

PD: NAM-712



UNITED STATES AGENCY for INTERNATIONAL DEVELOPMENT

CAIRO, EGYPT

October 21, 1981

PROJECT COMPLETION REPORT FOR THE ASSISTANT DIRECTOR, DRPS

From: John P. Hunt, IDPS *JPH*

Subject: Project Completion Report - Grant 263-001
Electric Power Distribution Project

HR C-1305

Ref.: Mission Order 3-17, Project Completion Report

1. PROJECT PURPOSE AND GOAL

The purpose of this project was to provide materials and equipment for the reconstruction of power distribution systems in Port Said, Ismailia, and Suez. Studies performed by the Ministry of Electricity in 1974 had identified distribution equipment and material needed to rehabilitate the distribution systems in the three cities.

2. ACCOMPLISHMENTS, ACTUAL AND PROJECTED

A total of twelve (12) IFBs were prepared for procurement of distribution materials and equipment. The IFBs were advertised in the Commerce Business Daily and AID's Business Opportunities bulletin. Tenders were evaluated, awards made and contracts were executed pursuant to A.I.D. regulations. All materials and equipment for the rehabilitation of the power distribution system were received at the main warehouses of the Egyptian Electricity Authority (EEA) at Port Said and Suez. EEA delivered these materials and equipment to the Canal Zone Company at Port Said which in turn distributed the items to their warehouses at Ismailia and Suez. Detailed plans for the installation of the distribution materials and equipment were completed and served as the basis for subsequent Work Orders for construction. Following detailed installation plans, the material and equipment were withdrawn from stock and installed to rehabilitate the distribution systems. USAID, on several field inspections, has verified that the material and equipment were properly used.

3. SUMMARIZED PROJECT HISTORY

Following the October 1973 conflict and withdrawal of Israeli troops from the Suez Canal area, Egypt regained effective use of the three major cities of the Suez Canal: Port Said, Ismailia and Suez. Years of abandonment and periodic warfare had taken a heavy toll on these cities. The GOE assigned high priority to the rehabilitation and rebuilding of the area adjacent to the Canal so these cities could again play a significant role in the development of the Egyptian economy.

Direct damage caused by warfare and lack of maintenance of the electric facilities resulted in extensive deterioration of the distribution systems in the three cities. From feasibility studies and plans for the redevelopment of the electric distribution systems, the Ministry of Electricity (MOE) prepared detailed lists of distribution equipment needed to rehabilitate the three cities. In late 1974, the MOE requested USAID's assistance in financing the foreign exchange cost of the required material and equipment.

In response, USAID selected Anderson & Porter, Inc. (S&P) to supply Architect/Engineer Services of a short term nature on a quick response basis under a Requirements Contract No. AID/otr-C-1305 executed on January 6, 1975. Work Order No. 1 of the Contract was issued February 17, 1975, and provided for S&P to prepare complete specifications and host country-contract bid documents for AID-financed distribution equipment required for the rehabilitation of the 11KV and 380-volt networks for the cities of Port Said, Ismailia and Suez.

A team of S&P engineers working with General Egyptian Electricity Corporation (GEEC) engineers reviewed the results of the comprehensive assessment of electrical equipment requirements for the reconstruction of the canal area made by the Ministry, and finalized the material and equipment requirements for the project from which cost estimates were derived. Based on these material and equipment requirements, S&P developed Equipment Specifications, Commercial Terms and Tender Instructions for nine (9) IFBs and submitted the draft documents to EEA and USAID on April 4, 1975. Following extensive review and modification, EEA approved the draft IFBs on July 3, 1975. The amended drafts were approved by USAID on August 8, 1975, and a synopsis of each IFB was published in the Commerce Business Daily. IFBs were made available to potential bidders on August 12, 1975 with a bid opening date of November 12, 1975.

Based upon the S&P assessment of material and equipment requirements and estimates of funds required to finance the procurements, a Project Paper was prepared and a Grant Authorization was approved by the USAID Administrator on April 21, 1975.

The Project Grant Agreement was signed on May 28, 1975. The grant provided Thirty Million U.S. dollars (\$30,000,000) to finance the foreign exchange costs of electrical equipment and materials needed for the rehabilitation of the distribution systems serving Port Said, Ismailia and Suez.

