 March 1994. The basis of this report was used to prepare an IFB for Communication Equipment.

IFB-08A provided a new Communications system for the AEDC. Nine base stations, one hundred and forty five fixed stations, fifty mobile radios, and fifty portable radios have been supplied along with the necessary antennas and accessories.

The AEDC with the help of the consultant set up a work order system to handle the installation of the radios. Design was started in March 1997, with the first component installations beginning in April 1997. Four communications engineers from AEDC attended training in the US during May 1997. The supplier's training representative arrived in country to begin training in operations and maintenance on June 1, 1997. All scheduled training was completed by mid July, 1997.

Training

Training of AEDC personnel in a systematic approach to maintaining the distribution system was an important aspect of the project. Implementation of training was accomplished through assignment of AEDC personnel to carry out project tasks, under the guidance and supervision of BVI/SA staff.

The training program included training AEDC personnel in the use of computers. The computer training for engineering applications was implemented through AEDC performing project assignments with the guidance of BVI/SA personnel. The intent of the training was to introduce AEDC personnel to modern utility engineering practices. The computer supplier provided training in basic computer operation that included an introduction to the use of software programs. Computer programs have been established for monitoring and reporting construction progress.

Additionally 45 Engineers and 23 Technicians had received training on DOS plus DataBase; and 11 Engineers and 4 Technicians have received training on Lotus 1-2-3. Seven AEDC engineers continued the training program and were trained on advanced Lotus. AEDC continued to train personnel through close of project.

Two engineers and ten warehouse keepers were trained in computer use for inventory program.

The BVI construction specialist trained 15 technicians on tool repair and maintenance. Based on this AEDC established five centers for tool repair.

Computer Aided Design

Computer aided design was introduced by training AEDC engineers to design the new low tension overhead networks on the computer. Computer programs were prepared locally for designing the networks; taking into consideration future expansion, load growth, voltage drop, minimum loss, and optimum cable size.

AEDC engineers were trained to develop other computer programs by themselves for their use on medium and low voltage networks design.

AutoCad Work

AEDC had a drawing office in which all company drawings were made using classical draftsmanship. A plan was prepared to introduce the AutoCad work to AEDC personnel, at both engineer and technician levels. A BVI autocad specialist was recruited for this purpose. The AutoCAD specialist arrived the first of February 1992 to begin training AEDC personnel in the use of AutoCAD (Computer Aided Design) to prepare drawings. During his one year assignment three groups were trained. The three groups included a total of 13 individuals, consisting of five engineers, four technicians and four draftsmen. A fourth group was trained by AEDC engineers under the supervision of the BVI AutoCad specialist.

After the personnel completed their basic training, they were assigned to production drawings for the project with the AutoCAD specialist providing guidance as required.

During the course of the project AEDC continued with training of AutoCAD personnel. A total of 13 Engineers and 28 Technicians/Draftsmen had received training by the end of the project.

Integration Plan

During the course of the project, an Integration Plan was approved, to allow for AEDC personnel to take over the day to day management

of the project. This plan was put into operation 1 February 1997 with BVI providing guidance to AEDC personnel.

Procurement

Material

Procurement for major materials has been through the use of the IFB's. Major computer items have been procured using Local Purchase Orders (LPO's). The Small Value Procurement (SVP) process has been used to purchase needed spare parts.

Low Tension Network

Low tension Overhead Network Rehabilitation work was implemented at the beginning of the project. AEDC assigned six distribution engineers to work on Low Tension Network Rehabilitation. The rehabilitation design work was organized into two teams working under the supervision of BVI/SA distribution engineers. The rehabilitation design activity was completed in September 1994. Design was prepared for rehabilitation of 707 transformer points. This is well above the 600 transformer points listed for renovation in the contract Work Statement.

First estimation in mid eighties was that there were 1200 low tension overhead networks that need to be renovated. 600 were completed thru the previous three phases of the project. The remaining 600 were planned for the present project. A thorough survey at the beginning of the project revealed the need to renovate 707 networks including areas in the suburbs added to AEDC from Behera Distribution company.

Low Tension Overhead Network Construction was initiated during December 1991 with construction work by AEDC crews. Material used in construction was surplus material procured under the earlier phases of the Alexandria rehabilitation program until arrival of purchased material during the first half of 1994. During the contract period construction was 97.6% completed. Appendix B shows the distribution of the 707 transformer points among the 16 districts in Alexandria.

Different from the original plan, AEDC supplied all cabling required to do this construction. AEDC urged the three local main cable manufacturers to manufacture low voltage overhead quadruplex cables according to USA standards. After several trials the three cable manufacturers succeeded and the cable became available locally. This resulted in a considerable saving in the dollar

portion for procurement, which was directed later to the 11kV load break switch procurement for \$1,728,032, and renovating the communication system for \$2,119,064.

Low Tension Underground Network rehabilitation involved work on service boxes. The service box rehabilitation included replacement of connections and new service boxes. Work on design for service box rehabilitation was initiated during May 1991 and construction was initiated during June 1991. Design effort was completed during May 1994. Construction was completed during July 1994. A total of 9,538 Service Boxes were installed. This is considerably below the quantity of 17,000 listed in the contract Work Statement, because AEDC continued replacement of service boxes on its own initiative after the close of the previous project. This reduced the requirement for this project. See Appendix C.

Medium Tension

Rehabilitation of the 11kV network included installation of new circuits for providing service to new distribution transformers added for the low tension network rehabilitation and new circuits to divide load from existing distribution circuits. Existing cables on circuits that had excessive outages were replaced. Due to an ordinance in Alexandria that prohibits cutting streets during the summer months construction is limited to October through May for placement of cable. The final installation was completed in July 1995, one year ahead of schedule as shown in Appendix D. AEDC supplied all cable and a portion of the accessories required to complete this task.

Construction of the 11kV cable was accomplished with construction contractors placing the cable and AEDC personnel doing the splicing, terminations, testing, and energizing. A total amount of 279.5 km of cables were installed to complete the AEDC enthusiastic plan of the digging season of 1995 for major replacement of old oil paper cables by the new XLPE 11kV cables. This amount is above the 250 km listed in the contract work statement.

Medium Voltage Distribution Points

A study for the needs of the Alexandria network for additional medium voltage distribution points based on the load growth and the extension of AEDC network to cover added areas in the north west coast to Alexandria, was carried out. Nineteen 11kV and four 20kV distribution points were found to be needed. AEDC provided the 23 distribution points and installed them by January 1995, nine months ahead of schedule, under the consultants supervision. The

locations of the 23 distribution points and their dates of completion are shown in Appendix E.

This amount is more than the 20 distribution points listed in the contract work statement, as it included an additional three 20kV distribution points in the west of Alexandria.

20kV Network Design

The project team prepared typical designs for criteria of 20kV overhead and underground construction. In December 1993 design criteria was presented for the 20kV overhead construction. Underground design criteria was presented in February 1994. The design was prepared by the project team in Alexandria. After preparation the design criteria was transmitted to the home office of BVI in Kansas City for a Quality Assurance review. The design criteria was approved and accepted by BVI and AEDC during the second half of 1994. Typical designs were then prepared based on the criteria and after several periodic reviews with AEDC engineers, the 20kV design for overhead and underground construction was delivered in the second half of 1995.

Fault Indicators

Fault indicators have been installed to detect phase to ground faults on medium voltage underground cable. The fault indicators are required so that operations personnel can quickly detect faulted areas and restore service quickly. The fault indicators are installed on outgoing circuits in all Transformers Points. Old units installed on earlier rehabilitation work were removed, tested, and reinstalled. AEDC purchased a limited quantity of Fault Indicators from a local manufacturer and the remainder was procured from a US Source.

IFB-02A procured 4000 fault indicators for the project. 3928 of these indicators had been installed through October 1996. This closed the BVI/Sabbour portion of fault indicator installation. (Refer to Appendix F1)

AEDC requested additional fault indicators to be purchased by USAID and 3500 more were procured through IFB-07. AEDC has developed an installation program for these fault indicators. Through May, 1997 560 indicators of the 3500 have been installed. (See Appendix F2)

Loadbreak Switches

Loadbreak Switches were purchased and are being installed. These Switches were provided to allow AEDC the ability to operate the

system to minimize the number of customer interruptions when switching for planned outages and when restoring regular service after system failures. The switches shipped in late 1995 and were available for installation in early 1996. Loadbreak switch design was completed in July 1997.

Construction was initiated during April 1996 with the first unit placed in service during May. Appendix G provides details of the total requirement and completion through July, 1997.

Test Equipment, Tools, & Construction Vehicles

Test equipment to test various types of power equipment and apparatus, including test vans to locate faults and test medium voltage underground cable was the subject of an investigation by BVI. This equipment is necessary for the operation and maintenance of the electric system.

BVI investigated the need for additional compression tools and fiberglass ladders. Since this equipment was necessary in the construction of the low tension network and to improve AEDC engineering practice, BVI recommended to USAID the equipment should be procured.

The purchase of construction vehicles; including, aerial lift trucks for use in rehabilitation of overhead circuits, articulation hydraulic crane trucks for lifting and handling electrical equipment and diesel engine fork lifts for use in storage yards was requested by BVI/AEDC of USAID, to expedite the low tension and transformer point rehabilitation.

IFB Preparation

The USAID at the inception of the project supplied to BVI a sample IFB (Invitation for Bid) to be used for preparation of the IFB's on the contract. These IFB's were modified from time to time during the life of the BVI contract to accommodate any updating requirements.

The IFB's were generally structured in the following format:

Part A: Instructions to Bidders.

Part B: Bid/Award/Contract Form.

- Part C: Bid Schedule
- Part D: Conditions of Contract.
- Part E: Technical Specifications.
- Part F: Forms of Bid and Performance Bonds.

The uniqueness of these IFB's allowed the Bidder to bid on any or all of the line items. This allowed BVI and AEDC to evaluate the most successful bidder with the lowest price for each line item. Based on USAID approval of the BVI/AEDC Evaluation Contracts were issued.

This approach allowed the AEDC to minimize the funding required of USAID.

IFB Development/History

IFB-01 BVI evaluated the tool requirement of AEDC to properly implement the construction of the overhead and underground medium tension network, rehabilitation of transformer points, and low tension service boxes. The work took place in 16 districts of AEDC concurrently.

BVI evaluated the need for light weight fiberglass ladders to replace the heavy wooden ladders that AEDC had been using. The heavy wooden ladders had to be transported by cart. The fiberglass ladders were requested to expedite construction of the low tension network.

This IFB was then issued to purchase hand crimping tools, compression tools and ladders for use in the rehabilitation project. This IFB had three bidders.

One AEDC engineer travelled to the US for inspection of the fiberglass ladders.

IFB-02/02A BVI and AEDC gathered data for the splices and terminations that would be required for the AEDC supplied medium tension cables. BVI with AEDC developed the quantities that would be required of these commodities.

During this same time period BVI studied the existing fault indicator program and found many of the old indicators in place were inoperable. In order to

minimize fault location time and improve customer service it was determined fault locators were required.

IFB-02 had to be rewritten as IFB-02A due to commercial reasons; however, it should be noted that AEDC purchased splices and terminations to keep the medium tension underground program on track.

IFB-02A received the approval of USAID and the items requested were purchased. Some components of this IFB when received, replaced the components that AEDC had purchased.*

This IFB had four bidders for Line Items 1 and 2, and six bidders for Line Item 3.

One AEDC engineer attended the inspection of the fault indicators in the US.

During this inspection trip, this engineer also visited BVI, Kansas City, to become acquainted with computer work.

IFB-03

BVI and AEDC determined that the use of bucket trucks would enhance the installation program of the low tension network. The existing bucket trucks were too large and cumbersome to navigate the many streets and alleyways in Alexandria. This IFB purchased vehicles of overall size and boom lengths to meet the majority of obstacles encountered in construction of the low tension network. These vehicles also have seen limited use in street lighting.

During the development of this IFB, it became apparent that heavy equipment would be required to handle the many transformers in the transformer lay down areas. To make this cumbersome procedure easier it was recommended to make provisions for a hydraulic crane truck.

During this time period AEDC purchased flat bed trucks for transportation of transformers and pick up trucks for AEDC crew use in the rehabilitation program.*

*AEDC expenditures are addressed in another section of this report.

There were ten bidders for this IFB.

Three AEDC engineers and one AEDC engineer travelled separately to the US on two separate occasions to inspect the bucket trucks and hydraulic crane.

IFB-04/04A BVI conducted a study to determine what types of testing equipment would be required to improve the operation of the overall distribution system, including; the medium tension network, low voltage network, energy metering and transformer point maintenance. The data collected from monitoring instruments provided a valuable information tool for use by engineers in the 16 districts of AEDC.

Typical equipment provided by this IFB included: Fault location equipment; Energy Test Meters both fixed and portable; Oil Testers; Ground Testers.

IFB-04 had to be rewritten as IFB4A for source of origin requirements.

Line Item 1 of this IFB had two bidders while Line Items 2 through 6 had one bidder.

Three AEDC engineers attended inspection in the US for the Energy Test Meters.

The Supplier volunteered to provide training at no cost to AEDC or USAID for the Energy Test Meters. Two AEDC engineers travelled to the US for this training.

IFB-05 AEDC had expended the hardware on hand and a need developed for additional hardware required to complete the low tension overhead network. Such accessories as : tap connectors; full tension splices; service entrance sleeves; ground rods; clamps, were procured through this IFB.

Line Items 1, 3 and 5 had eight bidders while Line Item 2 had seven bidders. Line Item 4 had four bidders and Line Item 6, five bidders.

No inspection services were performed for this IFB.

IFB-06/06A/06B This IFB was prepared for the purchase of capacitor banks. This requirement for capacitor banks resulted from a study prepared by BVI. The study recommended that the system power factor be raised to 0.95.

BVI suggested that loadbreak switches be installed in Transformer Points to minimize the outage time required for maintenance. With the concurrence of AEDC and USAID these switches were included in the IFB.

IFB-06 for the loadbreak switches was rejected by AEDC since the switches were physically larger than anticipated. The capacitor section of this IFB was declared non responsive due to non compliance with the bid documents.

USAID authorized the reissuance of the original IFB as 6A for capacitors and 6B for loadbreak switches.

IFB-06A and IFB-06B*** were ultimately approved by AEDC and USAID.

IFB-6A had two bidders and 6B had four bidders for the loadbreak switch. There were eleven bidders for the remaining items on IFB 6B.

Two AEDC engineers attended inspection in the US for the capacitor banks. An additional two AEDC engineers attended the loadbreak switch inspection in the US.

IFB-07 This IFB was issued to purchase additional quantities of material for the low tension network rehabilitation work. BVI and AEDC identified a requirement for additional fault indicators, identical to those purchased with IFB-02A. AEDC was not satisfied with the performance of the locally purchased units and wanted to replace them with American Products.

This IFB also purchased spare parts for 1989 vintage GMC bucket trucks. Electric forklifts for use in the AEDC warehouse were requested in IFB-03 but were rejected, the specification was rewritten and the forklifts were included in this IFB.

***Due to AEDC expenditures, which are addressed in another section of this report, funds were available for USAID to finance the loadbreak switches.

Test equipment previously requested in IFB-04A and found technically non responsive was rewritten and included in this IFB. Items such as : Transistor Checker; Phase Rotation Tester; Multimeter, were included.

On this IFB five bidders responded to Line Items 1, 2 and 9; six bidders to Line Items 4 through 8. Line Items 3 and 10 through 14 had seven bidders.

One AEDC engineer attended the inspection for the electric fork lifts and two AEDC engineers attended the inspection of the measuring instruments. Both inspections took place in the US.

IFB-08/08A BVI realized that the AEDC communications system was quite old (15-20 years) and required constant maintenance. After a survey conducted by a BVI Communication Engineer, BVI proposed to AEDC to replace the existing outdated system with a more modern system. USAID approved the procurement of this new communication system.

No bids were received for IFB-08 since none of the tenderers could meet the technical requirements. The requirements were relaxed and USAID approved the issuance of IFB-08A.***

IFB-08A had three bidders.

Two AEDC engineers attended the inspection of this equipment in the US. Four AEDC engineers received training in the US on this equipment.

Note: Commercial Business Daily IFB advertisement dates and Contract Award Dates are shown in Appendix H. Bid Due Dates and Contract Completion Dates are also included in Appendix H.

Local Purchase Orders for Major Computer Items

There were ten major computer purchases during the life of the project, totalling approximately \$ 60,300.

***Due to AEDC expenditures, which are addressed in another section of this report, funds were available for USAID to finance the communications system.

The last major computer purchase of \$ 22,740 in June 1997, was to replace the AEDC provided LAN (Local Area Network). The existing network was no longer able to handle the volume of work.

Small Value Procurement

SVP-1

Recording instruments were obtained on the previous project and were made available for use in the early stages of this project for the capacitor study. Spare Parts were required to put all of instruments into working order. Requests for quotation were issued and price received for spare parts and one additional instrument. A purchase order was issued and the spare parts were shipped in January 1992.

SVP-2

Contract 17841-04A Part 2 supplied Energy Test Equipment. Purchase of spare parts was postponed to a later stage to allow AEDC engineers and technicians to acquire experience with the equipment and then determine the required spare parts. The required spare parts for maintenance of this equipment were determined in early 1997. A purchase order was issued April 24, 1997 and the spare parts were delivered in early June 1997.

SVP-3

Contract 17841-04A Part 7 supplied Test Vans containing a fault locator and thumper unit, AEDC required spare parts for maintenance of this equipment; based on their experience after using the test vans. A purchase order was issued April 24, 1997 and the spare parts were delivered in early June, 1997.

Note: USAID expenditures for IFB's and SVP's are shown in Appendix I.

Other Purchases

BVI per contract purchased for project use, four-Chevrolet Blazers and two-Chevrolet Vans under BVI PQ S38077 for a total cost of \$103,258. These vehicles were transferred to the ownership of the AEDC June 4, 1997.

Lessons Learned

A. Loadbreak Switches

On two occasions an oil filled termination failed upon initial energizing. On the third occasion, after a switch had been in service for a short time period, a maintenance crew operated the switch position to open; however, one pole on one of the positions failed to open.

The mechanical failure of one pole failing to open is easy to address; although, the failure should not have occurred. There are viewing ports on the switches and the maintenance crew should have observed switch position.

The maintenance crews had been instructed to view the switch positions as part of their operating procedures.

The loadbreak switch supplier has since replaced this defective switch.

Addressing the oil termination ruptures, it should be noted that the switch bushings are designed to accept shielded, XLPE type cables in conjunction with pre molded shielded connectors which provide for true "dead front" operation. Since the AEDC uses unshielded paper/oil cables the termination procedures were modified to accept same.

The AEDC shielded XLPE cables do not present a problem. Termination of the paper/oil cables requires that very precise, time consuming procedures be followed. Great care must be taken in terminating the paper/oil cables. Generally the cables are an old vintage and are extremely sensitive to insulation cracking, when subjected to the handling and the maneuvering required to get them located properly for termination.

When contemplating any future installation of these loadbreak switches it is recommended that a transition splice be used between the shielded XLPE and paper/oil cables with the appropriate shielded premolded connectors.

This will not only give the AEDC a truly "dead front" termination but will save many manhours and be a superior installation.

B. Vehicle Spare Parts

Contract 17841-07 Parts 3, 10-14 provided fault indicators and spare parts for 1989 GMC vehicles. The fault indicators did not present a problem.

The vehicle spare parts supplied do not fit in many instances. In many cases stock numbers of parts supplied differ from stock numbers ordered, supposedly an updated version of the part was supplied by the Tenderer.

It is recommended in future purchases of vehicles that the supplier have an in country sales outlet and guarantee parts replacement for 10 years.

AEDC Contributions and Expenditures

The AEDC had expended LE 71,815,485.48 (\$ 21,184,508) toward the project thru June 30, 1997.

Refer to breakdown of AEDC project costs in Appendix J.

AEDC in the early stages had decided to purchase; pick ups, flat bed trucks, medium and low tension cables, for construction of the transformer points and rehabilitation of the low and medium tension networks.

The AEDC decision to purchase these four items valued at LE 35,616,011 (\$ 10,504,197) freed up USAID funding for the purchase of loadbreak switches (IFB-06B), \$ 1,728,032 and the communications system (IFB-08A), \$ 2,119,064.

Note: AEDC Shipments and Material Reports are shown in Appendices K and L.

AEDC Additional Travel

In addition to the travel for inspection services and training AEDC Top Management travelled to BVI, Kansas City, to become acquainted with the BVI Project Management.

An AEDC Senior Accountant also travelled to BVI, Kansas City, to become acquainted with the BVI accounting system.

Administrative Report

Contract Financial Budgets and expenditures are shown in Appendix M and Appendix N. Appendix M is a monthly distribution of the contract budget for the duration of the project. Appendix N1 is a cumulative distribution of the contract Budget items for the period of January through May. Appendix N2 includes the total amount invoiced through May and lists the percent invoiced with comparison to the budget percentages.

Contract manhour budgets and manhour expended are shown in Appendix O and Appendix P. Appendix O is a monthly distribution of the professional manhour budget for the duration of the project. Appendix P1 is a cumulative distribution of the budgeted manhours expended for the period of January through May. Appendix P2 shows manhours expended through May and lists the percent expended with comparison to the budget percentages.

The data presented in Appendices M through P are derived from the revised estimate that was developed in the first quarter of 1996 and submitted to USAID on 7 October 1996.

PD-ABP-667

FINAL REPORT

August 31, 1997

Part 2: Appendices

Presented by: Michael Wiltanger

Contract No.: 263-0194-C-00-0135-00
Project Nos.: 263-0194.01
263-0215.05

***Alexandria Electrical Network
Modernization***

Distribution System

Black & Veatch International/Sabbour Associates

USAID/Cairo

August 14, 1997

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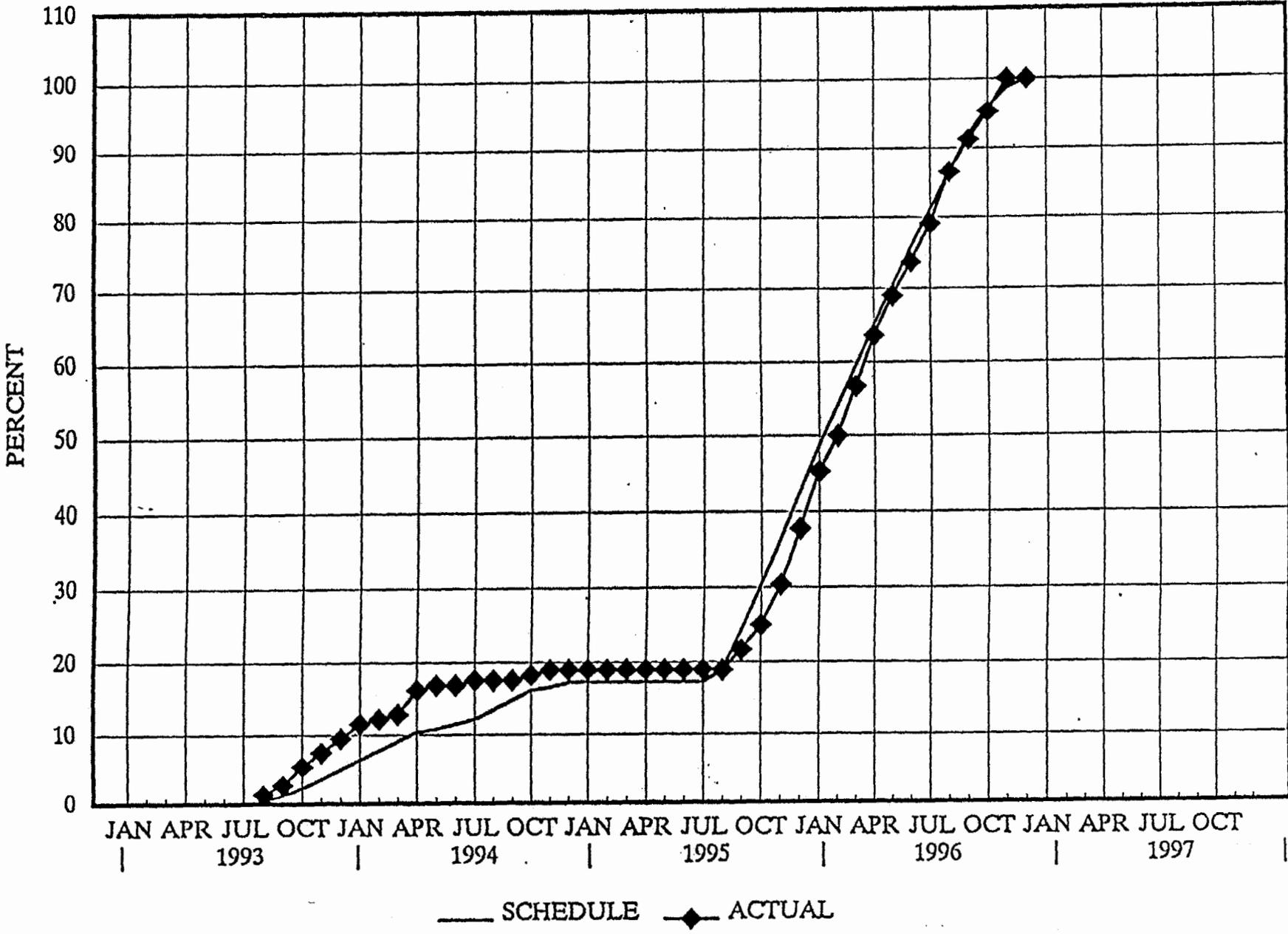
Part 2 Appendices

	<u>Appendix</u>
Capacitor Construction	A
Low Tension Overhead Network Construction	B
Service Box Construction	C
11kV Cable Construction	D
Transformer Point Rehabilitation	E
Fault Indicator Installation	F
Loadbreak Switch Installation	G
CBD Dates, Bid Due Dates, Contract Dates and Contract Completion Dates	H
USAID Procurements	I
AEDC Contributions	J
AEDC Shipment Report	K
AEDC Material Report	L
BVI Budget Distribution	M
BVI Cumulative Budget Distribution	N
BVI Monthly Distribution Professional Manhour Budget	O
BVI Cumulative Distribution of Budgeted Manhours	P

APPENDIX A

CAPACITOR CONSTRUCTION

CAPACITOR CONSTRUCTION
PERCENT COMPLETE



BVI/Sabbour
Month: December 1996

Appendix A

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APPENDIX B

LOW TENSION OVERHEAD NETWORK CONSTRUCTION

Appendix B

BVI/Sabbour
 Month: July 1997
 Low Tension Overhead Network Construction

District	No. of TP's After Design Completion	Estimated 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	20	-	-	-	20	20	C.C.
Mandara	139	-	1	1	139	124	Bh.S.
Sidi Bishr	43	-	-	-	43	43	C.C.
Siouf	118	-	1	0	118	117	Bh.S.
Saba Pasha	54	-	-	-	54	54	C.C.
Abis	48	-	-	1	48	47	C.C.
Semouha	23	-	-	-	23	23	C.C.
TOTAL	445	0	2	2	445	428	
Central/West Zone							
Ibrahimia	31	-	-	-	31	31	C.C.
Moharem Bey	57	-	-	-	57	57	C.C.
Gomrok	85	-	-	-	85	85	C.C.
Kabbary	13	-	-	-	13	13	C.C.
Dekhela	15	-	-	-	15	15	C.C.
Amria	20	-	-	-	20	20	C.C.
Agami	16	-	-	-	16	16	C.C.
Borg El-Arab	15	-	-	-	15	15	C.C.
Hammam	10	-	-	-	10	10	C.C.
Total	262	0	0	0	262	262	
Grand Total	707	0	2	2	707	690	

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

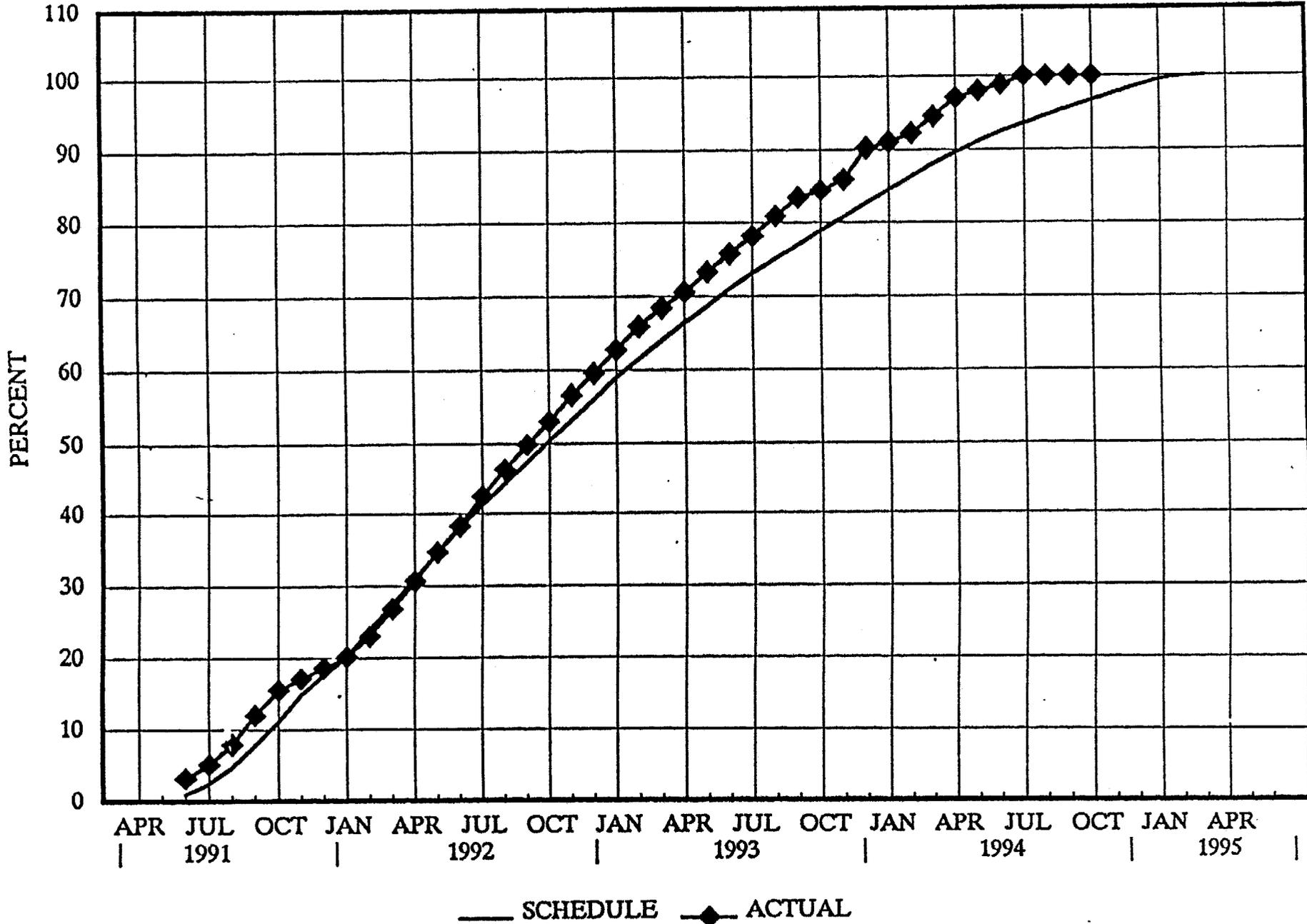
Bh.S.: Behind schedule.