The USAID-S&P Contract had contemplated services necessary for the preparation of equipment specifications and formulation of bid packages for U.S. procurement. In mid 1975, GEEC requested USAID's approval for an expansion of the S&P Scope of Work to provide additional technical services throughout the bid evaluation and procurement of the equipment. USAID approved a waiver of the normal selection procedures and authorized GEEC to negotiate a second stage contract with S&P on August 5 1975.

The contract between the Ministry of Electricity and S&P was signed by both parties on September 27, 1975 to become effective November 1, 1975. It was approved by USAID on October 2, 1975. The contract provided for engineering and commercial services in the evaluation of tenders; preparation of procurement contract documents and any subsequent contract change orders; review and approval of vendor provided drawings and instruction books; expediting, inspection and test review of equipment; verification of vendor invoices; assistance in personnel training; and, submission of a final report.

The initial funding for S&P under the original contract was \$182,459 and 540 mandays. The contract between S&P and the Ministry of Electricity was amended on seven (7) occasions to reflect the expanded scope of work requiring additional engineering and commercial services and contract time extension. At the time the amended contract was completed, S&P had expended \$335,051 and 1,154.6 mandays .

Tenders responding to nine (9) IFBs were opened on November 11, 1975, in the offices of GEEC. S&P and GEEC independently evaluated the tenders over the next two months.

Protests were filed on IFB-2 - 11KV Distribution Transformers and Apparatus by Sola Basic Industries on December 10, 1975 and on IFB-4

- Power Distribution Fuse Boxes by New World Research Corporation on February 11, 1976. Both protests were eventually submitted to the Comptroller General of the United States and decisions were made which sustained USAID positions.

GEEC submitted their bid evaluations and contract award recommendations to USAID on December 3, 1975. S&P submitted their bid evaluations and recommendations for award to AID/W on December 19, 1975. USAID approved the awards on February 12, 1976 and advised EEA^{1/} on February 20, 1976. The approved awards, subobligations and actual expenditures are summarized in Table 1.

On February 24, 1976, USAID approved the award of Tender 4818-01-4 to Westinghouse.

The above approved tenderers were advised of their selection on February 29, 1976. Contracts were executed during the period March 14 thru 16 with the exception of the contract with Okonite which was signed on March 27, 1976, and the contract with Copperweld Industries which was signed on April 26, 1976.

IFB-4818-01-8 was cancelled and materials were procured through negotiation with cable suppliers.

IFB-4818-01-7 for Compression Tools and Fittings was redrafted, rebid twice, and a contract with Kearney National signed on March 24, 1977.

Following a favorable decision of the Comptroller General of the United States on April 7, 1976, USAID approved the award of Tender 4818-01-2 to Westinghouse. The contract was signed on April 8, 1976.

^{1/} On February 12, 1976, Law No. 12/1976 became operative creating the Egyptian Electricity Authority (EEA) superseding GEEC.

TABLE 1
AWARDS APPROVED
ACTUAL EXPENDITURES, BANKING CHARGES
AND TOTAL SUBOBLIGATIONS

| <u>ORDER NO.</u> | <u>FIRM</u> | <u>APPROVED AWARD</u> | <u>ACTUAL EXPENDITURES</u> | <u>BANK CHARGES</u> | <u>TOTAL SUBOBLIGATION</u> |
|------------------|---------------------------------|-----------------------|----------------------------|---------------------|----------------------------|
| 4818-01-1 | Abbot Power Corp. | \$1,794,042.00 | \$1,880,339.71 | \$3,971.44 | \$1,884,311.15 |
| 4818-01-2 | Westinghouse | 5,127,007.16 | 4,831,319.90 | 5,997.19 | 4,836,317.09 |
| 4818-01-3A | Phelps Dodge Wire & Cable Corp. | 13,419,081.81 | 15,348,453.07 | 16,914.10 | 15,365,367.19 |
| 4818-01-3B | Okonite Company | 1,920,003.55 | 2,204,719.73 | 1,993.51 | 2,206,693.29 |
| 4818-01-3C | General Cable | 70,030.00 | 71,463.55 | 5,855 | 71,522.10 |
| 4818-01-4 | Westinghouse | 3,587,778.00 | 3,687,706.85 | 3,936.20 | 3,691,643.05 |
| 4818-01-5 | McGraw-Edison | 550,462.55 | 494,311.80 | 384.27 | 494,696.07 |
| 4818-01-6 | Burndy Company | 13,198.54 | 12,967.13 | 9.00 | 12,976.13 |
| 4818-01-7 | Kearney | 227,289.17 | 239,368.98 | 464.90 | 239,833.88 |
| 4818-01-9 | Copperweld Industries | 374,734.96 | 390,148.87 | 384.30 | 390,533.17 |

The summary of each procurement is summarized in Appendix I, Pages 1 through 12.

During early 1978, an Audit of the Electrical Distribution Equipment in the Suez Canal area financed by Grant 236-001 was performed by the Area Auditor General, Near East, AID, to determine the present status of the commodity procurement, utilization and adequacy of controls and project progress. The Audit was performed on a selective basis in accordance with generally accepted audit practices and included such tests of records, site visits and discussion with appropriate representative of GOE and USAID. Audit Report Number 5-263-78-4 was issued February 16, 1978. The Audit contained six recommendations for improving the implementation of the project. The Audit recommendations were implemented.

In March, 1978, EEA requested S&P to undertake additional services to monitor the progress of project implementation and identify additional construction tools and installation equipment required to expedite the installation of the distribution material which could be financed from residual grant funds.

Following an inspection trip to the Canal Zone area to review project management, equipment utilization, reconstruction plans and installation techniques, S&P recommended to EEA the purchase of six (6) Backhoe - Trencher Combinations and three (3) Cable Trailers.

EEA revised the S&P recommendation and advised USAID on September 30, 1978 of their intent to purchase, through competitive bidding procedures, six (6) Backhoe - Trencher Combinations, six (6) Cable Trailers and a defined list of Spare Parts. IFBs 10, 11 and 12 were drafted and submitted to EEA for approval on October 12, 1978 and, following revisions, were approved by EEA and USAID. A synopsis of each IFB was published in AID Export Opportunities Bulletin on March 13, 1979 (Commerce Business Daily printers were on strike) with Bid Opening scheduled for April 30, 1979. Tenders responding to the three (3) additional IFBs were opened on April 30, 1979, in the offices of EEA. Three tenders were received on IFB-10 - Cable Installation Equipment and single responses were received on IFB-11 - Cable Trailers and IFB-12 - Spare Parts.

S&P submitted their Tender Evaluation and Recommendation of Award for Cable Installation Equipment to EEA on May 14, 1979. EEA submitted their request for USAID approval of the Award of Contract to Vermeer on July 28, 1979. USAID approved the contract award to Vermeer Manufacturing Company on August 9, 1979.

The single tenders were attributed to the 100% Performance Bond requirement. S&P recommended reducing the Performance Bond requirement to 20% and rebidding the two (2) IFBs. EEA and USAID approved. The purchasers of the original IFBs 11 and 12 were notified June 6, 1979, of change in Performance Bond requirements and were requested to rebid the IFBs with a bid opening date of July 16, 1979.

Tenders for IFB-11 - Cable Trailer and IFB-12 - Spare Parts were opened on July 16, 1979. Three (3) tenders were received for Cable Trailers and one (1) tender was received for the Spare Parts. Based upon remaining funds uncommitted within the project, only the procurement of Cable Trailers could be financed. The single tender for Spare Parts was judged by S&P and EEA to be excessive in price and was rejected. S&P submitted their Tender Evaluation and Recommendation of Award for Cable Trailers to EEA on July 24, noting that while both tenders were judged unresponsive to the delivery requirements, Pengo could provide three (3) units within the delivery requirement and were the lowest in cost. EEA submitted their request for USAID approval of the Award of Contract to Pengo Equipment Company on September 9, 1979. USAID determined that the three bids for Cable Reel Trailers did not comply with the delivery schedule of the IFB and were non-responsive and recommended the S&P formally request price and delivery information from the bidders based upon a modified delivery schedule for the six (6) units. USAID was advised by S&P on October 30, 1979 of the quotations received and recommended awarding a contract to Pengo Equipment Company. USAID approved the contract award on November 8, 1979. These additional awards are summarized in Table II, below.