Percent complete = 97.6

APPENDIX C

SERVICE BOX CONSTRUCTION

SERVICE BOX CONSTRUCTION
PERCENT COMPLETE



9,538 Service Boxes have been rehabilitated. Task is completed July 94.

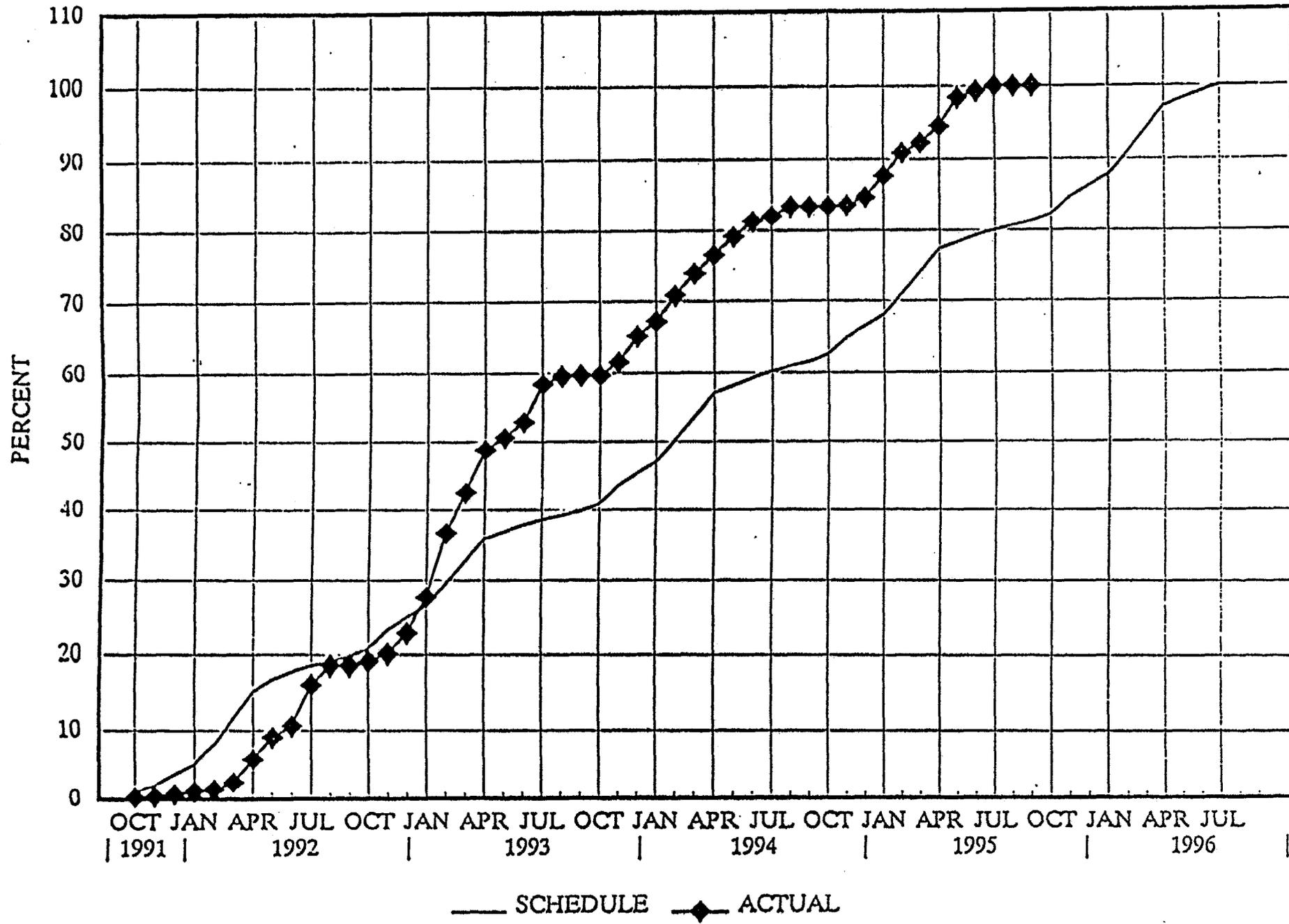
BVI/Sabbour
Month: Oct. 94

APPENDIX D

11kV CABLE CONSTRUCTION

11KV CABLE CONSTRUCTION
PERCENT COMPLETE

BVI/Sabbour
Month: September 1995



Appendix D

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APPENDIX E

TRANSFORMER POINT REHABILITATION

Appendix E

BVI/Sabbour
Month :FEB. 1995

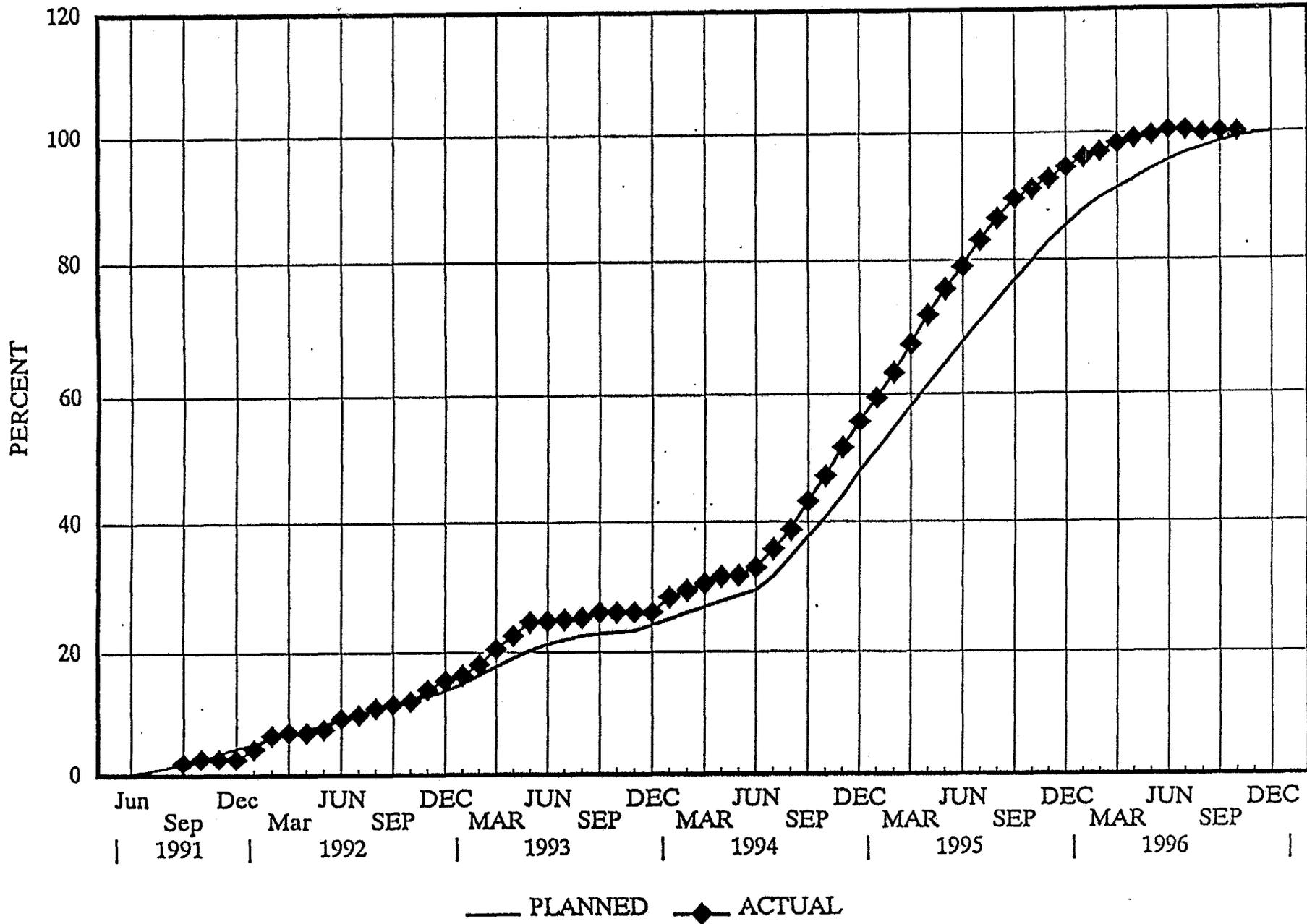
INSTALLATION OF 11&20 KV
DISTRIBUTION POINTS
STATUS REPORT

S.N.	DISTRIBUTION POINTS	KV	SITE		BUILDING		EQUIPMENT		OPERATION		NOTES
			DETERMINED	OBTAINED	UNDER CONSTRUCTION	COMPLETED	PURCHASED	INSTAIED	UNDER COMMISSIONING	IN OPERATION	
01	EL-SOUK S/S	11									OCT.91
02	ABU-TALAT	11									DEC.91
03	KM 34 MATROUH ROAD	11									MAR.92
04	EL BALLYANA	11									JUL.92
05	ALEX. TEX. & WEAVING	11									SEP.92
06	EL NASRIA	11									SEP.92
07	MILITARY TOWN 1	20									DEC.92
08	MILITARY TOWN 2	20									DEC.92
09	MOBARAK CITY (4A)	11									FEB.93
10	EL BATATIN	11									APR.93
11	MEYAH NEW B.EL ARAB	11									JUL.93
12	MEYAH EL NOZHA	11									JUL.93
13	BORG EL ARAB S/S	20									OCT.93
14	KM 47 MATROUH ROAD	11									OCT.93
15	MOBARAK CITY (4B)	11									NOV.93
16	ABU-KIR P.S.	11									MAY94
17	MOHAREM BEY S/S	11									JUNE94
18	HAMAM CITY	11									JUNE94
19	UNIVERSITY HOSPITAL	11									JUNE94
20	COMPLEX TEXTILE	11									JULY94
21	KM 16.5 BORG ELARAB	11									AUG94
22	KM 6.5 BORG ELARAB	11									SEP.94
23	KM 59 MATROUH ROAD	20									JAN.95

APPENDIX F

FAULT INDICATOR INSTALLATION

FAULT INDICATOR CONSTRUCTION PERCENT COMPLETE



BVI/Sabbour
Month: October 1996

Appendix F1

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Appendix F2

FAULT INDICATORS
U. S. PURCHASED UNITS

TOTAL PURCHASED by USAID under two IFB's	7,500
Installed through October 1996 Completing BVI Contract	3,928
Additional to be installed by AEDC	3,500

AEDC additional Fault Indicator Installations

Column A Column B

			TOTAL NO. OF DISTRICTS		
NO. Of. Repaired Equip.*	Repl. Of Defect. Equip.*	Installing New Equip.*	NO OF TP	Work Implementation	District
	70	49	301	26/12/96	Gomrok
33		38	101	02/03/97	Abo Kir
37	2	2	73	15/02/97	Siouf
	11	2	54	24/03/97	Semouha
	8	8	70	24/03/97	S. Pasha
27	9	143	212	05/01/97	S. Bishre
	37	59	205	11/12/96	M. Bey
68	58	39	221	02/01/97	Mandara
	58	13	66	10/11/96	Ibrahimia
		12	39	26/12/96	Abis
165	195	365	1342	TOTAL INSTALLED THROUGH MAY 1997	

* Addition of columns A and B is the total installed of the 3500 additional units purchased.

Note: Installation figures only available through May 1997.

APPENDIX G

LOADBREAK SWITCH INSTALLATION

Appendix G

BVI/Sabbour
Month: July 1997

Loadbreak Switch Installation Plan

District	No. of Switches	Status This Month			Status To Date		
		Loadbreak Switches			Loadbreak Switches		
		Remaining	Monthly Rate	Installation Complete	Scheduled Installation	Installation Complete	Status *
East/Central Zone							
Abukir	10	1	1	4	8	9	Ah.S.
Mandara *	14	0	0	6	11	14	C.C.
Sidi Bishr	12	0	1	4	8	12	C.C.
Siouf	10	0	-	-	8	10	C.C.
Saba Pasha	30	9	2	4	20	21	Ah.S.
Abis	3	0	0	-	3	3	C.C.
Semouha	10	3	0	2	7	7	Ah.S.
Total	89	13	4	20	65	76	
Central/West Zone							
Ibrahimia	24	0	-	-	15	24	C.C.
Moharem Bey	34	4	2	4	20	30	Ah.S.
Gomrok	11	0	0	0	5	11	C.C.
Merghem	0	0	-	-	0	0	-
Amria	0	0	-	-	0	0	-
Agami	3	0	-	0	3	3	CC
Abu Talat	3	0	-	0	3	3	CC
Total	75	4	2	4	46	71	
Grand Total	164	17	6	24	111	147	Ah.S.
Percent Complete	100	10.4	3.7	14.6	67.8	89.6	Ah.S.

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

C C Construction Complete

** Construction Completed during the month of June.

APPENDIX H

*CBD DATES, BID DUE DATES, CONTRACT DATES and
CONTRACT COMPLETION DATES*

Listing of IFB'S and
Contracts Issued

CBD Date

Bid Due
Date

Contract
Award Date

Contract
Completion Date

IFB 17841-01

Apr 17, 92

Jun 22, 92

Con 17841-01 Line Items 1 & 2
(Compression Tools & Spare Parts)

Oct 25, 92

June 01, 93

Line Item 3 (Fiberglass Ladders)

Oct 25, 92

April 20, 93

IFB 17841-02

Jul 28, 92

Sep 27, 92

IFB 02A

Jul 01, 93

Sep 01, 93

Con 17841-02A Line Items 1 & 2
(Splices & Termination Kits)

Dec 12, 93

July 27, 94

Line Item 3 (Fault Indicators)

Dec 12, 93

May 23, 94

IFB 17841-03

Nov 27, 92

Feb 08, 93

Con 17841-03 Line Items 1 & 2
(Aerial Lift Trucks & Hydraulic Crane)

Aug 18, 93

Dec 31, 93

Line Item 3 (Diesel Fork Lifts)

Aug 18, 93

Dec 21, 93

IFB 17841-04

Jan 01, 93

Apr 21, 93

04A

Nov 01, 93

Dec 20, 93

Con 17841-04A Line Items 1,3,6, & 8
(Test Equipment & Test Vans)

Apr 05, 94

Jan 10, 95

Line Item 2 (Energy Test Equipment)

Apr 05, 94

Aug 29, 94

IFB 17841-05

Jul 15, 93

Sep 15, 93

Con 17841-05 Line Items 1 & 5
(Tap Connectors)

Dec 12, 93

Mar 25, 94

Listing of IFB'S and
Contracts Issued

CBD Date

Bid Due
Date

Contract
Award Date

Contract
Completion Date

Con 17841-05

Jul 15, 93

Sep 15, 93

Line Items 2 & 6
(Compression Splices & Tools)

Dec 12, 93

Mar 01, 94

Line Item 3
(Service Entrance Sleeves)

Dec 12, 93

Apr 06, 94

Line Item 4 (Dead End Grip)

Dec 12, 93

May 21, 94

IFB 17841-06

Jan 12, 94

Mar 28, 94

IFB 17841-06A

Aug 18, 94

Oct 26, 94

Con 17841-06A (Capacitors)

Dec 29, 94

Aug 24, 95

IFB 17841-06B

Jan 20, 95

Mar 22, 95

Con 17841-06B

Line Item 1 (Loadbreak Switches)

Aug 31, 95

Feb 29, 96

Line Item 2 (Tap Connectors)

Aug 31, 95

Mar 11, 96

Line Item 3 (L.V Material)

Aug 31, 95

Feb 01, 96

Line Item 4 (Street Lighting)

Aug 31, 95

Apr 19, 96

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<u>Listing of IFB'S and Contracts Issued</u>	<u>CBD Date</u>	<u>Bid Due Date</u>	<u>Contract Award Date</u>	<u>Contract Completion Date</u>
IFB 17841-07	Jun 03, 94	Aug 08, 94		
Con 17841-07 Line Item 1 (Electric Fork Lifts)			Jan 17, 95	Oct 25, 95
Line Item 2 (Metering & Measuring Instruments)			Jan 17, 95	Jun 12, 95
Line Item 3, 10-14 (Fault Indicators & GMC Spares)			Jan 17, 95	Jun 26, 95
Line Item 4 & 7 (Ford Spares)			Jan 17, 95	Aug 31, 95
Line Item 5,6 & 8 (Ford Spares)			Jan 17, 95	Jul 29, 95
IFB 17841-08	Oct 26, 94	Dec 28, 94		
IFB 17841-08A	Dec 11, 95	Feb 14, 96		
Con 17841-08A Line Items 1 & 2 (Communication Equipment)			Jul 29, 96	Jul 10, 97

APPENDIX I

USAID PROCUREMENT

CONTRACTS STATUS

Contract	Supplier	Committed \$	Expended	TOTAL CONTRIBUTION	
				USAID US\$	AEDC LE
SVP # 1	Esterline	24,135.20	24,135.20	12,403,265.08	71,815,485.48
CON 01	ICS	424,399.30	424,399.30		
	IMG	78,069.29	78,069.29		
CON 02A	Raychem	1,227,000.00	1,227,000.00		
	Orascom	474,000.00	474,000.00		
CON 03	Sargent	1,546,623.54	1,546,623.54		
	IMG	272,428.20	272,428.20		
CON 04A	Orascom	1,439,411.00	1,431,151.00	* Explanation of \$ 13,326.77 difference between Committed and Expended * \$ 8,260.00 Training of three days not ten as contracted. \$8,250 reduction. One item not supplied, \$10 reduction ** \$5,066.77 reduction, Liquidated Damages	
	Phoenix	933,600.00	933,600.00		
CON 05	EMSI	236,000.00	236,000.00		
	N. World	28,942.50	28,942.50		
	Ardry	76,725.00	76,725.00		
	Orascom	14,660.00	14,660.00		
CON 06A	Cooper	518,348.00	518,348.00		
CON 06B	ICS	29,937.00	29,937.00		
	G & W	1,728,032.00	1,728,032.00		
	Amr. Caribbean	8,951.55	8,951.55		
	Ardry	258,105.00	258,105.00		
CON 07	Hyster	80,419.00	75,352.23	**	
	Phoenix	121,344.00	121,344.00		
	Orascom	570,227.00	570,227.00		
	Edu System	58,085.47	58,085.47		
	Komat	101,884.38	101,884.38		
CON 08A	Phoenix	2,119,064.42	2,119,064.42		
SVP # 2	Phoenix	23,150.00	23,150.00		
SVP # 3	Phoenix	23,050.00	23,050.00		
TOTAL		12,416,591.85	12,403,265.08		

Appendix I
USAID Procurements

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APPENDIX J

AEDC CONTRIBUTION

Appendix J

	PREVIOUSLY	THIS QUARTER	CUMULATIVE TO DATE
1. IN-KIND CONTRIBUTION:			
1.1 AEDC SALARIES OF PERSONAL	914,450.90	26,434.55	940,885.45
1.2 VALUE OF LAND FOR D.Ps.	74,000.00	0.00	74,000.00
1.3 UTILIZATION OF EXISTING FACILITIES:	0.00		
1.3.1 OFFICE SPACE	216,000.00	9,000.00	225,000.00
1.3.1 OFFICE EQUIPMENT	249,807.00	0.00	249,807.00
1.3.3 OFFICE SUPPLY	18,966.07	765.55	19,731.62
1.3.4 VEHICLES	96,901.00	1,200.00	98,101.00
1.3.5 UTILITY BILLS	32,850.00	1,350.00	34,200.00
SUBTOTAL	1,602,974.97	38,750.10	1,641,725.07
2. CASH PAYMENT			
2.01 TRANSFORMERS	6,248,888.35	0.00	6,248,888.35
2.02 MEDIUM TENSION CABLES	20,132,729.97	0.00	20,132,729.97
2.03 SWITCHGEARS & CAPACITORS	9,299,713.00	0.00	9,299,713.00
2.04 LOW TENSION CABLES	14,294,831.13	663,544.30	14,958,375.43
2.05 JUNCTION BOXES	1,782,000.00	0.00	1,782,000.00
2.06 LAND AND/OR BUILDINGS	1,134,669.60	0.00	1,134,669.60
2.07 CONSTRUCTION SERVICES	8,542,364.58	0.00	8,542,364.58
2.08 CONSTRUCTION EQUIPMENT & MACHINERY:	3,137,125.74	0.00	3,137,125.74
2.09 CONSTRUCTION VEHICLES	1,091,550.00	0.00	1,091,550.00
2.10 BUILDING RENTAL	440,555.00	15,000.00	455,555.00
2.11 UTILITY BILLS	66,480.20	1,664.40	68,144.60
2.12 TOOLS	19,451.40	0.00	19,451.40
2.13 HARDWARE & CABLE ACCESSORIES	2,242,579.64	0.00	2,242,579.64
2.14 11k.v FAULT INDICATORS	217,668.00	0.00	217,668.00
2.15 TRAVEL AND RELATED EXPENSES	160,067.62	25,451.50	185,519.12
2.16 UTILIZATION OF EXISTING FACILITIES:			
2.16.1 OFFICE COSTS	182,744.74	2,542.83	185,287.57
2.16.2 MISCELLANEOUS	297,173.31	8,915.91	306,089.22
2.16.3 OUT OF POCKET	156,119.74	3,565.45	159,684.19
2.16.4 VEHICLES RENTAL	6,365.00	0.00	6,365.00
SUB TOTAL	69,453,076.02	720,684.39	70,173,760.41
GRAND TOTAL	71,056,050.99	759,434.49	71,815,485.48

I CERTIFY THAT AEDC HAS PROVIDED IN-KIND CONTRIBUTION FOR THE PROJECT AS LISTED IN ITEM 1 ABOVE. FURTHERMORE, I CERTIFY, THAT AEDC HAS PAID THE TOTAL CUMULATIVE TO DATE FOR PAYMENTS FOR EQUIPMENT SPECIFIED IN ITEM 2 ABOVE

SIGNATURE

Project 263-0194 in kind contributions by AEDC thru June 30, 1997

APPENDIX K

AEDC SHIPMENT REPORT

In The Name of God

ALEXANDRIA ELECTRICITY
DISTRIBUTION COMPANY
9, Sidi El-Metwally Str.
Alexandria - EGYPT.



Telephone :
4935727 - 4914364
Telex :
54563 ECOAL UN

Alex. 1938

June 5, 1997

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

Att.: Mr. Hossam Ismail, P.E.
Project Officer.

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

Sub: Project Materials

Dear Sir:

As per your request, attached is Report on Shipments of Materials
purchased under USAID Grant # 263/0194.01.

Please contact me should you have any questions.

Very truly yours,

M. Deif

Milad Deif
Manager for Modernization and Integration

cc: Chairman
M K Zaki
M Sabbagh
M Refaat
O H Oskvig
N Hariri

file: 14.0232
pc file: usaid.cai

1. P. 5/51

REPORT ON SHIPMENT OF MATERIALS PURCHASED UNDER USAID GARANT # 263/0194

Contract # 17841	Supplier	Contract Subject	Line Item	Contract Amount	Amend. No.	Amend. Date	Amend. Amount	B/L #	B/L Date	Vessel's Name	Invoice Number	Invoice Date	Invoice Amount
01	ICS	Spare Parts & Hyd. Comp. Tools	1 + 2	440,095.98	# 2	12/09/92	439,626.65	052M12667 009M24182 707 220-9618 6366	05/27/93 03/12/93 04/22/93 09/29/93	Sheldon Lykes Mason Lykes Green Island Lufthansa	EG2 0830-3 EG2 C8301 EG2 0830-2 EG2 0830-4	06/01/93 03/15/93 04/14/93 09/15/93	149,846.81 96,404.49 193,375.35 ***
	IMG	Fiber Glass Ladder	3	82,178.20				56574 016M08725	05/21/93 04/29/93	Lufthansa Charlotte Lykes	5693/2992/8 4593/2992/8	05/20/93 04/20/93	*** 82,178.20
02A	Raychem	11kV XLPE Splices Term.	1 + 2	1,227,000.00				052M14637 052M15460 MARM00484	06/23/94 09/10/94 07/05/95	Sheldon Lykes Sheldon Lykes Thompson Lykes	RVC25047 RVC32015 RVC53532	06/06/94 07/27/94 07/21/94	378,166.50 493,186.80 355,646.70
	Orascom	Fault Indicators	3	474,000.00				052M14729 052M14897	05/01/94 05/26/94	Sheldon Lykes Margaret Lykes	1517 1534	04/26/94 05/23/94	189,423.00 284,577.00
03	Sargent	Arial Lift Trucks & Hyd. Crane Trucks	1 + 2	1,546,661.23	# 1	11/17/93	1,546,623.54	9042822 992501440 22803 G12595 338 & 16281 16548	05/18/94 08/19/94 12/09/93 11/26/93 10/29/93 12/31/93	Air Express Air Express Export Freedom Argonaut Export Freedom Resolute	2457/94108 2457/94184 2457/93149 2457/93141A 2457/93138 2457/93186	05/18/94 08/19/94 31/04/93 11/26/93 10/30/93 12/31/93	*** *** 350,742.56 528,450.00 604,784.05 62,646.93
	IMG	Diesel Forklifts	3	272,428.20				512/22533173 A 16671	07/02/94 01/20/94	Royal Jordanian Freedom	5694/2793/8 16193/2793/8	06/30/94 12/21/93	*** 272,428.81

*** Shortage Compensated (No Charge)

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SW

REPORT ON SHIPMENT OF MATERIALS PURCHASED UNDER USAID GARANT # 203/0194

Contract# 17841	Supplier	Contract Subject	Line Item	Contract Amount	Amend. No.	Amend. Date	Amend. Amount	B/L #	B/L Date	Vessel's Name	Invoice Number	Invoice Date	Invoice Amount	
04A	Orascom	Test Equipment & Van	1,3,6, & 8	1,439,411.00				A17808	11/05/94	Export Patriot	1596	11/11/94	848,081.00	
								12/74953760	05/01/96	KLM	D42996	04/29/96	***	
								A19822	06/12/95	Argonaut	D111395A	06/12/95	***	
								01593781652	11/14/95	TWA CARGO	D111395B	11/14/95	***	
								512/26173836	08/28/95	Air-Jordan	011520-00	08/24/95	***	
								024653	04/02/95	Argonaut	1671	04/11/94	294,600.00	
								1595782551	12/15/94	TWA	1623	12/15/94	16,614.00	
		A18102	01/09/95	Argonaut	1631	01/10/95	266,606.00							
		Training												
		13,500.00												
	Phoenix	Energy Test Equip. Training	2	933,600.00				04EM04202	09/03/94	Howell Lykes	94-208	08/29/94	921,600.00 12,000.00	
05	EMSI	Tap Connectors & Miscellaneous L.T.	1 + 5	236,000.60				009M28085	03/12/94	Sheldon Lykes	AP072	03/03/94	61,400.00	
								009M28349	04/01/94	Margaret Lykes	T448F	03/23/94	113,200.60	
								009M28088	03/29/94	Margaret Lykes	AP072B	03/25/94	61,400.00	
	N. World	Comp. Splices	2 + 6	28,942.50				55	03/16/94	S/S Sam Houston	SHC-8402	03/01/94	28,942.50	
	Ardry	Sleeve Service Entrance	3	76,725.00				GE-94155	04/09/94	S.L. Performance	4640	04/06/94	76,725.00	
Orascom	Dead End Grip	4	14,660.00				17134	05/21/94	Argonaut	1528	05/21/94	14,660.00		
06A	Cooper	Capacitors & & Accessories	1 + 2	518,348.00				C16217	03/09/95	Resolute	542751/542752	08/24/95	89,845.00	
								C15873	06/30/95	Freedom	520131/520132	06/23/95	428,503.00	
								125/69504783	03/21/96	British Air	614133	31/12/96	***	