TABLE II
AWARDS APPROVED, ACTUAL EXPENDITURES,
BANKING CHARGES AND TOTAL SUBOBLIGATIONS

| <u>TENDER NO.</u> | <u>FIRM</u> | <u>APPROVE AWARD</u> | <u>ACTUAL EXPENDITURE</u> | <u>BANK CHARGES</u> | <u>TOTAL SUBOBLIGATION</u> |
|-------------------|-----------------------------|--------------------------|-------------------------------|-------------------------|--------------------------------|
| 4818-01-10 | Vermeer Manufacturing Co | \$197,766.54 | 185,871.42 | 400.00 | 186,271.42 |
| 4818-01-11 | Pengo Equipment Co. | \$117,325.60 | 117,326.00 | 235.00 | 117,561.00 |

All materials and equipment procured through Contracts 4818-01-1 thru 9, began arriving in Egypt in July 1976, and with the exception of Cables and Compression Tools and Fittings, deliveries were completed by mid-1977. Delivery of the long lead time cables and the compression tools and fittings awarded in March, 1977, were completed during the first quarter of 1978. The Cable Trailers supplied by Pengo were delivered to EEA in mid-1980. The Cable Installation Equipment supplied by Vermeer was shipped on May 2, 1980. After delays in route, it arrived in Alexandria Port in late 1980, and has been cleared through customs by Canal Distribution Company. The Canal Distribution Company has been requested to advise USAID of their plans for use of this equipment. The delivery and disbursement of these materials and equipment, based upon the records of EEA and CDC, are summarized in Appendix II, Tables 1 and 2.

On May 12, 1979, the Ministry of Electricity and Energy urgently requested USAID's approval to install some of the equipment and material, in El Arish, Sinai in conjunction with the return of the community to Egypt. USAID agreed in principle with the request and urged the MOE to provide a list of equipment to be used to rehabilitate the El Arish distribution system. EEA's records indicate the 2445 feet of 3 Conductor #2 AWG 15 KV cable, supplied under Contract 4818-01-3A, was transferred to the Sinai for the rehabilitation.

USAID has monitored the warehousing, disbursement and installation of the material equipment thru periodic field trips to Port Said, Ismailia and Suez. Certain quantities of cable remain in the Canal Distribution Company warehouses and will not be utilized. EEA requested USAID approval to transfer these stocks of cable to Project 263-K-043 Urban Electric Distribution to be used in the rehabilitation and expansion of distribution systems in Cairo, Alexandria, Beni Suef, and Shibin El Kom. This request has been approved.

All Letters of Commitment that had not previously expired were terminated on June 30, 1980 and the remaining uncommitted funds, \$166,223.81 were deobligated.

4. BENEFICIARIES, DIRECT AND INDIRECT

The direct beneficiaries of the rehabilitation of the electric distribution systems in Port Said, Ismailia and Suez were the residents of these cities and the commercial and industrial developments that were able to emerge.

The indirect beneficiaries of the rehabilitation of the electric distribution systems was the Government of Egypt, the areas of Egypt adjacent to the Suez Canal, the international maritime services, and residents of the Sinai and the commercial and industrial development that were able to develop.

5. LESSONS LEARNED

- A. Utilizing material lists prepared by the EEA and verified by their Engineer, equipment and materials were procured thru the competition bidding process and were made available for installation in from, 18 to 24 months from project inception. The equipment and materials have been installed generally according to plan and provided the infrastructure needed to rehabilitate the distribution systems in the Canal area. Some sizes of cable were supplied that could not be utilized, and in a project conceived and implemented on an expedited basis with material requirements subject to change as distribution plans evolved, surpluses of cable in some sizes and deficiencies in other sizes was to be expected. Clearly the intent was not to provide all of the materials to reconstruct the distribution systems but to provide a major equipment and material input.
- B. This project might more appropriately have been handled as a Commodity Import Activity and this may be true of any program to rehabilitate and expand electrical distribution systems in the future. Distribution system rehabilitation and expansion is a highly volatile activity which is constantly subject to modification, revision and redefinition. The requirements of a distribution systems are continually changing and long term system planning of distribution systems is not the precise and well defined project as it may appear. Distribution planning is a dynamic process and is not conducive to dedicated planning followed by procurement and installation - the requirements of a distribution system change over the 2-3 year period between design and completion of procurement. Unless the distribution system is an integral part of a new community development, long term planning will be sacrificed to satisfy short term needs for expansion and rehabilitation.
- C. Active monitoring of the construction/installation of the distribution facilities requires frequent visitation to the job sites with a planned program for inspection and evaluation of project progress. The conduct of a construction project some distance from Cairo and without the in-country presence of the

U.S. Engineering Consultant makes monitoring the project difficult. Without the active involvement of a U.S. Consultant working closely with the implementing agency, the technical assistance is minimized and the opportunity for the development of effective contracting and management procedures is lost.

- D. Utilization of residual funds at the end of the project may not be appropriate. The equipment or materials purchased often arrive after the project has been completed and the urgency to utilize the items is greatly diminished. Without the need for the equipment or material there is no compelling reason to follow thru on delivery and installation. Use of the residual funds for last minute procurements should be carefully evaluated to determine if a true need exists or if the procurement would be only a way of using the remaining funds.

6. REVIEW OF WARRANTIES AND PROJECT COVENANT

- A. The Grant Agreement set forth certain Conditions Precedent to be met before project funds could be disbursed. The Conditions Precedent were:
1. An opinion or opinions of the Minister of the Arab Republic of Egypt that this Agreement was duly authorized and/or ratified by and executed on behalf of the Government and legally binding obligation of the Government in accordance with all of its terms;
 2. A statement of the names of the persons holding or acting in the office of the Government and a specimen signature of each person specified in such statement;
 3. A procurement plan including the procedures by which all procurement financed under this agreement would be carried out, and the mechanism for evaluating bids and making awards;
 4. A plan for receipt, storage and warehousing of equipment financed under the Grant until utilization, including identification of warehouse locations.

These Conditions Precedent were complied with and Implementation Letter No. 2 dated September 29, 1975, advised EEA that funds were released for procurement of equipment and services.

B. General Covenants and Warranties. The Grant Agreement established the following General Covenants and Warranties:

1. Required AID approval for solicitations and bid documents prior to their issuance.
2. Required AID approval for all contracts and documents prior to their execution.
3. Required the GOE to maintain records and books related to this Grant Agreement indicating the receipt and use of materials.
4. Required the Government to provide USAID information concerning the material and equipment received and installed.
5. Provided that AID would perform inspection trips to the various sites throughout the life of the project.
6. Required the Government to promptly advise AID of any circumstances which could affect or effect this Grant.
7. Required that all commodities or equipment financed under this Grant were exempt from taxes, tariffs, duties and other levies.
8. Required that the Government warrant and covenant that no payments would be made or received by Government of other officials in connection with the procurement of goods and services.
9. Required the Government to carry out the Project with due diligence and efficiency insuring prompt and effective utilization of the materials, equipment and services financed in conformity with sound engineering, construction and administrative practices.
10. Required the Government to provide promptly, as required, all funds in addition to the Grant necessary for the prompt and effective implementation of the project.

Throughout the execution of the project, FEA complied with all General covenants and Warranties.

7. POST DISBURSEMENT REPORTING AND RESIDUAL MONITORING REQUIREMENTS

EEA will report on the remaining cable being transferred to Project 263-K-043 as to the quantity, type and location of use of the cables. As all remaining equipment and material has been utilized for the intended purpose, no further reporting will be required.

8. SUMMARY FINANCIAL STATEMENT

The United States of America, acting through the Agency for International Development (AID) committed a grant of Thirty Million dollars to COE. The subobligated funds of the Grant were \$29,833,776.19 which is equal to the expended funds. FM/BFD reconciled the I/Comm balances and transferred the residual balances to uncommitted funds and on June 16, 1981, the AID/Cairo Controller was requested to deobligate the uncommitted balance and take necessary action to close out the project. The uncommitted balance was \$166,223.81. A summary of sub-obligations is presented in Table III.