*** Shortage Compensated (No Charge)

Appendix K3

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REPORT ON SHIPMENT OF MATERIALS PURCHASED UNDER USAID GARANT # 263/0194

Contract#	Supplier	Contract Subject	Line Item	Contract Amount	Amend. No.	Amend. Date	Amend. Amount	B/L #	B/L Date	Vessel's Name	Invoice Number	Invoice Date	Invoice Amount
06B	G&W	11 Load Break Switches	1	1,728,032.00				057-2124 6536	04/12/96	Air France	G81835-5	04/09/96	***
								400-6485 3261	08/22/96	Fedex	G-85548-2	08/20/96	***
								AM4567	03/14/96	Resolute/86	G81835-4	02/29/96	225,054.00
								AM4549	03/04/96	Argonaut/146	G81835-3	02/19/96	656,422.00
								077-1769 4493	02/23/96	Egypt Air	G81835-Repl.	02/22/96	***
								AM4365	02/07/96	Exp. Patriot	G81835-2	02/02/96	454,946.00
								AM4079	12/17/95	Exp. Freedom	G81835-1	12/01/95	391,610.00
	ICS	Tap Connectors	2	29,937.00				20322	03/18/96	Export Patriot	EG5 0900	03/11/96	29,937.00
	Ardry	Miscellaneous L.V. Materials	3	258,105.00				7484183582	05/02/96	DHL	502	05/02/96	***
								017128	03/02/96	Argonaut	7998	02/01/96	135,905.00
								C16558	11/18/96	Resolute	7785	11/17/95	122,200.00
	Amer. & Caribbean	Street Lighting	4	9,690.75				057-5663.2004	04/28/96	Air France	961089	04/19/96	9,690.75

*** Shortage Compensated (No Charge)

405 SF

REPORT ON SHIPMENT OF MATERIALS PURCHASED UNDER USAID GARANT # 263/0194

Contract # 17841	Supplier	Contract Subject	Line Item	Contract Amount	Amend. No.	Amend. Date	Amend. Amount	B/L #	B/L Date	Vessel's Name	Invoice Number	Invoice Date	Invoice Amount
07	Hyster	Electric Forklifts	1	80,419.14				218501 20/92533335	10/30/95 09/20/96	Adable Lykes Lufthansa	- 14-93286	10/25/95 09/20/96	80,419.1- ***
	Phoenix	Metering & Measuring Instrument	2	121,344.00				182	12/18/95	Green Island	272-95	06/12/95	30,699.60
								20/8677144	10/13/95	Lufthansa	85-428-A	04/15/95	***
								12	07/11/95	Robert Lee	95-256	03/11/95	90,644.46
Orascom	Fault Indicators	3,10 - 14	570,227.00				MARM01198	07/26/95	Howell Lykes	1725	06/26/95	165,592.00	
							MARM01222	07/26/95	Howell Lykes	1741	06/26/95	404,635.00	
	EduSystem	Spares for Ford Ranger	4 + 7	58,085.47				21207152	09/07/95	Argonaut	4731	08/31/95	58,085.47
	Komal	Spares for Ford Ranger	5, 6, & 8	101,884.38				MAR01486 400/0882-5723	08/13/95 03/22/92	Jean Lykes Air Way	KAO-514EGP KAO-514EGP	07/29/95 03/22/96	101,884.38 ***
08A	Phoenix	Mobile Communi. System	1, 2	2,119,064.42				22549	07/11/96	Export Patriot	256/96	10/19/96	286,853.40
								2012	12/29/96	Resolute	288/96	10/12/96	627,242.02
								158265-4250	02/02/97	TWA	16197	01/31/97	610,560.00
								15	03/24/97	Robert Lee	56/97	03/14/97	261,840.00
								32	03/29/97	Robert Lee	32/97	02/27/97	284,448.00
		Training										48,121.00	
SVP # 1	EstelLine	Test Equipment	1	24,411.00				2210477	12/26/97	Circle Freight TWA	43583-00	-	24,411.00

Appendix K5

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APPENDIX L

AEDC MATERIAL REPORT

**BALANCE OF MATERIALS
PURCHASED BY USAID
PROJECT 263/194.01
AS OF 15/4/1997**

Line Item General No. Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)	
							Unit	Total			
4.6.2.1 Spare Parts For New 15 Ton Hydraulic Compression Tool											
1	Die Release Spring	7/3/7			10	10	10	\$ 2.06	\$ 20.60	10	20.6
2	Die Pin - W Spring Action	7/3/9			15	15	10	\$ 84.33	\$ 1,264.95	10	843.3
3	Boot Retaining Spring	7/3/10			0	0	12	\$ 34.45	\$ 0.00	12	413.4
4	Back Up Washer	7/3/11			0	0	20	\$ 5.76	\$ 0.00	20	115.2
5	Retainer Ring	7/3/12			0	0	25	\$ 0.60	\$ 0.00	25	15
6	New From G.T. Ring	7/3/13			45	45	7	\$ 11.78	\$ 530.10	7	82.46
7	Die Pin Guide	7/3/15			20	20	20	\$ 18.54	\$ 370.80	20	370.8
8	Ram Boot				0	0	0	\$ 18.87	\$ 0.00	0	0
9	Ram Guide Pin	7/3/17			0	0	20	\$ 12.46	\$ 0.00	20	249.2
10	Die Release Button Cover				0	0	0	\$ 10.31	\$ 0.00	0	0
11	Cover Retaining Spring				0	0	0	\$ 4.28	\$ 0.00	0	0
12	Die Pin Guide				0	0	0	\$ 17.90	\$ 0.00	0	0
13	New From "O" Ring	7/3/22			100	100	10	\$ 7.29	\$ 729.00	10	72.9
14	New From Compression Spring	7/3/24			12	12	5	\$ 46.99	\$ 563.88	5	234.95
15	New From Ram				6	6	0	\$ 102.33	\$ 613.98	0	0
16	All Weather Hydraulic Fluid				0	0		\$ 24.08	\$ 0.00	0	0
17	Quick Connect Coupling Male	7/3/27			10	10	9	\$ 9.77	\$ 97.70	9	87.93
18	Quick Connect Coupling Female	7/3/28			10	10	10	\$ 21.78	\$ 217.80	10	217.8
Total Price Item 4.6.2.1 (Item 1 Through 18)								\$ 4,408.81		2,723.54	

4.6.2.2 Spare Parts For New Foot Pump

1	Pump Block Support Assembly (KEY NO. 2 & 3)	7/5/2			8	8	1	\$ 197.46	\$ 1,579.68	1	197.46
2	Pump Block Assembly (KEY NO. 5,6 & 26 Thru 55)	7/5/4			10	10	4	\$ 554.15	\$ 5,541.50	4	2216.6
3	Injector Assembly (KEY NO. 32 Thru 40)				10	10	0	\$ 316.05	\$ 3,160.50	0	0
4	Pressure Release Assembly (KEY NO. 27,39 & 50 Thru 55)				15	15	0	\$ 177.29	\$ 2,659.35	0	0
5	"O" Ring 2-1/8 x 2-3/8 x 1/8 in. (KEY NO. 10)	7/5/7			100	100	100	\$ 3.29	\$ 329.00	100	329
6	"O" Ring 1/4 x 3/8 x 1/16 in. (KEY NO. 14)	7/5/8			100	100	100	\$ 3.29	\$ 329.00	100	329
7	Copper Washer (key No. 32)	7/5/9			40	40	40	\$ 3.13	\$ 125.20	40	125.2

Bidder's Names : ICS

4.6.2 Spare Parts For New Tools

Contract Documents 17841-01

Line Item General No. Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
							Unit	Total		
8 *O*Ring 3/8 x 9/16 x 3/32 in. (Key No. 33)	7/5/10			100	100	100	\$ 0.60	\$ 60.00	100	60
9 Backup Ring 3/8 x 9/16 in. (Key No. 34)	7/5/12			50	50	50	\$ 1.86	\$ 93.00	50	93
10 *O*Ring 15/16 x 1-3/16 x 1/8 in. (Key No. 36)	7/5/16			100	100	100	\$ 1.26	\$ 126.00	100	126
11 Backup Ring 15/16 x 1-3/16 in. (Key No. 37)	7/5/14			50	50	50	\$ 3.35	\$ 167.50	50	167.5
12 *O*Ring 1/2 x 5/8 x 1/16 in. (Key No. 50)	7/5/15			100	100	100	\$ 0.71	\$ 71.00	100	71
13 *O*Ring 1/8 x 1/4 x 1/16 in. (Key No. 53)	7/5/13			100	100	100	\$ 0.49	\$ 49.00	100	49

Total Price Item 4.6.2.2 (Items 1 Through 13)

\$ 14,290.73

3,763.76

4.6.2.3 Spare Parts For New 12 Ton Hand-Operated Hydraulic

1 Top Die Holder And Head Kit	7/2/2			30	30	30	\$ 347.88	\$ 10,436.40	30	10436.4
2 Bottom Die Holder And Cylinder	7/2/3			30	30	20	\$ 213.92	\$ 6,417.60	20	4278.4
3 Set Screw (10c x 25 SCHS)	7/2/4			30	30	30	\$ 0.75	\$ 22.50	30	22.5
4 Lock Washer (10 NW)	7/2/16			80	80	80	\$ 0.11	\$ 8.80	80	8.8
5 Set Screw	7/2/17			75	75	75	\$ 0.66	\$ 49.50	75	49.5
6 Main Cylinder *O* Ring (PT-10177)	7/2/18			400	400	400	\$ 0.92	\$ 368.00	400	368
7 Main Cylinder Teflon Back Up Ring	7/2/19			400	400	400	\$ 2.98	\$ 1,192.00	400	1192
8 Cap Screw	7/2/20			75	75	75	\$ 11.96	\$ 897.00	75	897
9 Small Pump *O* Ring (PT 11544)	7/2/21			350	350	350	\$ 5.24	\$ 1,834.00	350	1834
10 Small Pump Teflon Backup Ring	7/2/22			350	350	350	\$ 0.48	\$ 168.00	350	168
11 Plunger	7/2/23			35	35	35	\$ 16.63	\$ 582.05	35	582.05
12 Cylinder Release Kit	7/2/24			75	75	75	\$ 9.21	\$ 690.75	75	690.75
13 Cylinder Release Plunger	7/2/25			60	60	60	\$ 6.17	\$ 370.20	60	370.2
14 Reservoir Piston Packing Quad Ring No. MR-Q101	7/2/26			75	75	75	\$ 3.27	\$ 245.25	75	245.25
15 Overload Valve Assembly	7/2/27			45	45	45	\$ 68.34	\$ 3,075.30	45	3075.3
16 Release Trigger	7/2/28			50	50	50	\$ 2.62	\$ 131.00	50	131

Total Price Item 4.6.2.3 (Items 1 Through 17)

\$ 26488.4

24,349.15

Bidder's Names : ICS

4.6.2 Spare Parts For New Tools

Contract Documents 17841-01

Line Item General No. Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)	
							Unit	Total			
4.6.2.4 Spare Parts For New Head - Operated Mechanical Compression Tool											
1	Jaw Assembly	7/4/4			10	10	0	\$ 73.69	\$ 736.90	0	0
2	Adjustable Frame Assembly	7/4/5			10	10	0	\$ 50.79	\$ 507.90	0	0
3	Non Adjustable Frame Assembly	7/4/4			10	10	0	\$ 30.73	\$ 307.30	0	0
4	Splined Shank Frame Bolt 7/16	7/4/7			60	60	0	\$ 3.10	\$ 186.00	0	0
5	Nut For Splined Shank Frame Bo	7/4/8			60	60	0	\$ 1.27	\$ 76.20	0	0
6	Die Button				40	40	0	\$ 0.27	\$ 10.80	0	0
7	Die Pin				40	40	0	\$ 1.45	\$ 58.00	0	0
8	Die Release Spring				40	40	0	\$ 0.27	\$ 10.80	0	0
9	Adjusting Gauge				2	2	0	\$ 25.21	\$ 50.42	0	0
Total Price Item 4.6.2.4 (Items 1 Through 9)									\$ 1,944.32	0	0

4.6.2.6 Spare Parts For New One Head - Operated

1	Handle Insulation				50	50		\$ 2.03	\$ 101.50	0	0
2	Pawl				100	100		\$ 1.69	\$ 169.00	0	0
3	Check Pawl Spacer				60	60		\$ 0.31	\$ 18.60	0	0
4	Handle Pawl Pivot Pin				20	20		\$ 2.41	\$ 48.20	0	0
5	Frame Pawl Pivot Pin				20	20		\$ 2.41	\$ 48.20	0	0
6	Jaw Return Spring				20	20		\$ 3.24	\$ 64.80	0	0
7	Return Handle Spring				45	45		\$ 1.11	\$ 49.95	0	0
8	Drive & Check Pawl Spring				45	45		\$ 0.84	\$ 37.80	0	0
9	Retainer Ring (3/8)				150	150		\$ 0.27	\$ 40.50	0	0
10	Retainer Ring (1/4)				150	150		\$ 0.27	\$ 40.50	0	0
11	Friction Strap Spring				45	45		\$ 1.18	\$ 53.10	0	0
12	Friction Strap Assembly				45	45		\$ 1.71	\$ 76.95	0	0
13	Indentor Nose Shim				40	40		\$ 1.54	\$ 61.60	0	0
14	Handle Spacer				30	30		\$ 0.49	\$ 14.70	0	0
15	Retainer Ring (13/32)				100	100		\$ 0.27	\$ 27.00	0	0
16	Pressure Sensitive Lable				30	30		\$ 0.95	\$ 28.50	0	0
17	Shoulder Pin				45	45		\$ 0.86	\$ 38.70	0	0
18	4-40x1/4 Lg Heat Treated Socket Head Cap Screw				45	45		\$ 0.27	\$ 12.15	0	0
Total Price Item 4.6.2.6 (Items 1 Through 18)									\$ 931.75	0	0

Appendix L4

Bidder's Names : ICS

Line No.	Item Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
4.6.3.1 Spare Parts For Existing 15 Ton Hydraulic Compression Tool											
1	Die Release Spring	7/3/7			15	15	1	\$ 2.06	\$ 30.90	1	2.06
2	Die Pin	7/3/9			15	15		\$ 62.38	\$ 935.70	0	0
3	Boot Retaining Spring	7/3/10			30	30	16	\$ 34.45	\$ 1,033.50	16	551.2
4	Back Up Washer	7/3/11			50	50		\$ 5.76	\$ 288.00	0	0
5	Retaining Ring	7/3/12			50	50		\$ 0.60	\$ 30.00	0	0
6	G.T. Ring	7/3/13			50	50	31	\$ 6.64	\$ 332.00	31	205.84
7	Die Pin Guide	7/3/15			50	50		\$ 18.54	\$ 927.00	0	0
8	Ram Boot				25	25	14	\$ 18.87	\$ 471.75	14	264.18
9	Ram Guide Pin	7/3/17			50	50		\$ 12.46	\$ 623.00	0	0
10	Die Release Button Cover				20	20		\$ 10.31	\$ 206.20	0	0
11	Cover Retaining Spring				10	10		\$ 4.28	\$ 42.80	0	0
12	Die Pin Guide				10	10		\$ 17.90	\$ 179.00	0	0
13	*O* Ring	7/3/22			100	100		\$ 4.38	\$ 438.00	0	0
14	Compression Spring	7/3/24			16	16		\$ 37.47	\$ 599.52	0	0
15	Ram				10	10		\$ 89.73	\$ 897.30	0	0
16	Quick Connect Coupling (Male)	7/3/27			20	20		\$ 9.77	\$ 195.40	0	0
17	Quick Connect Coupling (Female)	7/3/28			20	20		\$ 21.78	\$ 435.60	0	0
Total Price Item 4.6.3.1 (Item 1 Through 18)								\$ 7,665.67			1,023.28

4.6.3.2 Spare Parts For Existing Foot Pump

1	Pump Block Support Assembly (KEY NO. 2 & 3)	7/5/2			4	4	0	\$ 197.46	\$ 789.84	0	0
2	Pump Block Assembly (KEY NO. 5,6 & 26 Thru 55)	7/5/4			4	4	0	\$ 554.15	\$ 2,216.60	0	0
3	Injector Assembly (KEY NO. 32 Thru 40)				10	10	0	\$ 316.05	\$ 3,160.50	0	0
4	Pressure Release Assembly (KEY NO. 27,39 & 50 Thru 55)				10	10	0	\$ 177.29	\$ 1,772.90	0	0
5	*O* Ring 2-1/8 x 2-3/8 x 1/8 in. (KEY NO. 10)	7/5/7			50	50	26	\$ 3.29	\$ 164.50	26	85.54
6	*O* Ring 1/4 x 3/8 x 1/16 in. (KEY NO. 14)	7/5/8			50	50	29	\$ 3.29	\$ 164.50	29	95.41

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Bidder's Names : ICS

Line Item General No. Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru, AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		Net Balance	Value Of Net Balance (AID PURCHASE)
							Unit	Total		
7 Copper Washer (key No. 32)	7/5/9			50	50	19	\$ 3.13	\$ 156.50	19	59.47
8 *O*Ring 3/8 x 9/16 x 3/32 in. (Key No. 33)	7/5/10			50	50	27	\$ 0.60	\$ 30.00	27	16.2
9 Backup Ring 3/8 x 9/16 in. (Key No. 34)	7/5/12			50	50	50	\$ 1.86	\$ 93.00	50	93
10 *O*Ring 15/16 x 1-3/16 x 1/8 in. (Key No. 36)	7/5/16			50	50	50	\$ 1.26	\$ 63.00	50	63
11 Backup Ring 15/16 x 1-3/16 in. (Key No. 37)	7/5/14			50	50	50	\$ 3.35	\$ 167.50	50	167.5
12 *O*Ring 1/2 x 5/8 x 1/16 in. (Key No. 50)	7/5/15			50	50	29	\$ 0.71	\$ 35.50	29	20.59
13 *O*Ring 1/8 x 1/4 x 1/16 in. (Key No. 53)	7/5/13			50	50	27	\$ 0.49	\$ 24.50	27	13.23

Total Price Item 4.6.2.2 (Items 1 Through 13) 8,838.84 613.94

4.6.3.3 Spare Parts For Existing 12 Ton Hand-Operated Hydraulic Compression Tool

1 Top Die Holder And Head Kit	7/1/2			20	20	4	\$ 283.88	\$ 5,677.60	4	1135.52
2 Bottom Die Holder And Cylinder	7/1/3			24	24	2	\$ 234.48	\$ 5,627.52	2	468.96
3 Set Screw (10c x 25 SCHS)	7/1/4			100	100	47	\$ 0.82	\$ 82.00	47	38.54
4 Lock Washer (10 NW)	7/1/5			100	100		\$ 0.27	\$ 27.00	0	0
5 Set Screw	7/1/6			100	100	13	\$ 0.66	\$ 66.00	13	8.58
6 Main Cylinder *O* Ring (PT-10177)	7/1/7			200	200	92	\$ 7.40	\$ 1,480.00	92	680.8
7 Cap Screw	7/1/8			100	100	70	\$ 4.26	\$ 426.00	70	298.2
8 Small Pump *O* Ring (PT 11544)	7/1/9			250	250	133	\$ 0.49	\$ 122.50	133	65.17
9 Small Pump Teflon Backup Ring	7/1/10			250	250	196	\$ 2.08	\$ 520.00	196	407.68
10 Plunger	7/1/11			150	150	36	\$ 17.46	\$ 2,619.00	36	628.56
11 Cylinder Release Kit	7/1/12			150	150	38	\$ 15.60	\$ 2,340.00	38	592.8
12 Cylinder Release Plunger	7/1/13			150	150	90	\$ 9.27	\$ 1,390.50	90	834.3
13 Reservoir Piston Packing Quad Ring No. MR-Q101	7/1/14			100	100		\$ 4.65	\$ 465.00	0	0
14 Overload Valve Assembly	7/1/15			100	100	41	\$ 84.33	\$ 8,433.00	41	3457.53
15 Release Trigger	7/1/16			75	75		\$ 5.09	\$ 381.75	0	0

Appendix L6

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4.6.3 Spare Parts For Existing Tools

Contract Documents 17511-01

Bidder's Names : ICS

Line Item General No. Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDCAID Project	Quantity Proc.Thru. Quantity	Total Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
						Unit	Total		

Total Price Item 4.6.3.3 (Items 1 Through 15) 29,657.87 8,616.64

4.6.3.4 Spare Parts For Existing Hand-Operated Mechanical Compression Tool

1	Jaw Assembly	7/4/4		25	25	4	\$ 73.69	\$ 1,842.25	4	294.76
2	Adjustable Frame Assembly	7/4/5		25	25	0	\$ 50.79	\$ 1,269.75	0	0
3	Non Adjustable Frame Assembly	7/4/4		25	25	19	\$ 30.73	\$ 768.25	19	583.87
4	Splined Shank Frame Bolt 7/16	7/4/7		75	75	41	\$ 3.10	\$ 232.50	41	127.1
5	Nut For Splined Shank Frame Bo	7/4/8		75	75	41	\$ 1.27	\$ 95.25	41	52.07
6	Die Bullon			20	20	0	\$ 0.27	\$ 5.40	0	0
7	Die Pin			20	20	0	\$ 1.45	\$ 29.00	0	0
8	Die Release Spring			20	20	0	\$ 0.27	\$ 5.40	0	0
9	Adjusting Gauge			2	2	0	\$ 25.21	\$ 50.42	0	0

Total Price Item 4.6.2.4 (Items 1 Through 9) 4,298.22 1,057.80

4.6.3.5 Spare Parts For Existing One-Hand-Operated Compression Tool

1	Handle Insulation	7/7/2		40	40	38	\$ 2.03	\$ 81.20	38	77.14
2	Pawl	7/7/3		150	150	132	\$ 1.69	\$ 253.50	132	223.08
3	Check Pawl Spacer	7/7/4		75	75	67	\$ 0.31	\$ 23.25	67	20.77
4	Handle Pawl Pivotal Pin	7/7/5		40	40	18	\$ 2.41	\$ 96.40	18	43.38
5	Frame Pawl Pivotal Pin	7/7/6		40	40	18	\$ 2.41	\$ 96.40	18	43.38
6	Jaw Return Spring	7/7/7		40	40	12	\$ 3.24	\$ 129.60	12	38.88
7	Return Handle Spring	7/7/8		75	75	42	\$ 1.11	\$ 83.25	42	46.62
8	Drive & Check Pawl Spring	7/7/9		75	75	42	\$ 0.84	\$ 63.00	42	35.28
9	Retainer Ring (3/8)	7/7/10		200	200	200	\$ 0.27	\$ 54.00	200	54
10	Retainer Ring (1/4)	7/7/11		200	200	200	\$ 0.27	\$ 54.00	200	54
11	Friction Strap Spring	7/7/12		75	75	42	\$ 1.18	\$ 88.50	42	49.56
12	Friction Strap Assembly	7/7/13		75	75	42	\$ 1.71	\$ 128.25	42	71.82
13	Indenter Nose Shim	7/7/14		80	80	58	\$ 1.54	\$ 123.20	58	89.32
14	Handle Spacer	7/7/15		60	60	27	\$ 0.49	\$ 29.40	27	13.23
15	Retainer Ring (13/32)	7/7/16		150	150	120	\$ 0.27	\$ 40.50	120	32.4
16	Shoulder Pin	7/7/17		75	75	40	\$ 0.86	\$ 64.50	40	34.4
17	4-40 x 1/4 Lg Heat Treated Socket Head Cap Screw	7/7/18		90	90	73	\$ 0.27	\$ 24.30	73	19.71

Total Price 4.6.3.5 (Item 1 Through 18) \$ 1,433.25 946.97

Appendix L7

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Bidder's Names : ICS

Line Item General No. Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)	
							Unit	Total			
4.8.3.1 Compression Tools, Accessories And Spare Parts											
1	15 Ton Remole Head Hydraulic Compression Tool	7/5/1			20	20	0	\$ 1,260.47	\$ 25,209.40	0	0
2	Fool Pump for Die Head For Item 1 Above	7/5/5			20	20	0	\$ 701.82	\$ 14,036.40	0	0
3	Adaptor To Allow Dies To Be Universal For Item 1 Above	7/3/4			25	25	5	\$ 245.40	\$ 6,135.00	5	1227
4	Insulated Hose, 3.040m (10ft) For Item 1 Above	7/3/5			30	30	0	\$ 161.08	\$ 4,832.40	0	0
5	Die For 400mm 2 Cable For Item 1 Above.	7/6/8			30	30	9	\$ 138.84	\$ 4,165.20	9	1249.56
6	12 Ton Hand Operated, Hydraulic Compression Tool	7/2/1			150	150	27	\$ 630.78	\$ 94,617.00	27	17031.06
7	Set Of Mixed Dies For Item 6	7/2/5			180	180	53	\$ 594.18	\$ 106,952.40	53	31491.54
8	Force Test Guage For Item 6 Calibrated Dial Indicates Force And Acceptable Range Complete With Blank U Dies And Instruction Manual	7/2/29			5	5	2	\$ 793.13	\$ 3,965.65	2	1586.26
9	Force Test Guage For Item 1 Calibrated Dial Indicates Force And Acceptable Range Complete With Blank U Dies And Instruction Manual	7/2/29			3	3	0	\$ 793.13	\$ 2,379.39	0	0
10	Hand-Operated, Mechaincal Compression Tool	7/4/1			110	110	12	\$ 187.59	\$ 20,634.90	12	2251.08
11	Die Insert For item 10	7/4/2			100	100	24	\$ 37.11	\$ 3,711.00	24	890.64
12	Die Insert For Item 10	7/4/3			100	100	24	\$ 52.82	\$ 5,282.00	24	1267.68
13	One-Hand Operated, Mechanical Compression Tool	7/7/1			180	180	54	\$ 242.23	\$ 43,601.40	54	13080.42
14	Die Adaptor set For Burndy Y46 U Dies	7/6/18			10	10	8	\$ 177.71	\$ 1,777.10	8	1421.68
15	Die Insert For Y46 (400 mm ²)	7/6/5			8	8	5	\$ 148.10	\$ 1,184.80	5	740.5
16	Die Insert For Y46 (300 mm ²)	7/6/17			8	8	8	\$ 148.10	\$ 1,184.80	8	1184.8
Total Price Item 4.8.3.1 (Item 1 Through 17)								\$ 339,668.84			73,422.22

CONTRACT 17841-01

FIBER GLASS LADDER

LINE ITEM (3)

BIDDER'S NAME: IMG

Bidder's Names : IMG

4.6.4 Spare Parts For New Ladders

Line Item General No. Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)	
							Unit	Total			
4.6.4.1 Spare Parts For New (2*5.5m)Fiberglass Ladder											
01	17/1/6			100	100	12	\$	387.15	\$ 38,715.00	12	4645.8
4.6.4.2 Spare Parts For New (2*6m)Fiberglass Ladder											
01	17/1/6			100	100	52	\$	412.92	\$ 41,292.00	52	21471.84
Total Price Item 4.6.4.1 - Price Item 4.6.4.2								80,007.00			

01	Top Rail CAP Ril Ext	17/1/36			20	20	20	\$	3.95	\$ 79.00	20	79
02	Top Rail CAP LH Ext	17/1/36			20	20	20	\$	3.95	\$ 79.00	20	79
03	Top Rail CAP RH Base	17/1/36			20	20	20	\$	3.95	\$ 79.00	20	79
04	Top Rail CAP LH Base	17/1/36			20	20	20	\$	3.95	\$ 79.00	20	79
05	Bottom Rail Cap RH Ext	17/1/36			20	20	20	\$	3.95	\$ 79.00	20	79
06	Bottom Rail Cap LH Ext	17/1/36			20	20	10	\$	3.95	\$ 79.00	10	39.5
07	Chose Assy RH	17/1/38			24	24	24	\$	19.06	\$ 457.44	24	457.44
08	Chose Assy LH	17/1/38			24	24	23	\$	19.06	\$ 457.44	23	438.38
09	Extension Support RH	17/1/37			16	16	16	\$	19.06	\$ 304.96	16	304.96
010	Extension Support LH	17/1/37			16	16	14	\$	19.06	\$ 304.96	14	266.84
011	Pulley Assembly	17/1/39			20	20	16	\$	8.62	\$ 172.40	16	137.92
Total Price Item 4.6.4.1 - Price Item 4.6.4.2 (Item 1 Through 11)								\$ 2,171.20		2,040.04		

TOTAL CIP DOLLAR AMOUNT

\$ 82,178.20

CONTRACT 17841-2A

FAULT INDICATOR

LINE ITEM (3)

BIDDER'S NAME: ORASCOM

Appendix L11

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PART C. DELIVERY
C.3: ITEMIZED BID PRICE SCHEDULE

Contract 17841-02A
 Cable Accessories
 Port Of Alexandria EGYPT

Bidder's Name: ORASCOM OF AMERICA

Line Item General No. Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quant. Proc. Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
							Unit	Total		
3 Fault Indicators										
3A01 Fault Indicators Normal Leads	16/1/35			3250	3250	0	\$ 117	\$ 380250	0	0.00
3A02 Fault Indicators Longer Leads	16/1/35			750	750	0	\$ 125	\$ 93750	0	0.00

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.