TABLE III

POWER DISTRIBUTION EQUIPMENT GRANT
PROJECT 263-001

SUMMARY OF SUBOBLIGATIONS

| <u>CONTRACT NO.</u> | <u>CONTRACTOR</u> | <u>SUBOBLIGATED FUNDS</u> |
|---------------------|---------------------------------|---------------------------|
| | Sanderson and Porter | \$ 335,051.00 |
| 4818-01-1 | Abbot Power Corporation | \$ 1,884,311.15 |
| 4818-01-2 | Westinghouse Electric Corp. | \$ 4,837,317.09 |
| 4818-01-4 | Westinghouse Electric Corp. | \$ 3,691,643.05 |
| 4818-01-3C | General Cable Export | \$ 71,522.10 |
| 4818-01-3A | Phelps Dodge Overseas Marketing | \$15,365,367.17 |
| 4818-01-3B | Okonite Company | \$ 2,206,693.24 |

| | | |
|------------|---------------------------|------------------------|
| 4818-01-5 | McGraw Edison Company | \$ 494,696.07 |
| 4818-01-6 | Burndy Corporation | \$ 12,976.13 |
| 4818-01-9 | Copper Weld Industries | \$ 390,533.17 |
| 4818-01-7 | Kearney National Inc. | \$ 239,833.88 |
| 4818-01-10 | Vermeer Manufacturing Co. | \$ 186,271.42 |
| 4818-01-11 | Pengo Equipment | <u>\$ 117,560.72</u> |
| | Total Subobligations | \$29,833,776.19 |
| | Total Grant | <u>\$30,000,000.00</u> |
| | Funds Deobligated | \$ 166,223.81 |

Attachments:

Appendix I - Summary of Procurements
Appendix II and III - Material and Equipment Summaries

IDPS:JP [initials] / HGI:small:ih:10/19/81

Clearances:

IDPS:AdeGraffenreid

OD/IDPS:TFJohnson

DPPE:JLaPittus

Handwritten signatures and initials are present over the clearance list. A large signature is written over the IDPS:AdeGraffenreid line, and another signature is written over the OD/IDPS:TFJohnson line. There are also some initials written over the IDPS:JP line.

SUMMARY OF PROCUREMENTS
PROJECT - POWER DISTRIBUTION EQUIPMENT
USAID GRANT 263-001

IFB NO. 4818-01-1

11 KV SWITCHGEAR AND ACCESSORIES

IFB Issued: August 12, 1975
Tender Opening: November 11, 1975
Bid Award: February 29, 1976
Contractor: Abbott Power Corp.
Contract Signed: March 14, 1976
Contract Amount - CIF: \$1,794,042

Contract Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cause</u> |
|------------|--------------------|---------------|---|
| 1 | September 12, 1976 | \$1,851,330 | Provide Ground Relays |
| 2 | September 12, 1976 | \$1,863,330 | Provide Battery Chargers compatible with 4818-01-2 |

Letter of Commitment

No. 263-12-00102
Amount: \$1,802,000
Date: March 22, 1976 to April 30, 1978
Institution: Chase Manhattan Bank

L/Comm Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cause</u> |
|------------|------------------|---------------|--|
| 1 | March 31, 1976 | \$1,802,000 | Correct L/Comm Number |
| 2 | May 18, 1976 | \$1,802,000 | Amended L/Comm Provisions |
| 3 | October 19, 1976 | \$1,859,288 | Amendment No. 1 |
| 4 | March 1, 1977 | \$1,945,042 | Material Esculation, Ocean Freight, Spare Parts |
| 5 | March 29, 1977 | \$1,953,000 | Material Esculation, Ocean Freight, Spare Parts |

SUMMARY OF PROCUREMENTS
PROJECT - POWER DISTRIBUTION EQUIPMENT
USAID GRANT 263-001

IFB NO. 4818-01-2

11 KV DISTRIBUTION TRANSFORMERS AND APPARATUS

IFB Issued: August 12, 1975
Tender Opening: November 11, 1975
Bid Award: April 7, 1976
Contractor: Westinghouse Electric Corp.
Contract Signed: April 8, 1976*
Contract Amount - CIF: \$5,127,007.16

* Contract signing delayed by Court of Appeals injunction.

Contract Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cause</u> |
|------------|------------------|----------------|------------------------------------|
| 1 | June 28, 1976 | \$5,127,007.16 | Clarification of Contract Items. |
| 2 | July 11, 1976 | \$5,143,145.90 | Additional Test Equipment & Tools. |
| 3 | October 25, 1976 | 5,142,602.84 | Change in Volt-Ohm Milliammeter |

Letter of Commitment

No. 263-12-00103
Amount: \$5,133,007.16
Date: April 9, 1976 to April 30, 1978
Institution: Chase Manhattan Bank

L/Comm Amendments - NONE

SUMMARY OF PROCUREMENTS
PROJECT - POWER DISTRIBUTION EQUIPMENT
USATD GRANT 263-001
IFB NO. 4818-01-3A
CABLE AND CONDUCTORS AND ACCESSORIES

IFB Issued: August 12, 1975
Tender Opening: November 11, 1975
Bid Award: February 29, 1976
Contractor: Phelps Dodge
Contract Signed: March 15, 1976
Contract Amount - CIF: \$13,419,081.81

Contract Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cause</u> |
|------------|--------------------|-----------------|--|
| 1 | March 22, 1976 | \$13,419,081.81 | Revise cable construction details. |
| 2 | September 12, 1976 | \$13,469,853.14 | Provide Cable Test Equipment & Tools. |
| 3 | October 4, 1976 | \$13,469,853.14 | Change Ocean Freight and Cable data to conform with Amendment No. 1. |
| 4 | October 23, 1978 | \$13,904,494.54 | Additional quantities of material |

Letter of Commitment

No. 263-12-00106
Amount: \$13,433,081.81
Date: April 10, 1976 to April 30, 1978
Institution: Chase Manhattan Bank

L/Comm Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cau</u> |
|------------|--------------------|-----------------|---|
| 1 | October 19, 1976 | \$13,483,653.14 | Contract Amendment No. 1 |
| 2 | August 23, 1977 | \$14,974,078.85 | Material Price Escalation |
| 3 | November 27, 1978 | \$15,409,513.85 | Increase Bank Charges extend Expiration to June 30, 1979. Contract Amendment 4 |
| 4 | January 23, 1979 | \$15,409,513.85 | Change in Applicant |
| 5 | * | \$15,409,513.85 | * |
| 6 | September 18, 1979 | \$15,409,513.85 | Increase in Bank Charges. |
| 7 | December 1, 1979 | \$15,367,361.45 | * |
| 8 | January 27, 1981 | \$15,365,367.17 | * |

* Information not available

SUMMARY OF PROCUREMENTS
PROJECT - POWER DISTRIBUTION EQUIPMENT
USAID GRANT 263-001

IFB NO. 4818-01-3B

CABLE AND CONDUCTORS AND ACCESSORIES

IFB Issued: August 12, 1975
Tender Opening: November 11, 1975
Bid Award: February 29, 1976
Contractor: Okonite Co.
Contract Signed: March 27, 1976
Contract Amount - CIF: \$1,920,003.55

Contract Amendments - NONE

Letter of Commitment

No. 263-12-00107
Amount: \$1,922,003.55
Date: April 28, 1976 to April 30, 1978
Institution: Chase Manhattan Bank

L/Comm Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Ca...</u> |
|------------|------------------|----------------|--|
| 1 | April 21, 1977 | \$2,164,003.55 | Material Price Escalation. |
| 2 | April 4, 1978 | \$2,239,003.55 | |
| 3 | June 1, 1978 | \$2,239,003.55 | Extend expiration date to June 30, 1978. |
| 4 | August 30, 1978 | \$2,239,003.55 | Extend expiration date to December 31, 1978. |
| 5 | October 25, 1978 | \$2,239,003.55 | Extend expiration date to December 31, 1978. |

11

SUMMARY OF PROCUREMENTS
PROJECT - POWER DISTRIBUTION EQUIPMENT
USAID GRANT 263-001

IFB NO. 4818-01-3C

CABLE AND CONDUCTORS AND ACCESSORIES

IFB Issued: August 12, 1975
Tender Opening: November 11, 1975
Bid Award: February 29, 1976
Contractor: General Cable
Contract Signed: March 16, 1976
Contract Amount - CIF: \$70,030.00

Contract Amendments - NONE

Letter of Commitment

No. 263-12-00105
Amount: \$70,130.00
Date: April 16, 1976 to April 30, 1978
Institution: Chase Manhattan Bank