TOTAL PRICE ITEM (ITEMS 01-02)

\$ 474000

CONTRACT 17841-2A

CABLE ACCESSORIES

LINE ITEM (1, 2)

BIDDER'S NAME: RAYCHEM

Appendix L13

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**PART C: DELIVERY
C.3:ITEMIZED BID PRICE SCHEDULE**

Contract 17841-02A
Cable Accessories
Port Of Alexandria EGYPT

Bidder's Name: RAYCHEM

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quant. Proc. Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
1	Medium Voltage XLPE Splicing and Termination Kits										
Sub Line											
Item 1A01	11kV XLPE Splices Splice 11kv 1 x 400mm ²	3/1/12	2250		2500	4750	2480	\$ 69.75	\$ 174375	230	16,042.50
1A02	Splice 11kv 1 x 240mm ²	3/1/36			60	60	55	\$ 69.75	\$ 4185	55	3,836.25
1A03	Splice 11kv 3 x 300mm ²	3/1/69			100	100	100	\$ 199	\$ 19900	100	19,900.00
1A04	Splice 11kv 3 x 240mm ²	3/1/3		1100	3500	4600	1490	\$ 167.5	\$ 586250	390	65,325.00
1A05	Splice 11kv 3 x 150mm ²	3/1/4			250	250	222	\$ 167.5	\$ 41875	222	37,185.00
	20kV XLPE Splices										
1A06	Splice 20kv 1-400mm ²	Borg			20	20	20	\$ 138	\$ 2760	20	2,760.00
1A07	Splice 20kv 3-240mm ²	Borg			500	500	500	\$ 228.5	\$ 114250	500	114,250.00
	11kV Indoor Terminations										
1B01	Termination 11kv Indoor 1x400mm ²	3/1/37		3000	2000	5000	1680	\$ 23	\$ 46000	0	0.00
1B02	Termination 11kv Indoor 1x240mm ²	3/1/71			18	18	18	\$ 21	\$ 378	18	378.00
1B03	Termination 11kv Indoor 3x300mm ²	3/1/70			30	30	30	\$ 95	\$ 2850	30	2,850.00
1B04	Termination 11kv Indoor 3x240mm ²	3/1/18		1400	2250	3650	400	\$ 71.5	\$ 160875	0	0.00
1B05	Termination 11kv Indoor 3x150mm ²	3/1/75			100	100	70	\$ 71.5	\$ 7150	70	5,005.00
1B06	Termination 11kv Indoor 1x95mm ²	3/1/48		50	150	200	60	\$ 18	\$ 2700	10	180.00
1B07	Termination 11kv Indoor 1x50mm ²	3/1/47	1000	150	1400	2550	3	\$ 14	\$ 19600	0	0.00
	11kV Outdoor Termination										
1B08	Termination 11kV Outdoor 3x240mm ²	3/1/74			250	250	173	\$ 139	\$ 34,750.00	173	24,047.00
	20kV Indoor Terminations										
1B09	20kV Indoor Terminal 1x400mm ²	Borg			60	60	60	\$ 43	\$ 2580	60	2,580.00
1B10	20kV Indoor Terminal 3x240mm ²	Borg		100	400	500	400	\$ 95	\$ 38000	300	28,500.00
	20kV Outdoor Terminations										
1B11	20kV Outdoor Terminal 1x400mm ²	Borg			60	60	60	\$ 54	\$ 3240	60	3,240.00
1B12	20kV Outdoor Terminal 3x240mm ²	3/1/49			100	100	75	\$ 150	\$ 15000	75	11,250.00
TOTAL PRICE ITEM (ITEMS 01-12)									\$ 1,276,718.00		337,328.75

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.

2	11KV XLPE/OLP Transition Splices										
Item	Splices 11KV XLPE/OIP 3*240 mm ²	Borg			25	25	13	\$ 600	\$ 15000	13	7,800.00
TOTAL PRICE ITEMS									\$ 1291718		
DISCOUNT									64718		
TOTAL CIP DOLLAR AMOUNT									\$ 1,227,000.00		

Appendix L14

CONTRACT 17841-3

ARIAL LIFT TRUCKS & HYDRAULIC CRANE TRUCKS

LINE ITEM (1, 2)

BIDDER'S NAME: SARGENT

Appendix L15

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4.6.2

SPARE PARTS FOR MOBILE EQUIPMENT

Contract Document 17841-03

CIF PORT OF ALEX.

Bidder's Names : Sargent

Line Item No.	Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
4.6.2.1 Spare Parts For Aerial Lift Trucks Cabs And Chassis											
1	Outer bearing cup	50/25/3			16	16	16	\$ 4.34	\$ 69.44	16	69
2	Outer bearing	50/25/2			18	18	18	\$ 11.21	\$ 201.78	18	202
3	Shoe & lining kit	50/25/7			43	43	31	\$ 86.83	\$ 3,733.69	31	2692
4	Booster,brake	50/25/6			15	15	15	\$ 148.98	\$ 2,234.70	15	2235
5	Hose assy,brake front R.H.	50/25/9			18	18	18	\$ 25.00	\$ 450.00	18	450
6	Hose assy,brake front L.H.	50/25/10			18	18	18	\$ 21.42	\$ 385.56	18	386
7	Caliper repair kit (brake)	50/25/15			43	43	39	\$ 6.75	\$ 290.25	39	263
8	Master cylinder	50/25/14			15	15	15	\$ 116.08	\$ 1,741.20	15	1741
9	Shoe and lining kit	50/25/8			43	43	33	\$ 116.68	\$ 5,017.24	33	3850
10	Brake cylinder repair kit	50/25/16			43	43	43	\$ 3.00	\$ 129.00	43	129
11	Cylinder,R.H	50/25/12			23	23	21	\$ 39.26	\$ 902.98	21	824
12	Cylinder,L.H.	50/25/13			23	23	21	\$ 39.26	\$ 902.98	21	824
13	Hose assembly,brake rear L.H.	50/25/11			18	18	18	\$ 27.14	\$ 488.52	18	489
14	Seal kit P/S sector shaft	50/25/19			43	43	43	\$ 14.09	\$ 605.87	43	606
15	Seal kit P/S input shaft	50/25/20			43	43	43	\$ 15.23	\$ 654.89	43	655
16	Power steering pump	50/25/21			13	13	13	\$ 261.59	\$ 3,400.67	13	3401
17	Ring gear & pinion kit	50/25/22			9	9	9	\$ 579.83	\$ 5,218.47	9	5218
18	Pinion kit	50/25/23			9	9	9	\$ 100.20	\$ 901.80	9	902
19	Inner bearing	50/25/4			18	18	18	\$ 10.24	\$ 184.32	18	184
20	Inner bearing cup	50/25/5			18	18	18	\$ 4.91	\$ 88.38	18	88
21	Axle shaft (RH)	50/25/17			4	4	4	\$ 275.24	\$ 1,100.96	4	1101
22	Axle shaft (LH)	50/25/18			4	4	4	\$ 275.24	\$ 1,100.96	4	1101
23	Gasket kit,cyl front	50/25/24			18	18	18	\$ 24.41	\$ 439.38	18	439
24	Gasket head (PKG/2)	50/25/25			24	24	24	\$ 69.96	\$ 1,679.04	24	1679
25	Gasket set,lower	50/25/26			18	18	18	\$ 58.34	\$ 1,050.12	18	1050
26	gasket kit	50/25/27			25	25	25	\$ 286.78	\$ 7,169.50	25	7170
27	Oil pump assembly	50/25/47			15	15	15	\$ 158.67	\$ 2,380.05	15	2380

4.6.2

SPARE PARTS FOR MOBILE EQUIPMENT

Contract Document 17841,-03

CIF PORT OF ALEX.

Bidder's Names : Sargent

Line Item No.	Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
28	Gasket,oil cooler (RR)	50/25/28			18	18	18	\$ 1.85	\$ 33.30	18	33
29	Gasket,oil cooler (FR)	50/25/29			18	18	18	\$ 1.85	\$ 33.30	18	33
30	Rear oil seal and sleeve	50/25/35			18	18	18	\$ 45.08	\$ 811.44	18	811
31	Oil filter assembly (Mult/12)	50/25/53			108	108	78	\$ 12.15	\$ 1,312.20	78	948
32	Synchronizer assembly 1&2	50/25/36			4	4	4	\$ 207.16	\$ 828.64	4	829
33	Synchronizer assembly 3&4	50/25/37			4	4	4	\$ 191.88	\$ 767.52	4	768
34	Synchronizer assembly 5&R	50/25/38			4	4	4	\$ 192.20	\$ 768.80	4	769
35	Kil, master cylinder				24	24	16	\$ 165.00	\$ 3,960.00	16	2640
36	Disc,clutch	50/25/41			60	60	46	\$ 80.20	\$ 4,812.00	46	3689
37	Clutch plate	50/25/42			60	60	55	\$ 128.54	\$ 7,712.40	55	7070
38	Slave cylinder,clutch				24	24	6	\$ 60.92	\$ 1,462.08	6	366
39	Gasket thermostat (R)	50/25/30			18	18	18	\$ 0.74	\$ 13.32	18	13
40	Gasket thermostat (L)	50/25/31			18	18	18	\$ 1.06	\$ 19.08	18	19
41	Upper hose	50/25/43			43	43	43	\$ 14.04	\$ 603.72	43	604
42	Lower hose	50/25/44			43	43	43	\$ 11.95	\$ 513.85	43	514
43	Water pump assembly	50/25/46			15	15	15	\$ 154.58	\$ 2,318.70	15	2319
44	Thermostat 192°	50/25/50			18	18	16	\$ 5.85	\$ 105.30	16	94
45	Clutch,fan	50/25/48			5	5	5	\$ 192.80	\$ 964.00	5	964
46	Alternator belt (PKG/2)	50/25/49			45	45	19	\$ 15.43	\$ 694.35	19	293
47	Fuel pump	50/25/51			18	18	18	\$ 33.62	\$ 605.16	18	605
48	Gasket fuel pump (PKG/5)	50/25/32			18	18	18	\$ 1.34	\$ 24.12	18	24
49	Gasket,intake manifold	50/25/33			18	18	18	\$ 67.48	\$ 1,214.64	18	1215
50	GSKT,exhaust manifold (PKG/2)	50/25/34			18	18	18	\$ 7.60	\$ 136.80	18	137
51	Injector assembly, fuel	50/25/52			84	84	84	\$ 68.40	\$ 5,745.60	84	5746

4.6.2

SPARE PARTS FOR MOBILE EQUIPMENT

Contract Document 17841-03

CIF PORT OF ALEX.

Bidder's Names : Sargent

Line Item No.	Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
52	Air filter element (Mull/6)	50/25/54			204	204	194	\$ 16.02	\$ 3,268.08	194	3108
53	Voltage regulator	50/25/57			18	18	10	\$ 26.33	\$ 473.94	10	263
54	Alternator	50/25/56			10	10	8	\$ 208.85	\$ 2,088.50	8	1671
55	Starter	50/25/58			9	9	9	\$ 467.05	\$ 4,203.45	9	4203
56	Glow plug	50/25/55			126	126	94	\$ 19.26	\$ 2,426.76	94	1810
57	Headlamp assembly, R.H.	50/25/63			5	5	5	\$ 149.60	\$ 748.00	5	748
58	Headlamp assembly, L.H.	50/25/64			5	5	5	\$ 149.60	\$ 748.00	5	748
59	Lamp assembly, R.H.	50/25/65			7	7	7	\$ 79.46	\$ 556.22	7	556
60	Lamp assembly, L.H.	50/25/66			7	7	7	\$ 72.26	\$ 505.82	7	506
61	Flasher Assembly	50/25/62			25	25	25	\$ 3.29	\$ 82.25	25	82
62	Shock absorber front	50/25/59			43	43	43	\$ 36.92	\$ 1,587.56	43	1588
63	Shock absorber rear	50/25/60			43	43	43	\$ 42.08	\$ 1,809.44	43	1809
Total Price Item 4.6.2.1 (Items 1 Through 63)								\$	96,480.09		87,722.99

4.6.2.2 Spare Parts For Aerial Lift Units

1	Gearbox	50/26/1			2	2	2	\$ 1,060.31	\$ 2,120.62	2	2121
2	Bucket shaft (W/A)	50/26/2			4	4	4	\$ 197.25	\$ 789.00	4	789
3	FPS#MV3NR2000-20KIP -10-10-10S	50/26/7			2	2	2	\$ 654.15	\$ 1,308.30	2	1308
4	HYD motor (charlynn 101-1042)	50/26/6			2	2	2	\$ 462.00	\$ 924.00	2	924
5	1/2-13 x 1 PIN CAP	50/26/27			34	34	34	\$ 5.06	\$ 172.04	34	172
6	Snap ring (waldes # 5160-62ZD)	50/26/36			18	18	18	\$ 0.77	\$ 13.86	18	14
7	Snap ring (waldes # 5160-175ZD)	50/26/37			18	18	18	\$ 3.81	\$ 68.58	18	69
8	Conn link #2050	50/26/39			25	25	25	\$ 2.95	\$ 73.75	25	74
9	Clevis pin 1/2x2-1/2"	50/26/38			4	4	4	\$ 2.09	\$ 8.36	4	8
10	Spacer 1/16x1-9/32x x1-3/4"	50/26/28			34	34	34	\$ 0.55	\$ 18.70	34	19
11	5/8" SAE flat washer	50/26/29			43	43	43	\$ 0.24	\$ 10.32	43	10
12	5/8" spring washer	50/26/30			43	43	43	\$ 4.09	\$ 175.87	43	176
13	5/8-18 brass nut	50/26/31			85	85	85	\$ 1.98	\$ 168.30	85	168

4.6.2

SPARE PARTS FOR MOBILE EQUIPMENT

Contract Document 17841-03

CIF PORT OF ALEX.

Bidder's Names : Sargent

Line Item No.	Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
14	Bushing	50/26/20			9	9	8	\$ 20.50	\$ 184.50	8	164
15	Bushing	50/26/21			9	9	9	\$ 19.95	\$ 179.55	9	180
16	Bushing	50/26/22			9	9	9	\$ 43.98	\$ 395.82	9	396
17	Pad piece	50/26/3			18	18	18	\$ 8.49	\$ 152.82	18	153
18	Filler cap	50/26/40			2	2	2	\$ 15.71	\$ 31.42	2	31
19	Filter element	50/26/11			43	43	42	\$ 13.40	\$ 576.20	42	563
20	Relay	50/26/15			9	9	9	\$ 25.41	\$ 228.69	9	229
21	Low pressure switch	50/26/32			9	9	9	\$ 42.81	\$ 385.29	9	385
22	Knob	50/26/34			9	9	9	\$ 13.95	\$ 125.55	9	126
23	Knob mod	50/26/35			21	21	21	\$ 12.43	\$ 261.03	21	261
24	Air cylinder	50/26/33			9	9	9	\$ 47.74	\$ 429.66	9	430
25	4-way valve	50/26/14			2	2	2	\$ 372.68	\$ 745.36	2	745
26	Idler sprocket assy W/bushin	50/26/16			9	9	9	\$ 46.51	\$ 418.59	9	419
27	Key	50/26/19			9	9	9	\$ 2.90	\$ 26.10	9	26
28	Filter element	50/26/12			43	43	43	\$ 12.78	\$ 549.54	43	550
29	Pin bearing	50/26/23			21	21	21	\$ 7.37	\$ 154.77	21	155
30	Rotation bearing	50/26/17			4	4	4	\$ 1,221.77	\$ 4,887.08	4	4887
31	Sprocket	50/26/18			9	9	9	\$ 82.83	\$ 745.47	9	745
32	Bushing	50/26/24			11	11	11	\$ 26.14	\$ 287.54	11	288
33	Valve relief	50/26/8			4	4	4	\$ 86.22	\$ 344.88	4	345
34	Rubber pad	50/26/4			9	9	9	\$ 17.95	\$ 161.55	9	162
35	Boom tie down strap	50/26/46			9	9	9	\$ 31.81	\$ 286.29	9	286
36	Cbal Valve	50/26/9			18	18	18	\$ 141.44	\$ 2,545.92	18	2546
37	Leveling cable assy 244' 1/16	50/26/42			13	13	13	\$ 260.13	\$ 3,381.69	13	3382
38	Leveling cable assy 228' LG	50/26/43			13	13	13	\$ 253.04	\$ 3,289.52	13	3290
39	Leveling slide	50/26/5			9	9	9	\$ 98.43	\$ 885.87	9	886
40	Boom leveling pulley	50/26/44			9	9	9	\$ 54.76	\$ 492.84	9	493
41	Leveling pulley	50/26/45			9	9	9	\$ 61.78	\$ 556.02	9	556
42	Bushing	50/26/25			11	11	11	\$ 20.50	\$ 225.50	11	226
43	Hydraulic cylinder bushing	50/26/26			13	13	13	\$ 10.58	\$ 137.54	13	138
44	Drive chain	50/26/41			9	9	9	\$ 46.35	\$ 417.15	9	417
45	X527-274 & X527-159	50/26/13			9	9	9	\$ 130.04	\$ 1,170.36	9	1170
Total Price Item 4.6.2.2 (Items 1 Through 50)								\$	30,511.81		30,477.91

4.6.2

SPARE PARTS FOR MOBILE EQUIPMENT

Contract Document 17841-03

CIF PORT OF ALEX.

Bidder's Names : Sargent

Line Item No. Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
							Unit	Total		
1 Drum	50/27/3			6	6	6	\$ 193.50	\$ 1,161.00	6	1161
2 Inner cup	50/27/5			12	12	12	\$ 17.68	\$ 212.16	12	212
3 Outer bearing	50/27/4			12	12	12	\$ 20.76	\$ 249.12	12	249
4 Outer cup	50/27/7			12	12	12	\$ 23.14	\$ 277.68	12	278
5 Outer bearing	50/27/6			12	12	12	\$ 31.56	\$ 378.72	12	379
6 Inner cup	50/27/9			12	12	12	\$ 28.90	\$ 346.80	12	347
7 Inner bearing	50/27/8			12	12	12	\$ 43.36	\$ 520.32	12	520
8 Shoe and lining kit front	50/27/14			19	19	19	\$ 452.94	\$ 8,605.86	19	8606
9 Hose assembly front brake R.H.	50/27/16			6	6	6	\$ 25.74	\$ 154.44	6	154
10 Shoe and lining kit rear	50/27/15			19	19	19	\$ 190.44	\$ 3,618.36	19	3618
11 Cup	50/27/11			12	12	12	\$ 9.66	\$ 115.92	12	116
12 U-joint	50/27/17			12	12	12	\$ 107.92	\$ 1,295.04	12	1295
13 Head gasket	50/27/18			6	6	6	\$ 71.06	\$ 426.36	6	426
14 Gasket valve rocker arm cover	50/27/19			12	12	12	\$ 12.94	\$ 155.28	12	155
16 Oil pump	50/27/20			6	6	6	\$ 266.50	\$ 1,599.00	6	1599
17 Oil filter (MULT/12)	50/27/22			72	72	66	\$ 53.20	\$ 3,830.40	66	3511
18 Filter	50/27/23			55	55	55	\$ 44.12	\$ 2,426.60	55	2427
19 Disc front	50/27/12			13	13	12	\$ 139.70	\$ 1,816.10	12	1676
20 Disc plate	50/27/13			13	13	12	\$ 364.06	\$ 4,732.78	12	4369
21 Bearing clutch pilot	50/27/10			16	16	16	\$ 19.96	\$ 319.36	16	319
22 Water pump assembly	50/27/21			10	10	10	\$ 107.00	\$ 1,070.00	10	1070
23 Alternator bell(PK/2)	50/27/30			12	12	11	\$ 35.80	\$ 429.60	11	394
24 Belt	50/27/29			12	12	12	\$ 15.94	\$ 191.28	12	191
25 Fuel filter/seperator assy	50/27/26			56	56	56	\$ 126.70	\$ 7,095.20	56	7095
26 Fuel filter (PKG/2)	50/27/24			48	48	39	\$ 23.30	\$ 1,118.40	39	909
27 Fuel injector assy.	50/27/28			24	24	24	\$ 82.04	\$ 1,968.96	24	1969
28 Air element	50/27/25			72	72	67	\$ 48.48	\$ 3,490.56	67	3248
29 Rotor assembly	50/27/33			2	2	2	\$ 212.00	\$ 424.00	2	424
30 Startor assembly	50/27/32			4	4	4	\$ 223.36	\$ 893.44	4	893
31 ALternator	50/27/31			9	9	9	\$ 329.30	\$ 2,963.70	9	2964

4.6.2

SPARE PARTS FOR MOBILE EQUIPMENT

Contract Document 17841-03

CIF PORT OF ALEX.

Bidder's Names : Sargent

Line Item No.	Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
32	Shock absorber front	50/27/2			24	24	24	\$ 31.36	\$ 752.64	24	753
Total Price Item 4.6.2.3 (Items 1 Through 32)									\$ 52,639.08		95,194.83

4.6.2.4 Spare Parts For Articulating Hydraulic Crane

1	O-ring return large	50/28/1			30	30	30	\$ 4.16	\$ 124.80	30	125
2	O-ring pressure small	50/28/2			30	30	30	\$ 4.16	\$ 124.80	30	125
3	Retainer plate washer	50/28/3			24	24	24	\$ 7.48	\$ 179.52	24	180
4	spool										
5	Seal and washer spool	50/28/23			25	25	25	\$ 25.04	\$ 626.00	25	626
6	Sliding puck assembly	50/28/22			9	9	9	\$ 46.04	\$ 414.36	9	414
7	Outer boom slide pad	50/28/39			1	1	1	\$ 40.30	\$ 40.30	1	40
8	1ST stage rear slide pad	50/28/40			1	1	1	\$ 19.14	\$ 19.14	1	19
9	1ST stage side slide pad	50/28/41			3	3	3	\$ 15.28	\$ 45.84	3	46
10	1ST stage slide	50/28/37			1	1	1	\$ 24.84	\$ 24.84	1	25
11	2ND stage rear slide pad	50/28/38			1	1	1	\$ 16.00	\$ 16.00	1	16
12	Screw, HX HD 3/4 NCX4 LG	50/28/8			12	12	12	\$ 7.28	\$ 87.36	12	87
13	Spin on filter element	50/28/19			8	8	8	\$ 19.70	\$ 157.60	8	158
14	Push pull cable	50/28/33			3	3	3	\$ 46.72	\$ 140.16	3	140
15	Lift cyl counterbalance Valve	50/28/15			3	3	3	\$ 225.40	\$ 676.20	3	676
16	Adapter	50/28/28			3	3	3	\$ 2.78	\$ 8.34	3	8
17	Ell, 90Degree	50/28/29			3	3	3	\$ 27.50	\$ 82.50	3	83
18	Ell, 90Degree	50/28/30			3	3	3	\$ 17.24	\$ 51.72	3	52
19	Clamp assembly combination	50/28/34			6	6	6	\$ 10.10	\$ 60.60	6	61
20	Flow restrictor .062 Diameter	50/28/35			9	9	9	\$ 29.04	\$ 261.36	9	261
21	Flow restrictor .125	50/28/36			4	4	4	\$ 32.50	\$ 130.00	4	130

4.6.2

SPARE PARTS FOR MOBILE EQUIPMENT

Contract Document 17841-03

CIF PORT OF ALEX.

Bidder's Names : Sargent

Line Item No.	Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
22	Bushing pivot point Diameter	50/28/20			36	36	36	\$ 22.78	\$ 820.08	36	820
23	Seal kit lift cylinder	50/28/24			4	4	4	\$ 166.26	\$ 665.04	4	665
24	Seal kit outer boom cylinder	50/28/25			4	4	4	\$ 190.12	\$ 760.48	4	760
25	Seal kit outrigger	50/28/26			4	4	4	\$ 106.52	\$ 426.08	4	426
26	Seal kit extension cylinder	50/28/27			4	4	4	\$ 340.30	\$ 1,361.20	4	1361
27	Screw, HX HD 3/4 NCX6 3/4 LG	50/28/9			18	18	18	\$ 12.42	\$ 223.56	18	224
28	Extension cylinder counterbal	50/28/16			3	3	3	\$ 504.90	\$ 1,514.70	3	1515
29	Washer, flat 3/4 HVY	50/28/4			48	48	48	\$ 0.66	\$ 31.68	48	32
30	Outrigger, PO cartri- dge	50/28/17			3	3	3	\$ 86.74	\$ 260.22	3	260
31	Screw, SOC HD 3/4-NC X3 1/2 LG	50/28/10			27	27	2	\$ 20.48	\$ 552.96	2	41
32	Screw, HX HD 3/4 NCX3 1/4 LG	50/28/11			6	6	6	\$ 19.22	\$ 115.32	6	115
33	Washer, SPLK 3/4 HVY	50/28/5			36	36	36	\$ 1.16	\$ 41.76	36	42
34	Nut, HX 3/4 NC HVY	50/28/14			18	18	18	\$ 1.84	\$ 33.12	18	33
35	Screw, HX 3/8 NCX1 1/4 LG	50/28/12			18	18	18	\$ 0.24	\$ 4.32	18	4
36	Washer SP LK 3/8	50/28/6			18	18	18	\$ 0.16	\$ 2.88	18	3
37	Screw, HX HD 5/8 NCX1 1/2 LG	50/28/13			11	11	11	\$ 0.78	\$ 8.58	11	9
38	Washer, SP LK 5/8	50/28/7			9	9	9	\$ 0.10	\$ 0.90	9	1
39	Adapter, STR				6	6	6	\$ 6.16	\$ 36.96	6	37
40	Ell, 90Degree SWIVEL	50/28/32			4	4	4	\$ 8.32	\$ 33.28	4	33
41	Bushing pin 1 1/2' IDX2" LG	50/28/25			15	15	15	\$ 34.60	\$ 519.00	15	519
42	A125 Hydraulic pump	50/28/18			1	1	1	\$ 351.00	\$ 351.00	1	351
Total Price Item 4.6.2.4 (Items 1 Through 42)								\$	11,034.56		8,993.64

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4.6.2

SPARE PARTS FOR MOBILE EQUIPMENT

Contract Document 17841-03

CIF PORT OF ALEX.

Bidder's Names : Sargent

Line Item No.	Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		

4.8.3.1 Aerial Lift Trucks

1	Aerial Lift Trucks				25	25	0	\$ 40,650.00	\$ 1,016,250.00	0	0
Total Price Item 4.8.3.1 (Items 1)									1016250.00		

4.8.3.2 Articulating Hydraulic Crane Trucks

1	Articulating Hydraulic Crane Trucks				4	4	0	\$ 84,927.00	\$ 339,708.00	0	0
Total Price Item 4.8.3.2 (Items 1)									339,708.00		

CONTRACT 17841-4A

ENERGY TEST EQUIPMENT

LINE ITEM (2)

BIDDER'S NAME: PHOENIX

Part C: BID SCHEDULE

Contract Documents 178-1-04A

Bidder's Names : PHONEX MANAGEMENT & SYSTEMS

C.3: ITEMIZED BID PRICE SCHEDULE

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
2.1	Wallhour Meter Test Board (SEE SECTION E.3.1)					3	3	\$ 307,200.00	\$ 921,600.00	0.00	6.00

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CONTRACT 17841-4A

ENERGY TEST EQUIPMENT

LINE ITEM (1, 3, 6, 8)

BIDDER'S NAME: ORASCOM

Appendix L26

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PART C: BID SCHEDULE
C.3: ITEMIZED BID PRICE SCHEDULE

Contract Documents 17841-04A

Order's Name: ORASCOM OF AMERICA

Port of Alexandria EGYPT

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance AID PURCHASE
								Unit	Total		
	Electrical Test Equipment (See section E.1 and E.2)										
Sub Line .1	Portable Relay Test Sets (See section E.2.1)	16/1/53			3	3	0	\$ 16,177.00	\$ 48,531.00	0	0.00
.2	Variable Frequency Generator (See section E.2.2)	16/1/16			3	3	0	\$ 12,158.00	\$ 36,474.00	0	0.00
.3	Phase Angle Meter (See section E.2.3)	16/1/55			9	9	0	\$ 5,008.00	\$ 45,072.00	0	0.00
.4	Power System Circuit Analyzer (See section E.2.4)	16/1/56			2	2	0	\$ 7,758.00	\$ 15,516.00	0	0.00
.5	Current Transformer Burden Ammeter (See section E.2.5)	16/1/57			2	2	0	\$ 920.00	\$ 1,840.00	0	0.00
.6	Primary Injection Test Set (See section E.2.6)	16/1/58			3	3	0	\$ 11,872.00	\$ 35,616.00	0	0.00
.7	Secondary Injection Test Set (See section E.2.7)	16/1/59			3	3	0	\$ 5,777.00	\$ 17,331.00	0	0.00
.8	Phase Sequence Indicator (See section E.2.8)	16/1/60			27	27	0	\$ 210.00	\$ 5,670.00	0	0.00
.9	Portable Phase Shifter (See section E.2.9)	16/1/61			2	2	0	\$ 14,966.00	\$ 29,932.00	0	0.00
.10	Current transformer Excitation Ratio and Polarity Test Set (See section E.2.10)	16/1/62			10	10	0	\$ 7,093.00	\$ 70,930.00	0	0.00
.11	Capacitance Dissipation Factor (Power-Factor, Tan, Delta) Tester (See section E.2.11)	16/1/63			2	2	0	\$ 42,437.00	\$ 84,874.00	0	0.00
.12	Current Transformer Saturation Test Set (See section E.2.12)	16/1/64			2	2	0	\$ 14,425.00	\$ 28,850.00	0	0.00
.13	Portable Watthour Standard (See section E.2.13)	16/1/65			16	16	0	\$ 3,307.00	\$ 52,912.00	0	0.00
.14	Insulation Tester A (See section E.2.14)	16/1/66			14	14	0	\$ 7,025.00	\$ 98,350.00	0	0.00
.15	Insulation Tester B (See section E.2.15)	16/1/67			14	14	0	\$ 8,226.00	\$ 115,164.00	0	0.00
TOTAL PRICE (Items 1.1-1.15)									\$ 687,062.00		0.00

Sub Line Item .1	High Voltage Test Equipment (See Section E.1 and E.4) Megohmmeter	16/1/69			4	4	0	\$ 2,115.00	\$ 8,460.00	0	0.00
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PART C: BID SCHEDULE
C.3: ITEMIZED BID PRICE SCHEDULE

Contract Documents 17841-04A

Bidder's Name: ORASCOM OF AMERICA

Port of Alexandria EGYPT

Line Item No.	General Description	Ware House Coade #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance AID PURCHASE
								Unit	Total		
3.2	(See section E.4.1) AC\DC Hipot Tester A	16/1/68			2	2	0	\$ 3,607.00	\$ 7,214.00	0	0.00
3.3	(See section E.4.2) AC\DC Hipot Tester B	16/1/71			8	8	0	\$ 2,861.00	\$ 22,888.00	0	0.00
3.4	(See section E.4.3) Portable DC Hipot Tester	16/1/70			2	2	0	\$ 13,233.00	\$ 26,466.00	0	0.00
3.5	(See section E.4.4) Kilovoltmeter	16/1/72			2	2	0	\$ 3,132.00	\$ 6,264.00	0	0.00
3.6	(See section E.4.5) Digital Ground Resistance Tester	16/1/74			14	14	2	\$ 3,943.00	\$ 55,202.00	2	7,886.00
3.7	(See section E.4.6) Oil Test Set	16/1/75			14	14	0	\$ 4,040.00	\$ 56,560.00	0	0.00
3.8	(See section E.4.7) Cable Identifier	16/1/76			28	28	0	\$ 2,984.00	\$ 83,552.00	0	0.00
TOTAL PRICE (Items 3.1-3.8)									\$ 266,606.00		7,886.00

6	Analyzer Instruments (See Section E.1 and E.7)										
Sub Line Item											
6.1	Harmonic Analyzer (See Section E.7.1)				2	2	0	\$ 4,500.00	\$ 9,000.00	0	0.00
6.2	Notebook Computer (See section E.7.2)				2	2	0	\$ 3,525.00	\$ 7,050.00	0	0.00
TOTAL PRICE (Items 6.1-6.2)									\$ 16,050.00		

7	High Voltage Cable Testing and Fault Locating Equipment Van (See section E.1 and E.8)										
Sub Line Item											
7.1	Cable Testing and Fault Locating Equipment in a Van (See section E.8.2)				3	3	0	\$ 98,200.00	\$ 294,600.00	0	0.00
7.2	Training in Egypt (See section E.8.1E) + Days				14	14	0	\$ 750.00	\$ 10,500.00	0	0.00
7.3	Travel To and From Egypt ++ Round Trip				1	1	0	\$ 3,000.00	\$ 3,000.00	0	0.00

TOTAL PRICE (Items 7.1-7.3)

\$ 308,100.00

C.7.2. Specified Spares

\$ 161,593.00

TOTAL CIP DOLLAR AMOUNT

\$ 1,439,411.00

CONTRACT 17841-5

COMP. SPLICES, CONSTRUCTION TOOLS

LINE ITEM (2, 6)

BIDDER'S NAME: N. WORLD

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PART C: BID SCHEDULE
C.3: ITEMIZED BID PRICE SCHEDULE

IFB No. 17841-05
Overhead Conductor Accessories
CIP DESTINATION
Port of Alexandria EGYPT

Bidder's Name: NEW WORLD RESEARCH

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quant. Proc. thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		Net Blanc.	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
2	Compression Splices, Full Tension										
Sub Line	size in mm ² (AWG)										
2A01	95 mm ² (#4/0)	3/2/37	846		1,000	1846	1065	\$ 2.7600	\$ 2,760.00	219	604.44
2A02	70 mm ² (#2/0)	3/2/36	476		2,000	2476	1285	\$ 2.1500	\$ 4,300.00	809	1,739.35
2A03	35 mm ² (#2)	3/2/35	480		3,000	3480	2026	\$ 0.8125	\$ 2,437.50	1546	1,256.13
TOTAL PRICE ITEM (Item 01 - 03)									\$ 9,497.50		3,599.92

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement

6	Construction Tools and Hand Tools										
Sub Line											
6A01	Stringing block, 177.8 mm (7 in.) sheave diameter	3/5/7	10		50	60	50	\$ 94.6000	\$ 4,730.00	40	3,784.00
6A02	Nylon, 25 mm (1in.) safety webbing noose with steel ball eye fitting	3/5/8	0		200	200	200	\$ 19.9500	\$ 3,990.00	200	3,990.00
6A03	Ball oval eye	3/5/9	0		200	200	200	\$ 4.6	\$ 920.00	200	920.00
6A04	Compression Die Set, U34 ART	7/6/15	0		5	5	4	\$ 56.8	\$ 284.00	4	227.20
6A05	Compression Die Set, U35 ART	7/6/16	0		5	5	5	\$ 56.8	\$ 284.00	5	284.00
6A06	Compression Die Set U25ART	7/6/13	0		75	75	69	\$ 46.7	\$ 3,502.50	69	3,222.30
6A07	Compression Die set U28ART	7/6/14	0		75	75	75	\$ 46.7	\$ 3,502.50	75	3,502.50
6A08	Multi Purpose Pliers (Channel Lock) 12 in.				10	10	0	\$ 16.6	\$ 166.00	0	0.00
6A09	Retaining Ring Pliers Straight Tip (Convertible)				50	50	0	\$ 14.8	\$ 740.00	0	0.00
6A10	Retaining Ring Pliers 90° Angles Tip (Convertible)				50	50	0	\$ 13.4	\$ 670.00	0	0.00
6A11	Hex Key 5/64 inch		0		100	100	0	\$ 1	\$ 100.00	0	0.00
6A12	Hex Key 3/32 inch		0		100	100	0	\$ 1	\$ 100.00	0	0.00
6A13	Hex Key 1/8 inch		0		100	100	0	\$ 1	\$ 100.00	0	0.00
6A14	Hex Key 3/16		0		100	100	0	\$ 1.0000	\$ 100.00	0	0.00
6A15	Hex Key 1/4 inch		0		100	100	0	\$ 1.0000	\$ 100.00	0	0.00
6A16	Hex Key Set .050 in. to 3/8 in.		0		10	10	0	\$ 15.6000	\$ 156.00	0	0.00
TOTAL PRICE ITEM (ITEMS 01 - 16)									\$ 19,445.00		15,930.00

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PART C: AND
ITEMS

CONTRACT 17841-5

DEAD END GRIP

LINE ITEM (4)

BIDDER'S NAME: ORASCOM

Appendix L31

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PART C: BID SCHEDULE
C.3: ITEMIZED BID PRICE SCHEDULE

IFB No. 77341-00
Overhead Conductor Accessories
CIP DESTINATION
Port of Alexandria EGYPT

Bidder's Name: ORASCOM OF AMERICA

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quant. Proc. thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		Net Blanc.	Value Of Net Balance (A) PURCHASE
								Unit	Total		
1	Dead-end Grip, Preformed, for use over insulation										
4A01	Insulated aluminum Conductor, 35mm ² , 7 strands (9.65 to 9.91mm, 0.38 to 0.39 in. outside dia)	3/2/32	2600	0	6000	8600	162	\$ 2.1300	\$ 12,780.00	0	0.0
4A02	Insulated aluminum Conductor, 95 mm ² 19 strands (15.75 to 16.51mm, 0.62 to 0.65 in. outside dia)	3/2/34	1742	0	500	2242	364	\$ 3.7600	\$ 1,880.00	0	0.0
TOTAL PRICE ITEM (ITEMS 01-02)									\$ 14,660.00		

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement

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CONTRACT 17841-5

TAP CONNECTORS, MISCELLANEOUS L.V.

LINE ITEM (1, 5)

BIDDER'S NAME: EMSI

Appendix L33

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PART C: BID SCHEDULE
C.3: ITEMIZED BID PRICE SCHEDULE

Contract 17841-05
Overhead Conductor Accessories
CIP DESTINATION
Port of Alexandria EGYPT

Bidder's Name: EMSI

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quant. Proc. thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Blanc.	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
1	Tap Connectors										
Sub Line	Item										
	Run mm ² (MCM) to Tap mm ² (MCM)										
	1A01 240 mm ² (500) - 95 mm ² (# 4/0)	3/2/17	5,285		4,000	9285	2057	\$ 0.9581	\$ 3,832.40	0	0.00
	1A02 95 mm ² (#4/0) - 95mm ² (#4/0)	3/2/23	558		2,000	2558	0	\$ 0.3935	\$ 787.00	0	0.00
	1A03 95 mm ² (#4/0) - 35/16mm ² (#2/6)	3/2/25	41272		25,000	66272	12700	\$ 0.3540	\$ 8,850.00	0	0.00
	1A04 70 mm ² (#2/0) - 70mm ² (#2/0)	3/2/27	835		3,000	3835	0	\$ 0.4000	\$ 1,200.00	0	0.00
	1A05 70 mm ² (#2/0) - 35/16mm ² (#2/6)	3/2/26	61142		20,000	81142	14600	\$ 0.3693	\$ 7,386.00	0	0.00
	1A06 35mm ² (#2) - 35/16mm ² (#2/6)	3/2/28	51592		80,000	131592	0	\$ 0.2356	\$ 18,848.00	0	0.00
TOTAL PRICE ITEM (Item 01-06)									\$ 40,903.40		

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement

2	Miscellaneous Low Voltage Materials										
Sub Line	Description										
5A01	Rod, ground, copper-covered steel 16mm x 2.44m (5/8 in. x8 ft)	3/2/13	4538		20,000	24538	1119	\$ 6.1400	\$ 122,800.00	0	0.00
5A02	Clamp for 35mm ² (#2) ground wire, to 16mm (5/8 in.) ground rod	3/2/14	3021	3000	20,000	26021	1119	\$ 1.1700	\$ 23,400.00	0	0.00
5A03	Cable support grip, open split rod type, with mesh of tinned bronze with single eye, 63 mm thru 76mm (2 1/2 in. thru 3 in.) These are to be used on the communications project	3/2/39	0	0	2,000	2000	311	\$ 17.0500	\$ 34,100.00	311	5,302.55
5A04	Multi tap connector 16mm ² -50mm ² (# 6 AWG-#1/0AWG)line to 3mm ² - 10 mm ² (#12 AWG-#8 AWG) tap		0	0	1,000	1000	0	\$ 5.4700	\$ 5,470.00	0	0.00
5A05	Plastic slip - over boot for items 5A04.		0	0	1,000	1000	0	\$ 1.7300	\$ 1,730.00	0	0.00
5A06	Bronze distribution connetor 10mm ² (# 8 AWG) solid to 10 mm ² (#8 AWG) stranded		0	0	1,000	1000	0	\$ 1.3500	\$ 1,350.00	0	0.00
5A07	Bronze distribution connector 16mm ² #6 AWG) solid to 10mm ² (#8 AWG) stranded		0	0	1,000	1000	0	\$ 1.3500	\$ 1,350.00	0	0.00
5A08	Bronze grounding terminal 10mm ² (#8 AWG) solid to 16mm ² (#6 AWG stranded)		0	0	1,000	1000	0	\$ 1.3500	\$ 1,350.00	0	0.00
5A09	Connector wrench for use with items 06, 07, and 08		0	0	20	20	0	\$ 10.9600	\$ 219.20	0	0.00
5A10	Terminal connector 50mm ² (1/0 AWG) aluminum with 1/4" plated copper rod	6/7/31	0	0	500	500	500	\$ 1.8000	\$ 900.00	500	900.00
5A11	Terminal connector 95mm ²	6/7/30	0	0	200	200	198	\$ 12.1400	\$ 2,428.00	198	2,403.72

**PART C: BID SCHEDULE
C.3: ITEMIZED BID PRICE SCHEDULE**

Contract 17841-05
Overhead Conductor Accessories
CIP DESTINATION
Port of Alexandria EGYPT

Bidder's Name: EMSI

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quant. Proc. thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		Net Blanc.	Value Of Net Balance (AID PURCHASE)	
								Unit	Total			
	½" plated copper rod											
TOTAL PRICE ITEM (ITEMS 01-11)									\$	195,097.20		8,606.27

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CONTRACT 17841-5

SLEEVE SERVICE ENTRANCE

LINE ITEM (3)

BIDDER'S NAME: ARDRY

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4b

PART C: BID SCHEDULE
C.3: ITEMIZED BID PRICE SCHEDULE

IFB No. 17841-U5
 Overhead Conductor Accessories
 CIP DESTINATION
 Port of Alexandria EGYPT

Bidder's Name: ARDRY TRADING COMPANY

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quant Proc. thru AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		Net Blanc.	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
3	Sleeve, service Entrance, Insulated										
	Sub Line size in mm ² (AWG)										
3A01	16 mm ² (#6)	3/2/29	56,673	15000	150,000	221,673	114350	\$ 0.1705	\$ 25,575.00	42677	7,276.43
3A02	35 mm ² (#2)	3/2/30	0,000	35000	150,000	185,000	79500	\$ 0.1705	\$ 25,575.00	44500	7,587.25
3A03	35 mm ² (#2) - to 16 mm ² (#6)	3/2/31	2,363	30000	150000	182,363	101500	\$ 0.1705	\$ 25,575.00	69137	11,787.86
TOTAL PRICE ITEM (Item 01-03)									\$ 76,725.00		26,651.54

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement

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CONTRACT 17841-6A

CAPACITOR & ACCESSORIES

LINE ITEM (1, 2)

BIDDER'S NAME: COOPER

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Port of Alexandria, Egypt
Commodity Prices

Bidder's Name: Cooper Power Systems

Line Item General NO. Description	Ware House Code #	Balance 1/7/91	Local Proc. By	Quant. Proc. AEDCAID	Thru. Project	Total Quantity	balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)	
								Unit	Total			
C.7.2 SPECIFIED SPARE CAPACITOR BANK COMPONENTS												
01	1Ph Capacitor Units, 100 kVAR	6/7/36				30	30	30	\$ 305.00	\$ 9,150.00	30.00	9,150.00
02	25 mm ² Insulated Copper Wire (m)	16/5/260				1000	1,000	1000	\$ 1.85	\$ 1,845.00	1,000.00	1,845.00
03	1Ph Oil Switches	6/7/33	7			30	37	30	\$ 320.00	\$ 9,600.00	23.00	7,360.00
04	3Ph Fused Disconnect Switches	6/7/37				10	10	10	\$ 316.50	\$ 3,165.00	10.00	3,165.00
05	1Ph Capacitor Fuses (300 kVAR)	14/2/47				120	120	0	\$ 86.00	\$ 10,320.00	0.00	0.00

Total Price Item C.7.2 (Items 01 through 04) \$ 34,080.00 21,520.00

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.

C.7.3 SPECIFIED SPARES FOR EXISTING CAPACITOR BANKS

C.7.3.1 Vacuum Switch Spares

01	15 kV 200A Vacuum Switch	6/7/38				40	40	38	\$ 680.00	\$ 27,200.00	38.00	25,840.00
02	Actuating Coil (Close)	16/5/261				250	250	240	\$ 25.40	\$ 6,350.00	240.00	6,096.00
03	Actuating Coil (Open)	16/5/262				250	250	230	\$ 25.40	\$ 6,350.00	230.00	5,842.00
04	Limit Switch (Close)	6/7/25				20	20	20	\$ 17.50	\$ 350.00	20.00	350.00
05	Limit Switch (Open)	6/7/25				20	20	20	\$ 17.50	\$ 350.00	20.00	350.00

Total Price Item C.7.3.1 (Items 01 through 05) \$ 40,600.00 38,478.00

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.

C.7.3 SPECIFIED SPARES FOR EXISTING CAPACITOR BANKS

C.7.3.2 Current Controller Spares

01	Complete Controller Unit	16/5/263				40	40	40	\$ 1,445.00	\$ 57,800.00	40.00	57,800.00
02	Varistor	16/5/264				100	100	98	\$ 4.15	\$ 415.00	98.00	406.70
03	Step Down Transformer	16/5/265				10	10	10	\$ 34.50	\$ 345.00	10.00	345.00
04	Operations Counter	16/5/266				3	3	3	\$ 58.00	\$ 174.00	3.00	174.00
05	2-Way Switch	16/5/267				10	10	8	\$ 9.10	\$ 91.00	8.00	72.80
06	3-Way Switch	16/5/268				15	15	13	\$ 9.20	\$ 138.00	13.00	119.60
07	Isolating Transformer	16/5/269				10	10	10	\$ 151.50	\$ 1,515.00	10.00	1,515.00
08	Fuse - 10 amp	16/5/270				100	100	80	\$ 8.50	\$ 850.00	80.00	680.00
09	Fuse - 3/8 amp	16/5/271				100	100	79	\$ 4.80	\$ 480.00	79.00	379.20

Total Price Item C.7.3.2 (Items 01 through 09) \$ 61,808.00 2,766.60

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.

C.7.3 SPECIFIED SPARES FOR EXISTING CAPACITOR BANKS

C.7.3.3 Fused Disconnect Switch Spares

01	3Ph Hinge Style Fuse Mountings	6/7/24	26			12	38	38	\$ 374.00	\$ 4,488.00	12.00	4,488.00
02	3Ph Tandem-Unit Mountings	6/7/27	1			12	13	13	\$ 420.00	\$ 5,040.00	12.00	5,040.00
03	40 A CL Fuse With Arc-Strangler	14/2/47				15	15	0	\$ 88.00	\$ 1,320.00	0.00	0.00
04	50 A CL Clip Style Fuse	14/2/41				150	150	150	\$ 230.00	\$ 34,500.00	150.00	34,500.00
05	100 A CL Clip Style Fuse	14/2/42				48	48	46	\$ 300.00	\$ 14,400.00	46.00	13,800.00

Total Price Item C.7.3.3 (Items 01 through 05) \$ 59,748.00 57,828.00

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.

IFB-6 ENGINEERING COST ESTIMATE
 Bidder's Name: COOPER POWER SYSTEMS

PART C: BID SCHEDULE
 C.3.3 ENGINEERING COST ESTIMATE

CIP DESTINATION
 Port of Alexandria, Egypt
 Commodity Prices

Line Item General NO. Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quant. Proc. Thru. AID Project	Total Quantity	balance 15/4/97	Commodity Prices		Net Balance	Value Of Net Balance (AID PURCHASE)
							Unit	Total		
01 3Ph Assembled Capacitor Banks, 300 kVAR, With Oil Switches	6/7/35			128	128	8	\$ 1,942.00	\$ 248,576.00	8.00	15,536.00
02 3Ph Fused Disconnect Switches	6/7/14			128	128	13	\$ 316.50	\$ 40,512.00	13.00	4,114.50
03 1Ph Capacitor Fuses (300 kVAR)	14/2/47	188		384	572	188	\$ 86.00	\$ 33,024.00	0.00	0.00
Total Price Item C.3.3.1 (Items 01-03)								\$ 322,112.00		19,650.50

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.

CONTRACT 17841-6B

LOAD BREAK SWITCH

LINE ITEM (1)

BIDDER'S NAME: G&W

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C.7.2 RECOMMENDED SPARES FOR 11 kv LOADBREAK SWITCHES
 G&W CIP DESTINATION Contract 17841-6B
 Port of Alexandria

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quant. Proc. Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID Purchase)
								Unit	Total		
C.7.2.1 Spare Parts for Motor Operated Switch Units (Section E.2)											
01	4 Way Switch Tank	6/14/15			1	1	1	\$ 3,000.00	\$ 3,000.00	1	3000
02	3 Way Switch Tank	6/14/16			1	1	1	\$ 2,400.00	\$ 2,400.00	1	2400
03	Switch Module	6/14/17			6	6	6	\$ 1,600.00	\$ 9,600.00	6	9600
04	Desiccant Bag	6/14/18			10	10	10	\$ 15.00	\$ 150.00	10	150
05	Viewing Window Gask.	6/14/19			15	-15	15	\$ 5.00	\$ 75.00	15	75
06	Viewing Window	6/14/20			15	15	15	\$ 15.00	\$ 225.00	15	225
07	Open stud Bushing	6/14/32			20	20	20	\$ 230.00	\$ 4,600.00	20	4600
08	Bushing Gasket	6/14/35			30	30	30	\$ 5.00	\$ 150.00	30	150
09	Fill Valve	6/14/21			5	5	5	\$ 7.00	\$ 35.00	5	35
10	Shaft Seal	6/14/22			15	15	15	\$ 450.00	\$ 6,750.00	15	6750
11	Rotary Lock Assem.	6/14/23			10	10	10	\$ 200.00	\$ 2,000.00	10	2000
12	Pressure Gauge	6/14/24			15	15	15	\$ 60.00	\$ 900.00	15	900
13	Frame	6/14/42			2	2	2	\$ 200.00	\$ 400.00	2	400
14	Handle	6/14/25			5	5	5	\$ 85.00	\$ 425.00	5	425
15	Motor Oper. Comp.	6/14/26			15	15	12	\$ 850.00	\$ 12,750.00	12	10200
16	Aux.Sw.for Mot.Oper.	6/14/27			10	10	3	\$ 10.00	\$ 100.00	3	30
17	Motor for Mot. Oper.	6/14/28			5	5	5	\$ 225.00	\$ 1,125.00	5	1125
18	Motor Oper.Cover Gask.	6/14/29			10	10	10	\$ 10.00	\$ 100.00	10	100
19		6/14/30			10	10	8	\$ 40.00	\$ 400.00	8	320
20	20 LBS SF6 Gas Bottle	6/14/33			10	10	10	\$ 500.00	\$ 5,000.00	10	5000
21	Regulator & Hose	6/14/31			3	3	2	\$ 280.00	\$ 840.00	2	560
22	Leak Detector	16/1/89			2	2	2	\$ 350.00	\$ 700.00	2	700

TOTAL PRICE ITEM C.7.2.1 (ITEMS 01 THROUGH 22) \$ 51,725.00 48,745.00

C.7.2.2 Spare Parts for Local Controllers (Section E.2.7)

01	Battery	16/5/293			3	3	3	\$ 75.00	\$ 225.00	3	225
02	Fuses	16/5/294			15	15	15	\$ 2.50	\$ 37.50	15	37.5
03	Lights, Red	16/5/295			15	15	15	\$ 2.50	\$ 37.50	15	37.5
04	Lights, Green	16/5/296			15	15	15	\$ 2.50	\$ 37.50	15	37.5
05	Lights, White	16/5/297			15	15	15	\$ 2.50	\$ 37.50	15	37.5
06	Toggle Switch DPDT	16/5/298			3	3	3	\$ 15.00	\$ 45.00	3	45
07	Toggle Switch SPST	16/5/299			3	3	3	\$ 7.00	\$ 21.00	3	21
08	Push Botton Sw.	16/5/300			3	3	3	\$ 14.00	\$ 42.00	3	42
09	Contact Block				3	3	3	\$ 13.00	\$ 39.00	3	39
10	Cable (control)	16/5/289			1	1	1	\$ 250.00	\$ 250.00	1	250
11	Transformer 220VAC	16/5/290			3	3	3	\$ 60.00	\$ 180.00	3	180
12	P.C.Board (For Charger)	16/5/291			3	3	3	\$ 275.00	\$ 825.00	3	825

TOTAL PRICE ITEM C.7.2.2 (ITEMS 01 THROUGH 12) \$ 1,777.00 1,777.00

TOTAL CIP DOLLAR AMOUNT \$ 53,502.00

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PART C: BID SCHEDULE

C.3.3 ITEMIZED BID PRICE SCHEDULE

CIP DESTINATION

Port of Alexandria, Egypt

Bidder's Name: G & W ELECTRIC CO.

Commodity Prices

Line Item General No. Description	Ware House Code #	Balance 1/7/91	Local Proc. By AED	Quant Proc. Thru AID Proje	Total Quantity	Balance 15/4/97	Commodity Prices		*	Value Of Net Balance (AID PURCHASE)
							Unit	Total		
C.3.3.1 11KV Loading Switch Units										
C.3.3.1.1 Motor Operated Switch Units										
01 3-Way Switch Units	14/1/78			55	55	0	\$ 6,730.00	\$ 370,150.00	0	0.00
02 4-Way Switch Units	14/1/79			110	110	50	\$ 8,468.00	\$ 931,480.00	50	423,400.00
TOTAL PRICE ITEM (ITEMS 01-02)								\$ 1,301,630.00		423,400.00
* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.										
C.3.3.1.2 Local Controllers										
	16/1/79			22	22	10	\$ 1,560.00	\$ 34,320.0	10	15,600.0
C.3.3.1.3 3Ph Cable Termination Kits										
	3/1/83			330	330	132	\$ 1,026.00	\$ 338,580.0	132	135,432.0
TOTAL PRICE ITEM C.3.3.1 (Items C.3.3.1.1-C.3.3.1.3)								\$ 372,900.0		151,032.0

CONTRACT 17841-6B

STREET LIGHTING

LINE ITEM (4)

BIDDER'S NAME: AMERICAN & CARABIAN

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PART C: BID SCHEDULE							CIP DESTINATION			
C.3.3 ITEMIZED BID PRICE SCHEDULE							Port of Alexandria, Egypt			
Bidder's Name: AMERICAN & CARBEEN INT'L CORP.							Commodity Prices			
Line Item General No. Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quant Proc.Thru AID Proje	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
							Unit	Total		
C.3.3.4 Street Lighting Controls										
01 Photoelectric Control, with Omni-directional control for use in areas with high level ambient light.	18/1/14			500	500	498	\$ 4.94	\$ 2,470.00	498	2460.12
02 Photoelectric Control Receptacle & Mounting Bracket, three pole locking-type with LEXAN housing and wall mounting bracket	18/1/47			500	500	498	\$ 5.27	\$ 2,635.00	498	2624.46
03 Electronic time control, with 8 day programming and 9 volt Alkaline battery backup	16/1/125			25	25	23	\$ 183.43	\$ 4,585.75	23	4218.89
Total Price C.3.3.4 (Items 01-03)								\$ 9,690.75		9,303.47

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.

CONTRACT 17841-6B

TAP CONNECTORS

LINE ITEM (2)

BIDDER'S NAME: ICS

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PART C: BID SCHEDULE
C.3.3 ITEMIZED BID PRICE SCHEDULE

CIP DESTINATION
 Port of Alexandria, Egypt
 Commodity Prices

Bidder's Name: ICS

Line Item General No. Description	Ware House Code	Balance 1/7/91	Local Proc. By AEDCAID	Quant Proc. Thru Project	Total Balance Quantity	Balance 15/4/97	Commodity Prices *		Value Of Net Balance (AID PURCHASE)		
							Unit	Total Net Balance			
C.3.3.2 Connectors and Dead End Grip											
C.3.3.2.1 Tap Connectors											
01	95 mm ² (#4/0 AWG) Run to 35/16 mm ² (#2/6 AWG) Tap	3/2/25	41272		10,000	51272.00	12700.00	\$ 0.36	\$ 3,600.00	0.00	0.00
02	70 mm ² (#2/0 AWG) Run to 35/16 mm ² (# 2/6 AWG) Tap	3/2/26	61142		10,000	71142.00	14617.00	\$ 0.36	\$ 3,600.00	0.00	0.00
03	35 mm ² (# 2 AWG) Run to 35/16 mm ² (# 2/6 AWG) Tap	3/2/28	51592		10,000	61592.00	5900.00	\$ 0.26	\$ 2,600.00	0.00	0.00
Total Price Item C.3.3.2.1 (Items 01-03)									\$ 9800.00		

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.

C.3.3.2.2 Compression Splice, Full Tension.

01	95 mm ² (#4/0 AWG)	3/2/37	846		200.00	1046.00	1046.00	\$ 4.37	\$ 874.00	200.00	874.00
Total Price Item C.3.3.2.2 (Item 01)									874.00		

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.

C.3.3.2.3 Sleeve, Service Entrance, Insulated

01	16 mm ² (# 6 AWG)	3/2/29			30,000	30000.00	30000.00	\$ 0.12	\$ 5,400.00	30000.00	5400.00
02	35 mm ² (# 2 AWG)	3/2/30			30,000	30000.00	30000.00	\$ 0.18	\$ 5,400.00	30000.00	5400.00
03	35 mm ² (# 2 AWG) to 16mm ² (# 6 AWG)	3/2/31			30,000	30000.00	30000.00	\$ 0.18	\$ 5,400.00	30000.00	5400.00
Total Price Item C.3.3.2.3 (Items 01-03)									\$ 16,200.00		16,200.00

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.

**C.3.3.2.4 Dead-End Grip, Preformed, For Use
Over Insulation With:**

01	Insulated aluminum conductor, 95 mm ² , 19 strands (15.75 to 16.51 mm, 0.62 to 0.65 in. outside dia)	3/2/34	1,742		300	2042.00	300.00	\$ 10.21	\$ 3,063.00	0.00	0.00
Total Price Item C.3.3.2.4 (Item 01)									\$ 3,063.00		

* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.

29,937.00

CONTRACT 17841-6B

MISCELLANEOUS L.V. MATERIAL

LINE ITEM (3)

BIDDER'S NAME: ARDRY

Appendix L48

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		PART C: BID SCHEDULE					CIP DESTINATION				
C.3.3		ITEMIZED BID PRICE SCHEDULE					Port of Alexandria, Egypt				
Bidder's Name: ARARY TRADING CO.		Contract 17841-6B					Commodity Prices				
Line	Ware	Balance	Local	Quant	Total	Balance	Commodity Prices		*	Value Of Net	
Item General	House		Proc.	Proc.Thru	Quantity	15/4/97	Unit	Total	Net	Balance (AID	
No. Description	Code #	1/7/91	By AEDC	AID Project					Balance	PRURCHASE)	
C.3.3.3 Miscellaneous Low Voltage Materials											
01	Rod, ground copper covered steel 16 mm x 2.44 (5/8 in. x 8 ft)	3/2/13		20,000	20000	20000	\$ 5.38	\$ 107,600.00	20000	107600	
02	Clamp for 35 mm ² (#2 AWG) ground wire, to 16 mm (5/8 in.) ground rod	3/2/14		20,000	20000	20000	\$ 0.73	\$ 14,600.00	20000	14600	
03	Bronze distribution connector 35mm ² (#2AWG) Solid to 35mm ² (#3AWG) Stranded.	3/3/62		10,000	10000	9213	\$ 1.13	\$ 11,300.00	9213	10410.69	
04	Bronze distribution connector 25 mm ² (#4AWG) solid to 25mm ² (#4AWG) Stranded	3/3/63		10,000	10000	9906	\$ 0.73	\$ 7,300.00	9906	7231.38	
05	Bronze distribution connector 16 mm ² (#6AWG) solid to 10mm ² (#8AWG) Stranded	3/3/64		10,000	10000	9875	\$ 0.61	\$ 6,100.00	9875	6023.75	
06	Bronze grounding terminal 16 mm ² - 25 mm ² (#6AWG-#4AWG)	3/3/56		5,000	5000	4826	\$ 2.13	\$ 10,650.00	4826	10279.38	
07	Bronze grounding terminal 16mm ² -25mm ² (#6AWG-#4AWG)	3/3/57		5,000	5000	4863	\$ 2.13	\$ 10,650.00	4863	10358.19	
08	Parallel tap connectors (Al/Cu), (Al/Cu), with cover main:35mm ² (#2AWG)-3mm ² (#12AWG) Tap :25mm ² (#4AWG)-2mm ² (#14AWG)	3/3/67		10,500	10500	9740	\$ 2.37	\$ 24,885.00	9740	23083.8	
09	Aluminum underground compression terminal barrel ID 17.8mm(0.700 in)	3/2/74	20,708	12,000	32708	0	\$ 2.86	\$ 34,320.00	0	0	
10	Aluminum underground compression terminal barrel ID 17.6mm(0.300 in)	3/2/68	18,877	10,000	28877	0	\$ 1.72	\$ 17,200.00	0	0	
11	Electrical Tape, black vinyl 3/4" wide x 20 ft roll	3/3/5	151,709	25,000	176709	1500	\$ 0.54	\$ 13,500.00	0	0	
Total Price C.3.3.3 (Items 01-11)											
* Net Balance : Balance April 97 After Deducting July 91 Balance And Local Procurement.											
TOTAL CIP DOLLAR AMOUNT								\$ 258,105.00		189,587.19	

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CONTRACT 17841-07

GROUP A, D SPARES FOR FORD RANGES

LINE ITEM (7, 4)

BIDDER'S NAME: EDUSYSTEM

EDUSYSTEMS
BIDDER # 9

Contract Document 17841-07

C.7.2 GROUP A SPARES FOR FORD RANGER

Line Item No.	Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Projec	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
01	Piston Assy Incl Pin Std(Red)	50/22/196			40	40	36	\$ 48.67	\$ 1,946.80	36.00	1,752.12
02	Piston .003 O/S	50/22/197			40	40	40	\$ 48.67	\$ 1,946.80	40.00	1,946.80
03	Piston .020 O/S	50/22/198			60	60	40	\$ 51.68	\$ 3,100.80	40.00	2,067.20
04	Piston .030 O/S	50/22/199			40	40	32	\$ 51.68	\$ 2,067.20	32.00	1,653.76
05	Piston .040 O/S	50/22/200			20	20	20	\$ 51.68	\$ 1,033.60	20.00	1,033.60
RING SET(Piston Partial) One set consists of the necessary rings to re-ring two pistons (Items 06 through 10)											
06	Rings Std &.003 O/S	50/22/201			20	20	18	\$ 32.92	\$ 658.40	18.00	592.56
07	Rings .020 O/S	50/22/202			30	30	16	\$ 31.22	\$ 936.60	16.00	499.52
08	Rings .030 O/S	50/22/203			30	30	26	\$ 31.22	\$ 936.60	26.00	811.72
09	Rings .040 O/S	50/22/204			10	10	10	\$ 31.99	\$ 319.90	10.00	319.90
10	Rod Assy (connecting)	50/22/205			40	40	40	\$ 63.67	\$ 2,546.80	40.00	2,546.80
BEARING (CONNECTING ROD)(Items 11 through 17)											
11	Bearing Std(Red) Upr-Lwr pkg(2)	50/22/188			80	80	76	\$ 2.88	\$ 230.40	76.00	218.88
12	Brg .002 U/S Upr-lwr pkg(2)	50/22/190			120	120	120	\$ 2.86	\$ 343.20	120.00	343.20
13	Brg .010 U/S Upr-lwr pkg(2)	50/22/191			120	120	116	\$ 1.96	\$ 235.20	116.00	227.36
14	Brg .020 U/S Upr-lwr pkg(2)	50/22/192			80	80	60	\$ 3.37	\$ 269.60	60.00	202.20
15	Brg .030 U/S Upr-lwr pkg(2)	50/22/193			80	80	72	\$ 2.86	\$ 228.80	72.00	205.92
16	Nut (conn rod) Pkg(8)	50/22/194			160	160	160	\$ 3.26	\$ 521.60	160.00	521.60
17	Bolt (conn rod) - M9x1.55	50/22/195			80	80	80	\$ 0.65	\$ 52.00	80.00	52.00
TOTAL PRICE ITEM C.7.2.1 (Items 01 through 17)								\$ 17,374.30		14,995.14	

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EDUSYSTEMS
 BIDDER # 9

Contract Document 17841-07

C.7.5 GROUP D SPARES FOR FORD RANGER

Line Item No.	Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Projec	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
C.7.5.1 SPARE PARTS for 1989 FORD RANGER (EFI) 2.3L											
VIN # 1FTCR10A6KUA											
DRIVE BELT-FAN (ENGINE COOLING) (Items 01 and 02)											
01	Belt (Drive) 27/32" x 451/2"	50/22/189			25	25	24	\$ 11.04	\$ 276.00	24.00	264.96
02	Fan Blade Assy-8 Blades-14"Dia	50/22/31			5	5	5	\$ 36.57	\$ 182.85	5.00	182.85
AIR CLEANER (Items 03 through 05)											
03	Air Cleaner Assy	50/22/206			20	20	20	\$ 129.82	\$ 2,596.40	20.00	2,596.40
04	Element	50/22/32			100	100	100	\$ 6.03	\$ 603.00	100.00	603.00
05	Cannister Assy (fuel vapor stor)	50/22/207			24	24	22	\$ 39.13	\$ 939.12	22.00	860.86
FUEL PUMP (Item 06)											
06	Sender & Pump Assy (fuel tank)	50/22/208			30	30	12	\$ 117.86	\$ 3,535.80	12.00	1,414.32
WATER PUMP (Items 07 through 09)											
07	Pump Assy (water) Incl Gasket	50/22/2			30	30	30	\$ 55.10	\$ 1,653.00	30.00	1,653.00
08	Gasket (thermostat)	50/22/34			20	20	20	\$ 0.70	\$ 14.00	20.00	14.00
09	Thermostat (Water Temp. 192)	50/22/33			20	20	20	\$ 8.15	\$ 163.00		
BRAKE SYSTEM (Items 10 through 29)											
10	Master Cylinder Assy	50/22/13			10	10	10	\$ 175.2	\$ 1,752.20	10.00	1,752.20
11	Booster Assy				5	5	5	\$ 152.4	\$ 762.10	5.00	762.10
12	Shoe & Lining Kit (rear L & R)	50/22/27			42	42	32	\$ 48.14	\$ 2,021.88	32.00	1,540.48
13	Cylinder Assy (rear L & R)	50/22/15			42	42	42	\$ 30.66	\$ 1,287.72	42.00	1,287.72
14	Cylinder Repair kit 3/4"				10	10	10	\$ 7.87	\$ 78.70	10.00	78.70
15	Cylinder Repair kit 13/16"	50/22/14			10	10	10	\$ 9.46	\$ 94.60	10.00	94.60
16	Hub & Rotor Assy Front	50/22/209			10	10	2	\$ 85.74	\$ 857.40	2.00	171.48
17	Hub & Rotor Assy Front LH	50/22/226			10	10	10	\$ 82.9	\$ 829.00	10.00	829.00
18	Washer pkg(2)	50/22/210			40	40	40	\$ 1.49	\$ 59.60	40.00	59.60
19	Bearing Assy (inner)	50/22/211			10	10	10	\$ 19.08	\$ 190.80	10.00	190.80
20	Bearing Assy (outer)	50/22/212			10	10	10	\$ 10.62	\$ 106.20	10.00	106.20
21	Nut(SpdI)(MM-38-C)3/4"-16 Pkg(4)	50/22/213			10	10	10	\$ 1.22	\$ 12.20	10.00	12.20
22	Nut rtr(MM-304-A)49/64"ID x 11/16 OD	50/22/214			10	10	10	\$ 0.49	\$ 4.90	10.00	4.90
23	R.H.Housing Assy (wheel caliper) Includes Shoe & Lining	50/22/49			21	21	21	\$ 124.8	\$ 2,619.75	21.00	2,619.75
24	L.H.Housing Assy (wheel caliper) Includes Shoe & Lining	50/22/50			21	21	21	\$ 124.8	\$ 2,619.75	21.00	2,619.75

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EDUSYSTEMS
BIDDER # 9

Contract Document 17841-07

C.7.5 GROUP D SPARES FOR FORD RANGER

Line Item No.	Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc. Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
25	Shoe & Lining Kit R & L	50/22/215			21	21	2	\$ 59.38	\$ 1,246.98	2.00	118.76
26	Caliper Repair Kit R & L	50/22/11			21	21	21	\$ 21.27	\$ 446.67	21.00	446.67
27	Pin Assy (caliper support)	50/22/216			21	21	21	\$ 4.97	\$ 104.37	21.00	104.37
28	Clip(shoe anti rattle) Pkg(2)	50/22/217			40	40	40	\$ 3.62	\$ 144.80	40.00	144.80
29	Piston Assy (wheel cylinder)	50/22/218			22	22	22	\$ 22.1	\$ 486.20	22.00	486.20
CLUTCH (Items 30 through 39)											
30	Reservoir Assy (syst hydr fluid) Including Hose & Clamp	50/22/219			10	10	10	\$ 33.96	\$ 339.60	10.00	339.60
31	Tube Assy (mstr cyl to slave cyl)	50/22/220			20	20	19	\$ 44.63	\$ 892.60	19.00	847.97
32	Lever Assy (release)	50/22/42			20	20	20	\$ 19.33	\$ 386.60	20.00	386.60
33	Shim (slave cyl) Pkg(2)	50/22/221			20	20	20	\$ 7.13	\$ 142.60	20.00	142.60
34	Cylinder Assy Master Incl *O*, ring and pins - (7560)also(7641)push rod	50/22/222			24	24	17	\$ 69.85	\$ 1,676.40	17.00	1,187.45
35	Hub and Bearing Assy (release)	50/22/20			24	24	16	\$ 35.05	\$ 841.20	16.00	560.80
36	Disc Assy 8 15/16"dia.	50/22/21			42	42	24	\$ 65.17	\$ 2,737.14	24.00	1,564.08
37	Pressure Plate	50/22/22			42	42	40	\$ 78.56	\$ 3,299.52	40.00	3,142.40
38	Slave Cylinder (hydraulic) #E8Ta 7A508-Ea-EB-Inc 7548 Brg	50/22/223			42	42	38	\$ 105.7	\$ 4,437.30	38.00	4,014.70
39	Bearing (pilot)	50/22/224			42	42	42	\$ 6.41	\$ 269.22	42.00	269.22
TOTAL PRICE ITEM C.7.5.1 (Items 01 through 39)								\$ 40,711.17		33,475.09	

CONTRACT 17841-07

GROUP B, C, D SPARES FOR FORD RANGES

LINE ITEM (5, 6, 8)

BIDDER'S NAME: KOMAT

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KOMAT SCIENTIFIC, INC.
 BIDDER # 3
 C.7.3 GROUP B SPARES FOR FORD RANGER

CIP PORT OF ALEX.

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)	
								Unit	Total			
C.7.3.1 SPARE PARTS for 1989 FORD RANGER (EFI) 2.3L												
VIN # 1FTCR10A6KUA												
VALVES - 1989 Ford Ranger EFI 2.3L(140CID) (Items 01 through 14)												
01	Valve Exhaust Std	50/22/65			40	40	40	\$	12.06	\$ 482.40	40.00	482.40
02	Valve Exh .015 O/S	50/22/66			40	40	20	\$	12.06	\$ 482.40	20.00	241.20
03	Valve Exh .030 O/S	50/22/67			32	32	32	\$	12.06	\$ 385.92	32.00	385.92
04	Valve Intake Std	50/22/68			40	40	40	\$	8.21	\$ 328.40	40.00	328.40
05	Valve Int .015 O/S	50/22/69			40	40	20	\$	10.00	\$ 400.00	20.00	200.00
06	Valve Int .030 O/S	50/22/70			32	32	28	\$	10.00	\$ 320.00	28.00	280.00
07	Bushing (Valve Guide)	50/22/180			200	200	200	\$	5.99	\$ 1,198.00	200.00	1,198.00
08	Spring Assy (Valve)	50/22/71			200	200	200	\$	6.53	\$ 1,306.00	200.00	1,306.00
09	Retainer (Valve Spring)	50/22/72			200	200	200	\$	1.02	\$ 204.00	200.00	204.00
10	Key (Valve Spring Retainer)	50/22/73			200	200	200	\$	0.42	\$ 84.00	200.00	84.00
11	Arm - (Valve Rocker) Roller Type	50/22/74			80	80	80	\$	13.11	\$ 1,048.80	80.00	1,048.80
12	Std Int Seal (Valve Stem)	50/22/75			80	80	64	\$	2.29	\$ 183.20	64.00	146.56
13	Seal (Valve Stem).015 O/S	50/22/76			80	80	48	\$	2.29	\$ 193.20	48.00	109.92
14	Seal (Valve Stem).030 O/S	50/22/77			64	64	56	\$	3.07	\$ 196.48	56.00	171.92
CAMSHAFT ASSY (item 15 through 24)												
15	Roller Cam	50/22/78			15	15	14	\$	129.98	\$ 1,949.70	14.00	1,819.72
16	Tensioner Assy (timing belt)	50/22/79			15	15	15	\$	30.97	\$ 464.55	15.00	464.55
17	Sprocket (camshaft) - (1)	50/22/80			30	30	30	\$	26.14	\$ 784.20	30.00	784.20
18	Guide (timing belt camshaft)	50/22/81			15	15	15	\$	6.43	\$ 96.45	15.00	96.45
19	Bearing (camshaft F&R interm) Std ODU/S ID	50/22/82			45	45	19	\$	8.21	\$ 369.45	19.00	155.99
20	Belt (timing)	50/22/83			22	22	11	\$	12.85	\$ 282.70	11.00	141.35
21	Spring (tensioner)	50/22/84			22	22	22	\$	6.23	\$ 137.06	22.00	137.06
22	Washers (camshaft sprocket) Pkg(5)	50/22/85			5	5	25	\$	1.27	\$ 6.35	25.00	31.75
23	Washer (aux shaft sprocket) Pkg(5)	50/22/86			5	5	25	\$	1.27	\$ 6.35	25.00	31.75
24	Bolt (timing belt tensioner)	50/22/87			22	22	22	\$	6.03	\$ 132.66	22.00	132.66
CRANKSHAFT ASSY (item 25 through 51)												
25	Remanufactured Crankshaft Kit	50/22/88			5	5	5	\$	306.00	\$ 1,530.00	5.00	1,530.00
26	Guide (crankshaft tmg bell) Pkg(4)	50/22/89			6	6	24	\$	2.22	\$ 13.32	24.00	53.28
27	Crankshaft	50/22/90			10	10	10	\$	219.37	\$ 2,193.70	10.00	2,193.70
28	Crankshaft gear	50/22/91			10	10	10	\$	13.21	\$ 132.10	10.00	132.10
29	Pulley Assy (crankshaft outer) - incl	50/22/92			10	10	10	\$	21.56	\$ 215.60	10.00	215.60
30	Sensor Assy (crankshaft timing)	50/22/93			22	22	21	\$	55.86	\$ 1,228.92	21.00	1,173.06

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KOMAT SCIENTIFIC, INC.
 BIDDER # 3
 C.7.3 GROUP B SPARES FOR FORD RANGER

CIP PORT OF ALEX.

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (At PURCHASE)
								Unit	Total		
31	Sensor Assy (crankshaft timing)	50/22/94			5	5	5	\$ 2.33	\$ 11.65	5.00	11.6
32	Pin (balance) - .31" dia x .52" long	50/22/95			4	4	4	\$ 2.33	\$ 9.32	4.00	9.3
33	Brg (crkshft main) Std Frt Upr	50/22/96			10	10	16	\$ 1.93	\$ 19.30	16.00	30.8
34	Brg .040 U/S Frt Upr pkg(2)	50/22/97			12	12	20	\$ 4.03	\$ 48.36	20.00	80.6
35	Brg Std Frt lwr (Red) pkg(2)	50/22/98			40	40	76	\$ 1.89	\$ 75.60	76.00	143.6
36	Brg .002 U/S Frt lwr pkg(2)	50/22/99			40	40	80	\$ 2.06	\$ 82.40	80.00	164.8
37	Brg .010 U/S Frt lwr pkg(2)	50/22/100			40	40	76	\$ 2.60	\$ 104.00	76.00	197.0
38	Brg .020 U/S Frt lwr pkg(2)	50/22/101			40	40	80	\$ 3.10	\$ 124.00	80.00	248.0
39	Brg .030 U/S Frt lwr pkg(2)	50/22/102			20	20	32	\$ 3.58	\$ 71.60	32.00	114.5
40	Brg .040 U/S Frt lwr pkg(2)	50/22/103			12	12	20	\$ 4.02	\$ 48.24	20.00	80.4
41	Brg Std Frt Interm Upr (Red) pkg(2)	50/22/104			30	30	58	\$ 1.93	\$ 57.90	58.00	111.9
42	Brg Std Center (Red) pkg(2)	50/22/105			20	20	38	\$ 5.60	\$ 112.00	38.00	212.8
43	Brg .002 U/S Center pkg(2)	50/22/106			20	20	40	\$ 6.14	\$ 122.80	40.00	245.0
44	Brg .010 U/S Center pkg(2)	50/22/107			20	20	38	\$ 6.67	\$ 133.40	38.00	253.4
45	Brg .020 U/S Center pkg(2)	50/22/108			20	20	35	\$ 7.22	\$ 144.40	35.00	252.7
46	Brg .030 U/S Center pkg(2)	50/22/109			10	10	18	\$ 7.79	\$ 77.90	18.00	140.2
47	Brg .040 U/S Center pkg(2)	50/22/110			6	6	10	\$ 8.33	\$ 49.98	10.00	83.3
48	Brg .002 U/S Frt Upr pkg(2)	50/22/111			40	40	80	\$ 2.10	\$ 84.00	80.00	168.0
49	Brg .010 U/S Frt Upr pkg(2)	50/22/112			40	40	76	\$ 2.61	\$ 104.40	76.00	198.3
50	Brg .020 U/S Frt Upr pkg(2)	50/22/113			40	40	60	\$ 3.10	\$ 124.00	60.00	186.0
51	Brg .030 U/S Frt upr pkg(2)	50/22/114			20	20	38	\$ 3.58	\$ 71.60	38.00	136.0
Gasket Sets: For 1989 Ford Ranger EFI 2.3L (140 CID) Engine (item 52 through 56)											
52	Gasket Set - Lower	50/22/115			21	21	12	\$ 43.95	\$ 922.95	12.00	527.4
53	Gasket - (cylinder Head)	50/22/116			25	25	15	\$ 21.43	\$ 535.75	15.00	321.4
54	Exhaust Manifold (Gasket)	50/22/117			25	25	12	\$ 10.67	\$ 266.75	12.00	128.0
55	Int Manifold (Gasket)	50/22/118			25	25	20	\$ 3.77	\$ 94.25	20.00	75.4
56	Oil Pan (Gasket)	50/22/57			10	10	10	\$ 34.85	\$ 348.50	10.00	348.5
Cylinder Head - 1989 Ford Ranger EFI 2.3L (140 CID) (item 57)											
57	Head (Cylinder) Complete W/Valves and Roller Cam	50/22/119			7	7	7	\$ 375.87	\$ 2,631.09	7.00	2,631.0
Flywheel 1989 Ford Ranger EFI 2.3L (140 CID) (item 58)											
58	Gear (Flywheel Ring)	50/22/120			12	12	6	\$ 34.85	\$ 418.20	6.00	209.1
Oil Pump 1989 Ford Ranger EFI 2.3L											

KOMAT SCIENTIFIC, INC.
 BIDDER # 3
 C.7.3 GROUP B SPARES FOR FORD RANGER

CIP PORT OF ALEX.

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)	
								Unit	Total			
(140 CID)(Item 59 through 63)												
59	Pump assy (Oil)	50/22/121			- 7	7	1	\$	54.40	\$ 380.80	1.00	54.40
60	Sensor assy (Low Oil)	50/22/122			10	10	10	\$	15.56	\$ 155.60	10.00	155.60
61	Washer (Low Oil Level Sensor)	50/22/123			10	10	10	\$	2.79	\$ 27.90	10.00	27.90
62	Bolt & Washer (Oil Pump Attaching)	50/22/124			10	10	10	\$	0.63	\$ 6.30	10.00	6.30
63	Housing and Shaft assy (Oil Pump)	50/22/125			10	10	10	\$	70.11	\$ 701.10	10.00	701.10
TOTAL PRICE ITEM C.7.3.1 (Items 01 through 63)										\$ 24,511.95		23,536.49

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KOMAT SCIENTIFIC, INC.
 BIDDER # 3

C.7.4 GROUP C SPARES FOR FORD RANGER

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)	
								Unit	Total			
C.7.4.1 SPARE PARTS for 1989 FORD RANGER (EFI) 2.3L VIN # 1FTCR10A6KUA STARTER (Items 01 through 22)												
01	Service Starter Assembly	50/22/181			10	10	10	\$	181.36	\$ 1,813.60	10.00	1,813.60
02	Drive Assy (startment motor)	50/22/24			20	20	4	\$	21.75	\$ 435.00	4.00	87.00
03	Armature	50/22/126			20	20	13	\$	62.66	\$ 1,253.20	13.00	814.58
04	Washer (drive thrust)	50/22/127			20	20	20	\$	1.13	\$ 22.60	20.00	22.60
05	Plate & Bushing (brush end)	50/22/128			10	10	9	\$	14.19	\$ 141.90	9.00	127.71
06	Screw & Washer (cable to plate)	50/22/129			10	10	10	\$	0.52	\$ 5.20	10.00	5.20
07	Bushing (Brush end plate)	50/22/130			10	10	10	\$	1.49	\$ 14.90	10.00	14.90
08	Kit (Brush)	50/22/131			40	40	33	\$	9.66	\$ 386.40	33.00	318.78
09	Spring pkg(4)	50/22/132			20	20	80	\$	0.91	\$ 18.20	80.00	72.80
10	Cover (plunger) Inc gasket	50/22/133			20	20	20	\$	2.73	\$ 54.60	20.00	54.60
11	Holder (Brush)	50/22/134			20	20	19	\$	3.59	\$ 71.80	19.00	68.21
12	Insulator (brush holder)	50/22/135			20	20	20	\$	1.63	\$ 32.60	20.00	32.60
13	Lever and Pin Kit (drive)	50/22/136			20	20	19	\$	15.45	\$ 309.00	19.00	293.55
14	Coil (field) - Complete	50/22/137			20	20	17	\$	31.52	\$ 630.40	17.00	535.84
15	Bolt (thru) pkg(2)	50/22/138			20	20	100	\$	2.45	\$ 49.00	100.00	245.00
16	Spring (lunge return) pkg(5)	50/22/139			8	8	37	\$	1.37	\$ 10.96	37.00	50.69
17	Sleeve (coil retaining)	50/22/140			20	20	20	\$	1.33	\$ 26.60	20.00	26.60
18	Grommet pkg(2)	50/22/141			10	10	20	\$	2.75	\$ 27.50	20.00	55.00
19	Housing Assy (drive end)	50/22/142			20	20	16	\$	25.43	\$ 508.60	16.00	406.88
20	Point Kit (contact)	50/22/143			20	20	20	\$	20.37	\$ 407.40	20.00	407.40
21	Ring (drive stop) pkg(10)	50/22/144			5	5	50	\$	0.52	\$ 2.60	50.00	26.00
22	Retainer (drive stop ring) pkg(4)	50/22/145			5	5	20	\$	0.70	\$ 3.50	20.00	14.00
ALTERNATOR (Items 23 through 40)												
23	Alternator	50/22/146			10	10	9	\$	185.64	\$ 1,856.40	9.00	1,670.76
24	Regulator	50/22/147			20	20	35	\$	36.65	\$ 733.00	35.00	1,282.75
25	Bearing (Front)	50/22/148			20	20	19	\$	6.73	\$ 134.60	19.00	127.87
26	Rectifier Kit	50/22/149			20	20	19	\$	39.81	\$ 796.20	19.00	756.39
27	Screw (Rect to housing) pkg(10)	50/22/150			5	5	50	\$	0.52	\$ 2.60	50.00	26.00
28	Bearing (rear)	50/22/151			20	20	20	\$	5.04	\$ 100.80	20.00	100.80
29	Regulator Assy				20	20		\$	36.65	\$ 733.00	0.00	0.00
30	Holder Assy (brush & term)	50/22/152			10	10	8	\$	8.16	\$ 81.60	8.00	65.28
31	Nut & Washer (brush & term) pkg(5)	50/22/153			10	10	49	\$	0.54	\$ 5.40	49.00	26.46
32	Housing (front)	50/22/154			20	20	20	\$	17.22	\$ 344.40	20.00	344.40
33	Housing (rear)	50/22/155			20	20	20	\$	34.48	\$ 689.60	20.00	689.60

KOMAT SCIENTIFIC, INC.
 BIDDER # 3

C.7.4 GROUP C SPARES FOR FORD RANGER

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
34	Bolt Hex washer head	50/22/156			8	8	48	\$ 0.34	\$ 2.72	48.00	16.32
35	Rotor Assy.	50/22/157			20	20	20	\$ 41.98	\$ 839.60	20.00	839.60
36	Stator Assy.	50/22/158			20	20	20	\$ 37.60	\$ 752.00	20.00	752.00
37	Spring (brush) Pkg(2)	50/22/159			20	20	40	\$ 1.37	\$ 27.40	40.00	54.80
38	Holder (brush)	50/22/160			20	20	18	\$ 8.16	\$ 163.20	18.00	146.88
39	Retainer (front beating)	50/22/161			20	20	20	\$ 0.74	\$ 14.80	20.00	14.80
40	Ring (rotor stop)	50/22/162			20	20	20	\$ 1.59	\$ 31.80	20.00	31.80
CALIBRATION PARTS LIST NO. 670											
CALIBRATION NO. 9-49F-RO-4CYL.140(EFI)CID											
2.3 LITRE 1989 FORD RANGER--M/T-exc											
Calif (Items 41 through 55)											
41	Sensor (exh gas recirculation val)	50/22/163			20	20	20	\$ 23.97	\$ 479.40	20.00	479.40
42	Reservoir Assy (EGR vacuum)	50/22/182			20	20	20	\$ 20.21	\$ 404.20	20.00	404.20
43	Sensor Assy (exh gas oxygen)	50/22/186			20	20	20	\$ 49.25	\$ 985.00	20.00	985.00
44	Valve Assy (pressure external)	50/22/164			20	20	20	\$ 80.61	\$ 1,612.20	20.00	1,612.20
45	Injector Assy (fuel)				20	20	0	\$ 62.48	\$ 1,249.60	0.00	0.00
46	Sensor Assy (Carb air cleaner air temp control)	50/22/166			20	20	20	\$ 5.90	\$ 118.00	20.00	118.00
47	Motor Assy (carb air cleaner vacuum)	50/22/183			20	20	20	\$ 13.51	\$ 270.20	20.00	270.20
48	Valve Assy (throttle air by-pass) #E9TE 9F715-A1A	50/22/167			20	20	17	\$ 46.42	\$ 928.40	17.00	789.14
49	Sensor Assy (speed) #E3AF 9E731-AB	50/22/168			20	20	20	\$ 15.38	\$ 307.60	20.00	307.60
50	Regulator Assy (fuel chrg press) #E7EE 9C968-AA or E77E 9C968-AA	50/22/169			20	20	16	\$ 39.33	\$ 786.60	16.00	629.28
51	Potentiometer Assy (throttle pos sens) #E7DF 9B989-AA				50	50	46	\$ 18.69	\$ 934.50	46.00	859.74
52	Distributor Assy #E6RE 12117-FA	50/22/170			20	20		\$ 136.10	\$ 2,722.00	0.00	0.00
53	Sensor Assy (Engine Electronic control coolant temperature) #E1AF 12A648-AA or E4AF 12A648-AA	50/22/171			20	20	18	\$ 15.75	\$ 315.00	18.00	283.50
54	Processor and Calibrator Assy (E.E.C.1V)	50/22/172			40	40	36	\$ 340.36	\$ 13,614.40	36.00	12,252.96
55	Sensor Assy (air charge temp) #E4AF 12A697-AA	50/22/173			20	20	19	\$ 30.00	\$ 600.00	19.00	570.00
TOTAL PRICE ITEM C.7.4.1 (Items 01 through 55)								\$ 38,861.78			32,001.27

KOMAT SCIENTIFIC, INC.

BIDDER # 3

C.7.6 GROUP E SPARES FOR FORD RANGER

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
C.7.6.1 SPARE PARTS for 1989 FORD RANGER (EFI) 2.3L VIN # 1FTCR10A6KUA											
TRANSMISSION (Items 01 through 03)											
01	5 Speed Manual Remanufactured 5 Spd Trans Assy	50/22/58			5	5	5	\$ 1,225.66	\$ 6,128.30	5.00	6,128.30
02	Universal Joints (front)	50/22/61			20	20	16	\$ 17.47	\$ 349.40	16.00	279.52
03	Universal Joints (rear)	50/22/62			20	20	15	\$ 17.47	\$ 349.40	15.00	262.05
STEERING AND SUSPENSION (Items 04 through 09)											
04	Gear Assy (steering) SMK-A	50/22/18			5	5	5	\$ 410.80	\$ 2,054.00	5.00	2,054.00
05	End Assy (spdl conn rod LH inner)	50/22/174			20	20	16	\$ 46.77	\$ 935.40	16.00	748.32
06	RH Outer	50/22/17			20	20	14	\$ 52.65	\$ 1,053.00	14.00	737.10
07	LH Outer	50/22/175			20	20	14	\$ 53.63	\$ 1,072.60	14.00	750.82
08	Front Shock Absorber (gas charged)	50/22/176			40	40	24	\$ 43.24	\$ 1,729.60	24.00	1,037.76
09	Rear H/D (gas charged)	50/22/177			40	40	28	\$ 33.65	\$ 1,346.00	28.00	942.20
ENGINE-NEW & REMANUFACTURED (Items 10 through 12)											
10	2.3 Litre 140 CI EFI-OHC New Engine (Complete)	50/22/185			3	3	3	\$ 3,634.88	\$ 10,904.64	3.00	10,904.64
11	Remanufactured (long-block)	50/22/178			4	4	4	\$ 2,123.23	\$ 8,492.92	4.00	8,492.92
12	Remanufactured (short-block)	50/22/179			3	3	3	\$ 1,365.13	\$ 4,095.39	3.00	4,095.39
TOTAL PRICE ITEM C.7.6.1 (Items 01 through 12)									\$ 38,510.65		36,433.02

Appendix L60

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CONTRACT 17841-07

ELECTRIC FORKLIFTS

LINE ITEM (1)

BIDDER'S NAME: HYSTER

Appendix L61

C.7.13 RECOMMENDED SPARES FOR ELECTRIC MODEL FORKLIFTS

Bidder's Name: HYSTER COMPANY

Hyster Actual Shipment

CIP PORT OF ALEX.

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc. Thru. AIDProject	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)	
								Unit	Total			
C.7.13.1 Spare Parts For Electric Model Forklifts (Section E.2.2)												
1	SEAT	50/35/1			10	10	10	\$	61.87	\$ 618.7	10.00	618.7
2	SWITCH	50/35/2			3	3	3	\$	13.12	\$ 39.36	3.00	39.36
3	LATCH	50/35/3			4	4	4	\$	11.32	\$ 45.28	4.00	45.28
4	CONE	50/35/4			4	4	4	\$	15.33	\$ 61.32	4.00	61.32
5	CUP	50/35/5			4	4	4	\$	5.81	\$ 23.24	4.00	23.24
6	SEAL	50/35/6			4	4	4	\$	5.00	\$ 20.00	4.00	20.00
7	STUD	50/35/7			24	24	24	\$	0.63	\$ 15.12	24.00	15.12
8	NUT	50/35/8			24	24	24	\$	0.90	\$ 21.60	24.00	21.60
9	CUP	50/35/9			4	4	8	\$	5.81	\$ 23.24	8.00	46.48
10	CONE	50/35/10			4	4	8	\$	11.82	\$ 47.28	8.00	94.56
11	CUP	50/35/11			4	4	8	\$	3.20	\$ 12.80	8.00	25.60
12	CONE	50/35/12			4	4	8	\$	5.80	\$ 23.20	8.00	46.40
13	CONE	50/35/13			2	2	2	\$	7.81	\$ 15.62	2.00	15.62
14	CUP	50/35/14			3	3	6	\$	4.28	\$ 12.84	6.00	25.68
15	CUP	50/35/15			3	3	6	\$	4.94	\$ 14.82	6.00	29.64
16	CONE	50/35/16			3	3	3	\$	16.39	\$ 49.17	3.00	49.17
17	CUP	50/35/17			4	4	4	\$	3.94	\$ 15.76	4.00	15.76
18	CONE	50/35/18			4	4	4	\$	7.57	\$ 30.28	4.00	30.28
19	BEARING				4	4	4	\$	8.78	\$ 35.12	4.00	35.12
20	SEAL	50/35/19			4	4	4	\$	2.07	\$ 8.28	4.00	8.28
21	BEARING	50/35/20			4	4	4	\$	7.17	\$ 28.68	4.00	28.68
22	BRUSH SET-TRACTION MOTOR	50/35/21			4	4	4	\$	57.56	\$ 230.24	4.00	230.24
23	SPRING	50/35/22			9	9	9	\$	3.78	\$ 34.02	9.00	34.02
24	SWITCH	50/35/23			3	3	3	\$	81.51	\$ 244.53	3.00	244.53
25	COVER	50/35/24			4	4	8	\$	4.31	\$ 17.24	8.00	34.48
26	SWITCH	50/35/25			9	9	9	\$	6.88	\$ 61.92	9.00	61.92
27	KEY	50/35/26			10	10	20	\$	0.82	\$ 8.2	20.00	16.4
28	O-RING	50/35/27			12	12	12	\$	0.38	\$ 4.56	12.00	4.56
29	SPRING KIT	50/35/28			4	4	4	\$	2.78	\$ 11.12	4.00	11.12
30	DRIVE	50/35/29			4	4	4	\$	7.03	\$ 28.12	4.00	28.12
31	DRIVE LINK	50/35/30			4	4	4	\$	15.1	\$ 60.4	4.00	60.4
32	SEAL	50/35/31			4	4	4	\$	6.97	\$ 27.88	4.00	27.88
33	ROLLER KIT	50/35/32			4	4	4	\$	0.86	\$ 3.44	4.00	3.44
34	THRUST BEARING	50/35/33			4	4	4	\$	3.72	\$ 14.88	4.00	14.88
35	SEAL	50/35/34			4	4	4	\$	39.30	\$ 157.20	4.00	157.20

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C.7.13 RECOMMENDED SPARES FOR ELECTRIC MODEL FORKLIFTS
 Bidder's Name: HYSTER COMPANY

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Hyster Actual Shipment		Balance 15/4/97	CIP PORT OF ALEX.		* Net Balance	Value Of Net Balance (AID PURCHASE)
					Quantity Proc. Thru. AIDProject	Total Quantity		Commodity Prices Unit	Total		
36	BACKUP RING	50/35/35			3	3	4	\$ 11.99	\$ 35.97	4.00	47.96
37	O-RING	50/35/36			12	12	12	\$ 0.65	\$ 7.80	12.00	7.80
38	PIN	50/35/37			12	12	12	\$ 3.75	\$ 45.00	12.00	45.00
39	SNAP RING	50/35/38			24	24	24	\$ 0.18	\$ 4.32	24.00	4.32
40	BUSHING	50/35/39			12	12	12	\$ 9.53	\$ 114.36	12.00	114.36
41	WASHER	50/35/40			12	12	12	\$ 4.44	\$ 53.28	12.00	53.28
42	SEAL				12	12	12	\$ 2.90	\$ 34.80	12.00	34.80
43	CONE	50/35/42			8	8	16	\$ 3.87	\$ 30.96	16.00	61.92
44	CUP	50/35/43			8	8	16	\$ 1.88	\$ 15.04	16.00	30.08
45	SEAL	50/35/44			6	6	6	\$ 3.62	\$ 21.72	6.00	21.72
46	SLEEVE	50/35/45			6	6	12	\$ 2.37	\$ 14.22	12.00	28.44
47	CONE	50/35/46			6	6	6	\$ 6.64	\$ 39.84	6.00	39.84
48	CUP	50/35/47			6	6	12	\$ 3.55	\$ 21.30	12.00	42.60
49	CUP	50/35/48			6	6	6	\$ 6.89	\$ 41.34	6.00	41.34
50	CONE	50/35/49			6	6	6	\$ 10.63	\$ 63.78	6.00	63.78
51	SEAL KIT	50/35/50			3	3	3	\$ 23.13	\$ 69.39	3.00	69.39
52	PUMP-STEERING				3	3		\$ 146.12	\$ 438.36	0.00	0.00
53	REPAIR KIT	50/35/51			3	3	3	\$ 8.66	\$ 25.98	3.00	25.98
54	BEARING	50/35/52			8	8	2	\$ 2.35	\$ 18.80	2.00	4.70
55	BEARING	50/35/53			6	6	6	\$ 2.65	\$ 15.90	6.00	15.90
56	BRUSH SET-STEERING MOTOR	50/35/54			4	4	4	\$ 3.82	\$ 15.28	4.00	15.28
57	SPRING SET	50/35/55			4	4	4	\$ 1.49	\$ 5.96	4.00	5.96
58	SWITCH				3	3		\$ 12.38	\$ 37.14	0.00	0
59	MASTER CYLINDER	50/35/56			3	3	3	\$ 46.46	\$ 139.38	3.00	139.38
60	REPAIR KIT	50/35/57			3	3	3	\$ 13.00	\$ 39.00	3.00	39.00
61	SPRING	50/35/58			3	3	3	\$ 1.20	\$ 3.60	3.00	3.60
62	LINK	50/35/59			3	3	3	\$ 2.53	\$ 7.59	3.00	7.59
63	CUP	50/35/60			8	8	8	\$ 0.21	\$ 1.68	8.00	1.68
64	SPRING	50/35/61			4	4	4	\$ 0.77	\$ 3.08	4.00	3.08
65	LINK	50/35/62			4	4	4	\$ 6.26	\$ 25.04	4.00	25.04
66	SPRING	50/35/63			4	4	4	\$ 0.90	\$ 3.60	4.00	3.60
67	SHOELINING	50/35/64			6	6	6	\$ 53.35	\$ 320.10	6.00	320.10
68	SPRING	50/35/65			6	6	6	\$ 0.60	\$ 3.60	6.00	3.60
69	WHEEL CYLINDER	50/35/66			6	6	6	\$ 27.18	\$ 163.08	6.00	163.08
70	PIN	50/35/67			6	6	6	\$ 0.20	\$ 1.20	6.00	1.20
71	COVER	50/35/68			12	12	12	\$ 0.54	\$ 3.24	12.00	6.48

Appendix L63

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C.7.13 RECOMMENDED SPARES FOR ELECTRIC MODEL FORKLIFTS

Bidder's Name: HYSTER COMPANY

Hyster Actual Shipment

CIP PORT OF ALEX.

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity		Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
					Proc. Thru. AIDProject	Total Quantity		Unit	Total		
72	WHEEL CYLINDER KIT	50/35/69			6	6	6	\$ 1.83	\$ 10.98	6.00	10.98
73	BRAKE SHOE SET	50/35/70			3	3	3	\$ 12.50	\$ 37.50	3.00	37.50
74	POTENTIOMETER	50/35/71			3	3	3	\$ 24.12	\$ 72.36	3.00	72.36
75	SWITCH	50/35/72			3	3	6	\$ 12.38	\$ 37.14	6.00	74.28
76	SWITCH	50/35/73			3	3	3	\$ 46.15	\$ 138.45	3.00	138.45
77	HORN	50/35/74			3	3	3	\$ 19.01	\$ 57.03	3.00	57.03
78	FUSE 15AMP	50/35/75			6	6	6	\$ 0.51	\$ -3.06	6.00	3.06
79	FUSE 500AMP	50/35/76			6	6	6	\$ 6.13	\$ 36.78	6.00	36.78
80	FUSE 325AMP	50/35/77			6	6	6	\$ 6.62	\$ 39.72	6.00	39.72
81	FUSE 40AMP	50/35/78			10	10	10	\$ 0.79	\$ 7.90	10.00	7.90
82	OSCILLATOR CARD	50/35/79			1	1	1	\$ 425.51	\$ 425.51	1.00	425.51
83	SCR#1 TRACTION PANEL	50/35/80			2	2	2	\$ 115.26	\$ 230.52	2.00	230.52
84	SCR#2	50/35/81			4	4	7	\$ 24.94	\$ 99.76	7.00	174.58
85	RECTIFIER#3 & #4	50/35/82			4	4	4	\$ 20.61	\$ 82.44	4.00	82.44
86	SCR#5	50/35/83			4	4	4	\$ 24.94	\$ 99.76	4.00	99.76
87	BOTTOM TERMINAL	50/35/84			3	3	3	\$ 2.44	\$ 7.32	3.00	7.32
88	BOTTOM TERMINAL	50/35/85			3	3	3	\$ 2.44	\$ 7.32	3.00	7.32
89	BOTTOM TERMINAL	50/35/86			3	3	3	\$ 2.76	\$ 8.28	3.00	8.28
90	BOTTOM TERMINAL	50/35/87			3	3	3	\$ 2.70	\$ 8.10	3.00	8.10
91	TOP TERMINAL	50/35/88			3	3	3	\$ 2.71	\$ 8.13	3.00	8.13
92	TOP TERMINAL	50/35/89			3	3	3	\$ 2.36	\$ 7.08	3.00	7.08
93	TOP TERMINAL	50/35/90			3	3	3	\$ 2.84	\$ 8.52	3.00	8.52
94	CARRIER	50/35/91			3	3	3	\$ 0.81	\$ 2.43	3.00	2.43
95	SHIM	50/35/92			10	10	10	\$ 0.22	\$ 2.20	10.00	2.20
96	TIP	50/35/93			4	4	4	\$ 3.88	\$ 15.52	4.00	15.52
97	CUP	50/35/94			3	3	3	\$ 0.97	\$ 2.91	3.00	2.91
98	SPRING	50/35/95			3	3	3	\$ 0.28	\$ 0.84	3.00	0.84
99	PUMP CARD	50/35/96			1	1	1	\$ 296.12	\$ 296.12	1.00	296.12
100	SCR# 1 PUMP PANEL	50/35/97			1	1	1	\$ 257.50	\$ 257.50	1.00	257.50
101	SCR# 2	50/35/98			3	3		\$ 24.94	\$ 74.82	0.00	0.00
102	TERMINAL	50/35/99			3	3	3	\$ 4.73	\$ 14.19	3.00	14.19
103	TERMINAL	50/35/100			3	3	3	\$ 4.00	\$ 12.00	3.00	12.00
104	TERMINAL				4	4	4	\$ 4.73	\$ 18.92	4.00	18.92
105	CARRIER				3	3		\$ 0.81	\$ 2.43	0.00	0.00
106	SHIM				10	10		\$ 0.22	\$ 2.20	0.00	0.00
107	TIP	50/35/103			4	4	4	\$ 6.45	\$ 25.80	4.00	25.80

C.7.13 RECOMMENDED SPARES FOR ELECTRIC MODEL FORKLIFTS
 Bidder's Name: HYSTER COMPANY

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Hyster Actual Shipment		Balance 15/4/97	CIP PORT OF ALEX.		* Net Balance	Value Of Net Balance (AID PURCHASE)
					Quantity Proc. Thru. AIDProject	Total Quantity		Commodity Prices Unit	Total		
108	SPRING				6	6		\$ 0.28	\$ 1.68	0.00	0.00
109	CUP	50/35/105			3	3	3	\$ 0.44	\$ 1.32	3.00	1.32
110	SB CONNECTOR	50/35/106			12	12	24	\$ 9.35	\$ 112.20	24.00	224.40
111	BDI W/INTERRUPT				3	3		\$ 42.50	\$ 127.50	0.00	0.00
112	COUPLER	50/35/107			3	3	3	\$ 90.38	\$ 271.14	3.00	271.14
113	HYDRAULIC PUMP	50/35/108			3	3	3	\$ 158.00	\$ 474.00	3.00	474
114	SEAL KIT	50/35/109			3	3	-3	\$ -31.3	\$ -93.90	3.00	-93.9
115	HYDRAULIC MOTOR	50/35/110			1	1	1	\$ 943.26	\$ 943.26	1.00	943.26
116	BRUSH SET-HYDRAULIC MOTOR	50/35/111			3	3	3	\$ 123.18	\$ 369.54	3.00	369.54
117	SPRING SET	50/35/112			4	4	6	\$ 1.38	\$ 5.52	6.00	8.28
118	BEARING	50/35/113			3	3	3	\$ 6.13	\$ 18.39	3.00	18.39
119	FILTER	50/35/114			12	12	12	\$ 13.46	\$ 161.52	12.00	161.52
120	GASKET	50/35/115			3	3	3	\$ 12.30	\$ 36.90	3.00	36.90
121	SEAL KIT	50/35/116			3	3	3	\$ 10.78	\$ 32.34	3.00	32.34
122	O-RING	50/35/117			20	20	20	\$ 0.22	\$ 4.40	20.00	4.40
123	SEAL KIT	50/35/118			4	4	4	\$ 4.80	\$ 19.20	4.00	19.20
124	ROLLER	50/35/119			3	3	3	\$ 26.38	\$ 79.14	3.00	79.14
125	ROLLER	50/35/120			3	3	3	\$ 36.47	\$ 109.41	3.00	109.41
126	SNAP RING	50/35/121			15	15	15	\$ 0.19	\$ 2.85	15.00	2.85
127	PIN	50/35/122			6	6	6	\$ 15.73	\$ 94.38	6.00	94.38
128	COTTER	50/35/123			100	100	90	\$ 0.02	\$ 2.00	90.00	1.80
129	SEAL KIT	50/35/124			3	3	3	\$ 45.27	\$ 135.81	3.00	135.81
130	ROLLER				6	6	6	\$ 26.38	\$ 158.28	6.00	158.28
131	SNAP RING				15	15	15	\$ 0.19	\$ 2.85	15.00	2.85
132	PIN				12	12	12	\$ 15.73	\$ 188.76	12.00	188.76
133	COTTER				100	100	90	\$ 0.02	\$ 2.00	90.00	1.80
TOTAL PRICE ITEM (ITEM 1 Through 133)								\$ 9,560.02			9,344.68
3 % PROCESSING								\$ 229.72			
HANDLING CHARGE								\$ 45.40			
TOTAL CIP ALEXANDRIA , EGYPT								\$ 9,835.140			

1	Electric Model Forklifts	50/35/125			3	3	0	\$ 23,528.00	\$ 70,584.00	0.00	0.00
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TOTAL CIP DOLLAR AMOUNT \$ 80,419.14

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CONTRACT 17841-07

FAULT INDICATORS & SPARES FOR GMC

LINE ITEM (3, 10-14)

BIDDER'S NAME: ORASCOM

Appendix L66

123

BIDDER # 5
ORASCOM

IFB NO. 17841-07

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		

C.7.8.1 SPARE PARTS FOR 1989 GMC SL SIERRA
6.2 LITRE DIESEL, VIN 16DJR34JOKJ506628
GVWR 11,000 LBS; GAWR 4,000 LBS FRONT; GAWR 8,200 LBS REAR.

CLUTCH											
01	Clutch Master Cyl	50/23/1			15	15	12	\$ 70.00	\$ 1,050.00	12.00	840.00
02	Clutch Slave Cyl				15	15	15	\$ 58.00	\$ 870.00	15.00	870.00
03	Clutch Disk	50/23/75			40	40	40	\$ 175.00	\$ 7,000.00	40.00	7,000.00
04	Pressure Plate				40	40	40	\$ 160.00	\$ 6,400.00	40.00	6,400.00
05	Pilot Bearing	50/23/9			40	40	40	\$ 7.00	\$ 280.00	40.00	280.00
06	Throw Out Bearing				40	40	40	\$ 37.00	\$ 1,480.00	40.00	1,480.00
07	Repair Kit Clutch M Cyl				15	15	15	\$ 70.00	\$ 1,050.00	15.00	1,050.00
08	Fork Clutch	50/23/79			10	10	9	\$ 26.00	\$ 260.00	9.00	234.00
09	Repair Kit Clutch Slave Cyl	50/23/78			15	15	10	\$ 29.00	\$ 435.00	10.00	290.00
BRAKES											
10	Brake Caliper				10	10	10	\$ 12.00	\$ 120.00	10.00	120.00
11	Rear Brake Shoes				20	20	10	\$ 82.00	\$ 1,640.00	10.00	820.00
12	Rear Wheel Cylinder				20	20	20	\$ 31.00	\$ 620.00	20.00	620.00
13	Front Rotor				10	10	10	\$ 116.00	\$ 1,160.00	10.00	1,160.00
14	Front Brake Pad				40	40	40	\$ 45.00	\$ 1,800.00	40.00	1,800.00

TOTAL PRICE ITEM C.7.8.1 (Items 01 through 14) \$ 24,165.00 22,964.00

C.7.9 FUEL SYSTEM

01	Fuel Pump				15	15	15	\$ 97.00	\$ 1,455.00	15.00	1,455.00
02	Fuel Water Separator				50	50	50	\$ 102.00	\$ 5,100.00	50.00	5,100.00
03	Injectors	50/23/7			80	80	80	\$ 39.00	\$ 3,120.00	80.00	3,120.00
04	Fuel Pump Injection	50/23/81			15	15	15	\$ 1,343.00	\$ 20,145.00	15.00	20,145.00
05	Service Kit Injector Complete				80	80	80	\$ 39.00	\$ 3,120.00	80.00	3,120.00
06	Gear Fuel injection Pump Driver	50/23/82			5	5	5	\$ 48.00	\$ 240.00	5.00	240.00

OIL SYSTEM

07	Engine Oil Filters	50/23/1			100	100	85	\$ 4.00	\$ 400.00	85.00	340.00
08	Oil Pressure Sensor				10	10		\$ 34.00	\$ 340.00	0.00	0.00
09	Drive Oil-Pump	83/23/83			10	10	10	\$ 66.00	\$ 660.00	10.00	660.00
10	Oil Pump	84/23/84			20	20	18	\$ 95.00	\$ 1,900.00	18.00	1,710.00

COOLING SYSTEM

11	Thermostat W/gasket				10	10	10	\$ 21.00	\$ 210.00	10.00	210.00
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BIDDER # 5
ORASCOM

IFB NO. 17841-07

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
12	Thermostat W/gasket				10	10	10	\$ 1.00	\$ 10.00	10.00	10.00
13	Water Temp Sensor	69/23/69			10	10	10	\$ 19.00	\$ 190.00	10.00	190.00
14	Pump Kit- Coolant				10	10	10	\$ 101.00	\$ 1,010.00	10.00	1,010.00
15	Repair Kits- (water pump)				10	10	10	\$ 101.00	\$ 1,010.00	10.00	1,010.00
TOTAL PRICE ITEM C.7.9.1 (Items 01 through 16)									\$ 38,910.00		38,320.00
C.7.10 PISTONS											
01	Piston W/pin Standard	50/23/85			80	80	80	\$ 78.00	\$ 6,240.00	80.00	6,240.00
02	Piston W/pin Standard Hi Limit	50/23/86			80	80	80	\$ 78.00	\$ 6,240.00	80.00	6,240.00
03	Piston W/pin .75 mm O/S	50/23/87			80	80	56	\$ 78.00	\$ 6,240.00	56.00	4,368.00
RINGS											
04	Ring Kit	50/23/88			80	80	80	\$ 25.00	\$ 2,000.00	80.00	2,000.00
05	Ring Kit Standard	50/23/89			80	80	72	\$ 25.00	\$ 2,000.00	72.00	1,800.00
06	Ring Kit .75 mm O/S	50/23/90			80	80	48	\$ 25.00	\$ 2,000.00	48.00	1,200.00
CRANKSHAFT											
07	Crank Shaft	50/23/91			5	5	3	\$ 490.00	\$ 2,450.00	3.00	1,470.00
08	Bearing Kit Stand (1/2/4)	50/23/92			5	5	5	\$ 22.00	\$ 110.00	5.00	110.00
09	Bearing Kit #1/2/4 (.013 mm US)				10	10	0	\$ 21.00	\$ 210.00	0.00	0.00
10	Bearing Kit # 1/2/4 (.026 mm US)	50/23/94			10	10	10	\$ 22.00	\$ 220.00	10.00	220.00
11	CS Bearing Kit #5 (Stand)	50/23/95			5	5	4	\$ 20.00	\$ 100.00	4.00	80.00
12	CS Bearing Kit #5 (.013 mm U/S)	50/23/96			10	10	7	\$ 20.00	\$ 200.00	7.00	140.00
13	CS Bearing Kit #5 (.026 mm U/S)	50/23/97			10	10	10	\$ 20.00	\$ 200.00	10.00	200.00
14	CS Bearing Kit #3 (Stand)	50/23/98			5	5	4	\$ 21.00	\$ 105.00	4.00	84.00
15	Bearing Kit CS #3 (.013 mm U/S)	50/23/99			10	10	7	\$ 20.00	\$ 200.00	7.00	140.00
16	Bearing Kit CS #3 (.026 mm U/S)	50/23/100			10	10	10	\$ 20.00	\$ 200.00	10.00	200.00
17	Seal Crank Shaft	50/23/101			30	30	28	\$ 12.00	\$ 360.00	28.00	336.00
18	Sprocket (crank shaft)	50/23/102			10	10	10	\$ 33.00	\$ 330.00	10.00	330.00
19	Crank Shaft Timing	50/23/103			10	10	10	\$ 29.00	\$ 290.00	10.00	290.00
20	Gear- Fly Wheel Ring	50/23/104			10	10	7	\$ 31.00	\$ 310.00	7.00	217.00
VALVES											
21	Valve- Intake- Standard	50/23/105			240	240	216	\$ 18.00	\$ 4,320.00	216.00	3,888.00
22	Valve- Exhaust- Standard	50/23/106			240	240	216	\$ 37.00	\$ 8,880.00	216.00	7,992.00
MANIFOLD											
23	Manifold exhaust L.H	50/23/107			2	2	2	\$ 174.00	\$ 348.00	2.00	348.00
24	Manifold exhaust R.H	50/23/108			2	2	2	\$ 174.00	\$ 348.00	2.00	348.00

BIDDER # 5
ORASCOM

IFB NO. 17841-07

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
25	Manifold intake	50/23/109			2	2	2	\$ 330.00	\$ 660.00	2.00	660.00
26	Gasket Kit-intake Manifold	50/23/110			4	4	3	\$ 6.00	\$ 24.00	3.00	18.00
CYLINDER HEAD											
27	Head-Cylinder	50/23/111			4	4	4	\$ 582.00	\$ 2,328.00	4.00	2,328.00
28	Gasket Cylinder Head	50/23/112			20	20	13	\$ 32.00	\$ 640.00	13.00	416.00
TOTAL PRICE ITEM C.7.10.1 (Items 01 through 28)								\$ 47,553.00		41,663.00	
C.7.11 STARTER											
01	Starter	50/23/113			9	9	9	\$ 301.00	\$ 2,709.00	9.00	2,709.00
02	Armature (starter)				9	9	9	\$ 301.00	\$ 2,709.00	9.00	2,709.00
03	Coil field Kit (starter)	50/23/114			10	10	10	\$ 73.00	\$ 730.00	10.00	730.00
04	SW Coil (starter)	50/23/115			10	10	10	\$ 32.00	\$ 320.00	10.00	320.00
05	Pole Shoe Kit (Starter)	50/23/116			10	10	10	\$ 8.00	\$ 80.00	10.00	80.00
06	Drive Assembly (Starter)	50/23/116			10	10	10	\$ 70.00	\$ 700.00	10.00	700.00
ALTERNATOR											
07	Alternator				5	5	5	\$ 143.00	\$ 715.00	5.00	715.00
08	Rectifier assy (alntr)				20	20	20	\$ 52.00	\$ 1,040.00	20.00	1,040.00
09	Rotor (alntr)				10	10	10	\$ 86.00	\$ 860.00	10.00	860.00
10	Stator Kit (alntr)				10	10	20	\$ 56.00	\$ 560.00	20.00	1,120.00
11	Pole Shoe Kit (alntr)				20	20	5	\$ 11.00	\$ 220.00	5.00	55.00
12	Bearing Kit (alntr)				10	10		\$ 11.00	\$ 110.00	0.00	0.00
13	Alternator Belt				20	20	20	\$ 40.00	\$ 800.00	20.00	800.00
STEERING & SUSPENSION (Items 14 through 17)											
14	Steering Gear Assembly				5	5	5	\$ 525.00	\$ 2,625.00	5.00	2,625.00
15	Front Shock				40	40	40	\$ 35.00	\$ 1,400.00	40.00	1,400.00
16	Rear Shock				40	40	40	\$ 35.00	\$ 1,400.00	40.00	1,400.00
17	Power Steering Pump	50/23/51			4	4	4	\$ 215.00	\$ 860.00	4.00	860.00
ENGINE GASKETS (Item 18)											
18	(GASKET SET FOR eng) upr & lwr (compl.)	50/23/118			30	30	25	\$ 75.00	\$ 2,250.00	25.00	1,875.00
TOTAL PRICE ITEM C.7.11.1 (Items 01 through 18)								\$ 20,088.00		19,998.00	
C.7.12 GENERAL PARTS (Items 01 through 05)											
01	Engine Air Filters	50/23/4			40	40	40	\$ 9.00	\$ 360.00	40.00	360.00
02	Glow Plug Modified				20	20	20	\$ 67.00	\$ 1,340.00	20.00	1,340.00

Appendix L69

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BIDDER # 5
ORASCOM

IFB NO. 17841-07

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc.Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
03	Cam Shaft	50/23/119			4	4	4	\$ 442.00	\$ 1,768.00	4.00	1,768.00
04	Controller Glow Plug				10	10	1	\$ 67.00	\$ 670.00	1.00	67.00
05	Switch Cold Adv Temp	50/23/121			10	10	6	\$ 11.00	\$ 110.00	6.00	66.00
COMPLETE UNITS (Items 06 and 07)											
06	Transmission Complete				3	4	3	\$ 4,720.00	\$ 14,160.00	3.00	14,160.00
07	Engine Complete	50/23/6			4	0	4	\$ 4,117.00	\$ 16,468.00	4.00	16,468.00
TOTAL PRICE ITEM C.7.12.1 (ITEMS 01 through 07)									\$ 34,876.00		34,229.00

C.3.3.3

01	Fault Indicators Normal Loads				3500	3500	2,725.00	\$ 115.61	\$ 404,635.00	2,725.00	315,037.25
									\$ 570,227.00		

CONTRACT 17841-07

METERING & MEASURING INSTRUMENTS

LINE ITEM (2)

BIDDER'S NAME: PHOENIX

Appendix L71

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PART C: BID SCHEDULE
C.3.3 ITEMIZED BID SCHEDULE

Bidder's Name: PHONIX MGT.

CIP PORT OF ALEX.

Line Item No.	General Description	Ware House Code #	Balance 1/7/91	Local Proc. By AEDC	Quantity Proc. Thru. AID Project	Total Quantity	Balance 15/4/97	Commodity Prices		* Net Balance	Value Of Net Balance (AID PURCHASE)
								Unit	Total		
C.3.3.2 Metering & Measuring Instruments (SEE SECTION E.1 AND E.3)											
01	Dual Trace Oscilloscope (SEE SECTION E.3.1)		0	0	1	1	0	\$ 2,860.00	\$ 2,860.00	0.00	0
02	Transistor Checker (SEE SECTION E.3.2)		0	0	1	1	0	\$ 560.00	\$ 560.00	0.00	0
03	Clamp On Meter (SEE SECTION E.3.3)	16/1/12	0	0	44	44	2	\$ 200.00	\$ 8,800.00	2.00	400
04	Thermometer (SEE SECTION E.3.4)	16/1/88	0	0	14	14	2	\$ 610.00	\$ 8,540.00	2.00	1220
05	Recording Volt/Ampere Meter (SEE SECTION E.3.5)	16/1/27	0	0	14	14	10	\$ 560.00	\$ 7,840.00	10.00	5600
06	Infrared Thermometer (SEE SECTION E.3.6)	16/1/90	0	0	14	14	0	\$ 1,260.00	\$ 17,640.00	0.00	0
07	Low Voltage Tester (SEE SECTION E.3.7)	16/1/91	0	0	140	140	19	\$ 74.00	\$ 10,360.00	19.00	1406
08	Phase Rotation Tester A (SEE SECTION E.3.8)	16/1/94	0	0	28	28	0	\$ 880.00	\$ 24,640.00	0.00	0
09	Phase Rotation Tester B (SEE SECTION E.3.9)	16/1/95	0	0	2	2	2	\$ 1,189.80	\$ 2,379.60	2.00	2379.6
10	Capacitance Meter (SEE SECTION E.3.10)		0	0	2	2	0	\$ 470.00	\$ 940.00	0.00	0
11	Frequency Counter (SEE SECTION E.3.11)		0	0	1	1	0	\$ 2,048.00	\$ 2,048.00	0.00	0
12	Portable Universal Measuring LCR Meter (SEE SECTION E.3.12)		0	0	1	1	0	\$ 9,514.00	\$ 9,514.00	0.00	0
13	DC Power Supply (SEE SECTION E.3.13)		0	0	1	1	0	\$ 3,680.00	\$ 3,680.00	0.00	0
14	Multimeter (SEE SECTION E.3.14)		0	0	16	16	0	\$ 1,346.40	\$ 21,542.40	0.00	0

Total Price Item C.3.3.2 (item 01 - 14)

\$ 121,344.00

11,005.60

Appendix L72

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APPENDIX M

BVI BUDGET DISTRIBUTION

Appendix M1
Modernization Distribution System
Budget Distribution

June 1997

Project: 263-0194.01

	Salary & Wages	Overhead & Fringe Benefits	Differential & Educ. & Allowance	Travel Relocation Transport & Storage	Subcontr. & Consult.	Other Direct Costs	Total Estimated Cost	Fixed Fee	Total Estimated Cost Plus Fixed Fee
1996 Budget									
Jan 1991	10,133.3	14,272.0	2,583.2	4,183.0	6,265.4	2,884.8	40,321.7	3,266.1	43,587.8
Feb	10,133.3	14,272.0	2,583.2	4,183.0	6,265.4	2,884.8	40,321.7	3,266.1	43,587.8
Mar	10,133.3	14,272.0	2,583.2	4,183.0	6,265.4	2,884.8	40,321.7	3,266.1	43,587.8
Apr	10,133.3	14,272.0	2,583.2	4,183.0	6,265.4	2,884.8	40,321.7	3,266.1	43,587.8
May	10,133.3	14,272.0	2,583.2	4,183.0	6,265.4	2,884.8	40,321.7	3,266.1	43,587.8
Jun	10,133.3	14,272.0	2,583.2	4,183.0	6,265.4	2,884.8	40,321.7	3,266.1	43,587.8
Jul	10,133.3	14,272.0	2,583.2	4,183.0	6,265.4	2,884.8	40,321.7	3,266.1	43,587.8
Aug	10,133.3	14,272.0	2,583.2	4,183.0	6,265.4	2,884.8	40,321.7	3,266.1	43,587.8
Sep	10,133.3	14,272.0	2,583.2	4,183.0	6,265.4	2,884.8	40,321.7	3,266.1	43,587.8
Oct	10,133.3	14,272.0	2,583.2	4,183.0	6,265.4	2,884.8	40,321.7	3,266.1	43,587.8
Nov	10,133.3	14,272.0	2,583.2	4,183.0	6,265.4	2,884.8	40,321.7	3,266.1	43,587.8
Dec	10,133.3	14,272.0	2,583.2	4,183.0	6,265.4	2,884.8	40,321.7	3,266.1	43,587.8
Jan 1992	15,776.7	23,087.1	3,897.1	4,329.5	6,424.6	12,207.7	65,722.7	5,323.6	71,046.3
Feb	15,776.7	23,087.1	3,897.1	4,329.5	6,424.6	12,207.7	65,722.7	5,323.6	71,046.3
Mar	15,776.7	23,087.1	3,897.1	4,329.5	6,424.6	12,207.7	65,722.7	5,323.6	71,046.3
Apr	15,776.7	23,087.1	3,897.1	4,329.5	6,424.6	12,207.7	65,722.7	5,323.6	71,046.3
May	15,776.7	23,087.1	3,897.1	4,329.5	6,424.6	12,207.7	65,722.7	5,323.6	71,046.3
Jun	15,776.7	23,087.1	3,897.1	4,329.5	6,424.6	12,207.7	65,722.7	5,323.6	71,046.3
Jul	15,776.7	23,087.1	3,897.1	4,329.5	6,424.6	12,207.7	65,722.7	5,323.6	71,046.3
Aug	15,776.7	23,087.1	3,897.1	4,329.5	6,424.6	12,207.7	65,722.7	5,323.6	71,046.3
Sep	15,776.7	23,087.1	3,897.1	4,329.5	6,424.6	12,207.7	65,722.7	5,323.6	71,046.3
Oct	15,776.7	23,087.1	3,897.1	4,329.5	6,424.6	12,207.7	65,722.7	5,323.6	71,046.3
Nov	15,776.7	23,087.1	3,897.1	4,329.5	6,424.6	12,207.7	65,722.7	5,323.6	71,046.3
Dec	15,776.7	23,087.1	3,897.1	4,329.5	6,424.6	12,207.7	65,722.7	5,323.6	71,046.3
Jan 1993	16,282.3	23,475.9	3,503.0	6,693.2	9,189.3	3,755.1	62,898.8	5,094.8	67,993.6
Feb	16,282.3	23,475.9	3,503.0	6,693.2	9,189.3	3,755.1	62,898.8	5,094.8	67,993.6
Mar	16,282.3	23,475.9	3,503.0	6,693.2	9,189.3	3,755.1	62,898.8	5,094.8	67,993.6
Apr	16,282.3	23,475.9	3,503.0	6,693.2	9,189.3	3,755.1	62,898.8	5,094.8	67,993.6
May	16,282.3	23,475.9	3,503.0	6,693.2	9,189.3	3,755.1	62,898.8	5,094.8	67,993.6
Jun	16,282.3	23,475.9	3,503.0	6,693.2	9,189.3	3,755.1	62,898.8	5,094.8	67,993.6
Jul	16,282.3	23,475.9	3,503.0	6,693.2	9,189.3	3,755.1	62,898.8	5,094.8	67,993.6
Aug	16,282.3	23,475.9	3,503.0	6,693.2	9,189.3	3,755.1	62,898.8	5,094.8	67,993.6
Sep	16,282.3	23,475.9	3,503.0	6,693.2	9,189.3	3,755.1	62,898.8	5,094.8	67,993.6
Oct	16,282.3	23,475.9	3,503.0	6,693.2	9,189.3	3,755.1	62,898.8	5,094.8	67,993.6
Nov	16,282.3	23,475.9	3,503.0	6,693.2	9,189.3	3,755.1	62,898.8	5,094.8	67,993.6
Dec	16,282.3	23,475.9	3,503.0	6,693.2	9,189.3	3,755.1	62,898.8	5,094.8	67,993.6
Jan 1994	18,492.6	26,662.8	2,965.7	4,556.9	9,421.3	3,155.8	65,255.1	5,285.7	70,540.8
Feb	18,492.6	26,662.8	2,965.7	4,556.9	9,421.3	3,155.8	65,255.1	5,285.7	70,540.8
Mar	18,492.6	26,662.8	2,965.7	4,556.9	9,421.3	3,155.8	65,255.1	5,285.7	70,540.8
Apr	18,492.6	26,662.8	2,965.7	4,556.9	9,421.3	3,155.8	65,255.1	5,285.7	70,540.8
May	18,492.6	26,662.8	2,965.7	4,556.9	9,421.3	3,155.8	65,255.1	5,285.7	70,540.8
Jun	18,492.6	26,662.8	2,965.7	4,556.9	9,421.3	3,155.8	65,255.1	5,285.7	70,540.8
Jul	18,492.6	26,662.8	2,965.7	4,556.9	9,421.3	3,155.8	65,255.1	5,285.7	70,540.8
Aug	18,492.6	26,662.8	2,965.7	4,556.9	9,421.3	3,155.8	65,255.1	5,285.7	70,540.8
Sep	18,492.6	26,662.8	2,965.7	4,556.9	9,421.3	3,155.8	65,255.1	5,285.7	70,540.8
Oct	18,492.6	26,662.8	2,965.7	4,556.9	9,421.3	3,155.8	65,255.1	5,285.7	70,540.8
Nov	18,492.6	26,662.8	2,965.7	4,556.9	9,421.3	3,155.8	65,255.1	5,285.7	70,540.8
Dec	18,492.6	26,662.8	2,965.7	4,556.9	9,421.3	3,155.8	65,255.1	5,285.7	70,540.8

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Appendix M2
Modernization Distribution System
Budget Distribution

June 1997

Project: 263-0194.01

	Salary & Wages	Overhead & Fringe Benefits	Differential & Educ. Allowance	Travel Relocation Transport & Storage	Subcontr. & Consult.	Other Direct Costs	Total Estimated Cost	Fixed Fee	Total Estimated Cost Plus Fixed Fee
Jan 1995	19,006.1	27,403.1	2,403.4	2,988.8	9,952.7	4,423.7	66,177.8	5,360.4	71,538.2
Feb	19,006.1	27,403.1	2,403.4	2,988.8	9,952.7	4,423.7	66,177.8	5,360.4	71,538.2
Mar	19,006.1	27,403.1	2,403.4	2,988.8	9,952.7	4,423.7	66,177.8	5,360.4	71,538.2
Apr	19,006.1	27,403.1	2,403.4	2,988.8	9,952.7	4,423.7	66,177.8	5,360.4	71,538.2
May	19,006.1	27,403.1	2,403.4	2,988.8	9,952.7	4,423.7	66,177.8	5,360.4	71,538.2
Jun	19,006.1	27,403.1	2,403.4	2,988.8	9,952.7	4,423.7	66,177.8	5,360.4	71,538.2
Jul	19,006.1	27,403.1	2,403.4	2,988.8	9,952.7	4,423.7	66,177.8	5,360.4	71,538.2
Aug	19,006.1	27,403.1	2,403.4	2,988.8	9,952.7	4,423.7	66,177.8	5,360.4	71,538.2
Sep	19,006.1	27,403.1	2,403.4	2,988.8	9,952.7	4,423.7	66,177.8	5,360.4	71,538.2
Oct	19,006.1	27,403.1	2,403.4	2,988.8	9,952.7	4,423.7	66,177.8	5,360.4	71,538.2
Nov	19,006.1	27,403.1	2,403.4	2,988.8	9,952.7	4,423.7	66,177.8	5,360.4	71,538.2
Dec	19,006.1	27,403.1	2,403.4	2,988.8	9,952.7	4,423.7	66,177.8	5,360.4	71,538.2
Jan 1996	12,765.7	18,406.0	1,708.5	8,897.6	12,952.3	5,119.5	59,849.6	4,847.8	64,697.4
Feb	12,765.7	18,406.0	1,708.5	8,897.6	12,952.3	5,119.5	59,849.6	4,847.8	64,697.4
Mar	12,765.7	18,406.0	1,708.5	8,897.6	12,952.3	5,119.5	59,849.6	4,847.8	64,697.4
Apr	12,765.7	18,406.0	1,708.5	8,897.6	12,952.3	5,119.5	59,849.6	4,847.8	64,697.4
May	12,765.7	18,406.0	1,708.5	8,897.6	12,952.3	5,119.5	59,849.6	4,847.8	64,697.4
Jun	12,765.7	18,406.0	1,708.5	8,897.6	12,952.3	5,119.5	59,849.6	4,847.8	64,697.4
Jul	12,765.7	18,406.0	1,708.5	8,897.6	12,952.3	5,119.5	59,849.6	4,847.8	64,697.4
Aug	12,765.7	18,406.0	1,708.5	8,897.6	12,952.3	5,119.5	59,849.6	4,847.8	64,697.4
Sep	12,765.7	18,406.0	1,708.5	8,897.6	12,952.3	5,119.5	59,849.6	4,847.8	64,697.4
Oct	12,765.7	18,406.0	1,708.5	8,897.6	12,952.3	5,119.5	59,849.6	4,847.8	64,697.4
Nov	12,765.7	18,406.0	1,708.5	8,897.6	12,952.3	5,119.5	59,849.6	4,847.8	64,697.4
Dec	12,765.7	18,406.0	1,708.5	8,897.6	12,952.3	5,119.5	59,849.6	4,847.8	64,697.4
Jan 1997	13,557.6	19,547.8	1,719.6	10,779.1	13,340.4	5,874.5	64,819.0	5,250.3	70,069.3
Feb	13,557.6	19,547.8	1,719.6	10,779.1	13,340.4	5,874.5	64,819.0	5,250.3	70,069.3
Mar	13,557.6	19,547.8	1,719.6	10,779.1	13,340.4	5,874.5	64,819.0	5,250.3	70,069.3
Apr	13,557.6	19,547.8	1,719.6	10,779.1	13,340.4	5,874.5	64,819.0	5,250.3	70,069.3
May	13,557.6	19,547.8	1,719.6	10,779.1	13,340.4	5,874.5	64,819.0	5,250.3	70,069.3
Jun	13,557.6	19,547.8	1,719.6	10,779.1	13,340.4	5,874.5	64,819.0	5,250.3	70,069.3
Jul	13,557.6	19,547.8	1,719.6	10,779.1	13,340.4	5,874.5	64,819.0	5,250.3	70,069.3
Aug	13,557.6	19,547.8	1,719.6	10,779.1	13,340.4	5,874.5	64,819.0	5,250.3	70,069.3
Sep									
Oct									
Nov									
Dec									
TOTAL	1,217,943	1,756,066	218,488	466,022	757,189	425,557	4,841,265	392,143	5,233,408

APPENDIX N

BVI CUMULATIVE BUDGET DISTRIBUTION

Appendix N1

Alexandria Electrical Network
 Modernization Distribution System
 Cumulative Budget Distribution
 and Invoiced Cost

Project: 263-0194.01

Period: January - May, 1997

	Salary & Wages	Overhead & Fringe Benefits	Differential & Educ. Allowance	Travel Relocation Transport & Storage	Subcontr. & Consult.	Other Direct Costs	Total Estimated Cost	Fixed Fee	Total Estimated Cost Plus Fixed Fee
Cumulative Budget Distribution									
Thru Dec 1996	1,109,480.00	1,599,683.00	204,731.00	379,788.00	650,467.00	378,559.00	4,322,709.00	350,141.00	4,672,849.00
Jan 1997	1,122,245.70	1,618,089.00	206,439.50	388,685.60	663,419.30	383,678.50	4,382,558.60	354,988.80	4,737,546.40
Feb	1,135,011.40	1,636,495.00	208,148.00	397,583.20	676,371.60	388,798.00	4,442,408.20	359,836.60	4,802,243.80
Mar	1,147,777.10	1,654,901.00	209,856.50	406,480.80	689,323.90	393,917.50	4,502,257.80	364,684.40	4,866,941.20
Apr	1,160,542.80	1,673,307.00	211,565.00	415,378.40	702,276.20	399,037.00	4,562,107.40	369,532.20	4,931,638.60
May	1,173,308.50	1,691,713.00	213,273.50	424,276.00	715,228.50	404,156.50	4,621,957.00	374,380.00	4,996,336.00
Total For Period	63,828.50	92,030.00	8,542.50	44,488.00	64,761.50	25,597.50	299,248.00	24,239.00	323,487.00
Percent of Total Budget	5.24	5.24	3.91	9.55	8.55	6.02	6.18	6.18	6.18
Total Thru Period	1,173,308.50	1,691,713.00	213,273.50	424,276.00	715,228.50	404,156.50	4,621,957.00	374,380.00	4,996,336.00
Percent of Total Budget	96.34	96.34	97.61	91.04	94.46	94.97	95.47	95.47	95.47

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Appendix N2

Alexandria Electrical Network
 Modernization Distribution System
 Cumulative Budget Distribution
 and Invoiced Cost

Project: 263-0194.01

Period: January - May, 1997

	Salary & Wages	Overhead & Fringe Benefits	Differential & Educ. Allowance	Travel Relocation Transport & Storage	Subcontr. & Consult.	Other Direct Costs	Total Estimated Cost	Fixed Fee	Total Estimated Cost Plus, Fixed Fee
Invoiced Costs									
Invoiced Prior To Period	1,120,232.00	1,615,207.00	206,166.00	301,733.00	646,882.00	355,946.00	4,246,166.00	344,736.00	4,590,902.00
Total Invoiced For Period	65,431.93	94,341.97	8,362.56	21,438.55	57,971.96	31,353.37	278,900.34	22,591.21	301,491.55
Percent of Total Budget	5.37	5.37	3.83	4.60	7.66	7.37	5.76	5.76	5.76
Percent of Period Budget	102.51	102.51	97.89	48.19	89.52	122.49	93.20	93.20	93.20
Total Invoiced Thru Period	1,185,663.93	1,709,548.97	214,528.56	323,171.55	704,853.96	387,299.37	4,525,066.34	367,327.21	4,892,393.55
Percent of Total Budget	97.35	97.35	98.19	69.35	93.09	91.01	93.47	93.67	93.48
Percent of Budget Thru Period	101.05	101.05	100.59	76.17	98.55	95.83	97.90	98.12	97.92

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APPENDIX O

BVI MONTHLY DISTRIBUTION PROFESSIONAL MANHOUR BUDGET

Appendix O1

Alexandria Electrical Network
 Modernization Distribution System
 Professional Manhour Budget Distribution
 Project: 263-0194.01

June 1997

	Expatriate Staff		Egyptian Local Staff	Total
	Home Office	Field		
Jan 1991	44.4	292.7	795.3	1,132.4
Feb	44.4	292.7	795.3	1,132.4
Mar	44.4	292.7	795.3	1,132.4
Apr	44.4	292.7	795.3	1,132.4
May	44.4	292.7	795.3	1,132.4
Jun	44.4	292.7	795.3	1,132.4
Jul	44.4	292.7	795.3	1,132.4
Aug	44.4	292.7	795.3	1,132.4
Sep	44.4	292.7	795.3	1,132.4
Oct	44.4	292.7	795.3	1,132.4
Nov	44.4	292.7	795.3	1,132.4
Dec	44.4	292.7	795.3	1,132.4
Jan 1992	49.3	585.7	831.0	1,466.0
Feb	49.3	585.7	831.0	1,466.0
Mar	49.3	585.7	831.0	1,466.0
Apr	49.3	585.7	831.0	1,466.0
May	49.3	585.7	831.0	1,466.0
Jun	49.3	585.7	831.0	1,466.0
Jul	49.3	585.7	831.0	1,466.0
Aug	49.3	585.7	831.0	1,466.0
Sep	49.3	585.7	831.0	1,466.0
Oct	49.3	585.7	831.0	1,466.0
Nov	49.3	585.7	831.0	1,466.0
Dec	49.3	585.7	831.0	1,466.0
Jan 1993	41.5	481.3	874.1	1,396.9
Feb	41.5	481.3	874.1	1,396.9
Mar	41.5	481.3	874.1	1,396.9
Apr	41.5	481.3	874.1	1,396.9
May	41.5	481.3	874.1	1,396.9
Jun	41.5	481.3	874.1	1,396.9
Jul	41.5	481.3	874.1	1,396.9
Aug	41.5	481.3	874.1	1,396.9
Sep	41.5	481.3	874.1	1,396.9
Oct	41.5	481.3	874.1	1,396.9
Nov	41.5	481.3	874.1	1,396.9
Dec	41.5	481.3	874.1	1,396.9
Jan 1994	109.6	458.7	806.4	1,374.7
Feb	109.6	458.7	806.4	1,374.7
Mar	109.6	458.7	806.4	1,374.7
Apr	109.6	458.7	806.4	1,374.7
May	109.6	458.7	806.4	1,374.7
Jun	109.6	458.7	806.4	1,374.7
Jul	109.6	458.7	806.4	1,374.7
Aug	109.6	458.7	806.4	1,374.7
Sep	109.6	458.7	806.4	1,374.7
Oct	109.6	458.7	806.4	1,374.7
Nov	109.6	458.7	806.4	1,374.7
Dec	109.6	458.7	806.4	1,374.7

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Appendix O2

Alexandria Electrical Network
 Modernization Distribution System
 Professional Manhour Budget Distribution
 Project: 263-0194.01

June 1997

	Expatriate Staff		Egyptian Local Staff	Total
	Home Office	Field		
Jan 1995	96.0	469.8	779.8	1,345.6
Feb	96.0	469.8	779.8	1,345.6
Mar	96.0	469.8	779.8	1,345.6
Apr	96.0	469.8	779.8	1,345.6
May	96.0	469.8	779.8	1,345.6
Jun	96.0	469.8	779.8	1,345.6
Jul	96.0	469.8	779.8	1,345.6
Aug	96.0	469.8	779.8	1,345.6
Sep	96.0	469.8	779.8	1,345.6
Oct	96.0	469.8	779.8	1,345.6
Nov	96.0	469.8	779.8	1,345.6
Dec	96.0	469.8	779.8	1,345.6
Jan 1996	32.3	315.0	862.8	1,210.1
Feb	32.3	315.0	862.8	1,210.1
Mar	32.3	315.0	862.8	1,210.1
Apr	32.3	315.0	862.8	1,210.1
May	32.3	315.0	862.8	1,210.1
Jun	32.3	315.0	862.8	1,210.1
Jul	32.3	315.0	862.8	1,210.1
Aug	32.3	315.0	862.8	1,210.1
Sep	32.3	315.0	862.8	1,210.1
Oct	32.3	315.0	862.8	1,210.1
Nov	32.3	315.0	862.8	1,210.1
Dec	32.3	315.0	862.8	1,210.1
Jan 1997	45.8	320.0	892.5	1,258.3
Feb	45.8	320.0	892.5	1,258.3
Mar	45.8	320.0	892.5	1,258.3
Apr	45.8	320.0	892.5	1,258.3
May	45.8	320.0	892.5	1,258.3
Jun	45.8	320.0	892.5	1,258.3
Jul	45.8	320.0	892.5	1,258.3
Aug	45.8	320.0	892.5	1,258.3
Sep				
Oct				
Nov				
Dec				
TOTAL	4,844	33,798	66,533	105,175

APPENDIX P

BVI CUMULATIVE DISTRIBUTION OF BUDGET MANHOURS

Appendix P1

Alexandria Electrical Network
 Modernization Distribution System
 Professional Manhour Budget
 Cumulative Distribution
 and Expended

Project: 263-0194.01

Period: Jan - May, 1997

	Expatriate Staff		Egyptian Local Staff	Total
	Home Office	Field		
Manhour Budget Cumulative Distribution				
Thru Dec 1996	4,477.20	31,238.40	59,392.80	95,108.40
Jan 1997	4,523.00	31,558.40	60,285.30	96,366.70
Feb	4,568.80	31,878.40	61,177.80	97,625.00
Mar	4,614.60	32,198.40	62,070.30	98,883.30
Apr	4,660.40	32,518.40	62,962.80	100,141.60
May	4,706.20	32,838.40	63,855.30	101,399.90
 Total For Period	 229.00	 1,600.00	 4,462.50	 6,291.50
 Percent of Total Budget	 4.70	 4.70	 6.70	 6.00
 Total Thru Period	 4,706.20	 32,838.40	 63,855.30	 101,399.90
 Percent of Total Budget	 97.20	 97.20	 96.00	 96.40

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Appendix P2

Alexandria Electrical Network
 Modernization Distribution System
 Professional Manhour Budget
 Cumulative Distribution
 and Expended

Project: 263-0194.01

Period: Jan - May, 1997

	Expatriate Staff		Egyptian Local Staff	Total
	Home Office	Field		
Expended Manhours				
Expended Prior To Period	5,200.00	32,391.00	61,347.00	98,938.00
Expended For Period	18.00	288.00	525.00	831.00
Percent of Total Budget	0.40	0.90	0.80	0.80
Percent of Period Budget	7.90	18.00	11.80	13.20
Expended Thru Period	5,218.00	32,679.00	61,872.00	99,769.00
Percent of Budget Thru Period	110.90	99.50	96.90	98.40