L/Comm Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cause</u> |
|------------|-------------------|---------------|----------------------------|
| 1 | February 22, 1977 | \$\$71,563.56 | Material Price Escalation. |

SUMMARY OF PROCUREMENTS
PROJECT - POWER DISTRIBUTION EQUIPMENT
USAID GRANT 263-001

IFB NO. 4818-01-4

POWER DISTRIBUTION FUSE BOXES

IFB Issued: August 12, 1975
Tender Opening: November 11, 1975
Bid Award: February 29, 1976
Contractor: Westinghouse Electric Corp.
Contract Signed: March 14, 1976
Contract Amount - CIF: \$3,587,778.00

Contract Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cause</u> |
|------------|---------------|----------------|-----------------------------|
| 1 | June 28, 1976 | \$3,587,778.00 | Clarify item descriptions. |
| 2 | July 5, 1976 | \$3,587,778.00 | Correction in freight cost. |

Letter of Commitment

No. 263-12-00104
Amount: \$3,591,778.00
Date: April 14, 1977 to April 30, 1978
Institution: Chase Manhattan Bank

L/Comm Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cause</u> |
|------------|----------------|----------------|------------------------------|
| 1 | April 21, 1977 | \$3,664,078.00 | Material Price Escalation. |
| 2 | May 17, 1977 | \$3,691,778.00 | Increase in freight charges. |

SUMMARY OF PROCUREMENTS
PROJECT - POWER DISTRIBUTION EQUIPMENT
USAID GRANT 263-001

IFB NO. 4818-01-5

SWITCHED CAPACITOR BANK AND CONTROLS

IFB Issued: August 12, 1975
Tender Opening: November 11, 1975
Bid Award: February 29, 1976
Contractor: McGraw Edison Co.
Contract Signed: March 23, 1976
Contract Amount - CIF: \$530,462.55

Contract Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cause</u> |
|------------|---------------|---------------|---|
| 1 | May 13, 1976 | \$546,134.55 | Increase in Ocean Freight & Insurance. |
| 2 | July 12, 1976 | \$551,534.55 | Additional Tools. |
| 3 | July 12, 1976 | \$554,045.55 | Additional Current Transformers. |

Letter of Commitment

No. 263-12-00108
Amount: \$531,062.55
Date: April 28, 1976 to April 30, 1978
Institution: Chase Manhattan Bank

L/Comm Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cause</u> |
|------------|--------------|---------------|---------------------------|
| 1 | July 6, 1976 | \$546,734.55 | Contract Amendment No. 1. |

SUMMARY OF PROCUREMENTS
PROJECT - POWER DISTRIBUTION EQUIPMENT
USAID GRANT 263-001

IFB NO. 4818-01-6

THERMITE WELDING MATERIALS

IFB Issued: August 12, 1975
Tender Opening: November 11, 1975
Bid Award: February 29, 1976
Contractor: Burndy Corp.
Contract Signed: April 26, 1976
Contract Amount - CIF: \$13,288.09

Contract Amendments - NONE

Letter of Commitment

No. 263-12-00109
Amount: \$13,388.09
Date: May 7, 1976 to April 30, 1978
Institution: Chase Manhattan Bank

L/Comm Amendments - NONE

SUMMARY OF PROCUREMENTS
PROJECT - POWER DISTRIBUTION EQUIPMENT
USAID GRANT 263-001

IFB NO. 4818-01-7

COMPRESSION TOOLS AND FITTINGS

IFB Issued: August 12, 1975

Tender Opening: November 11, 1975/May 30, 1976/September 14, 1976/
 February 15, 1977

Bid Award: March 16, 1977

Contractor: Kearney - National Inc.

Contract Signed: March 24, 1977

Contract Amount - CIF: \$229,581.17

Contract Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cause</u> |
|------------|--------------|---------------|--|
| 1 | June 6, 1977 | \$229,581.17 | Clarification of Contract Items. |
| 2 | June 6, 1977 | \$227,289.17 | Reduce number of die and simplify cable installation procedures. |

Letter of Commitment

No. 263-12-00111

Amount: \$227,689.17

Date: June 17, 1977

Institution: Chase Manhattan Bank

L/Comm Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cause</u> |
|------------|--------------------|---------------|-------------------------------|
| 1 | February 8, 1978 | \$250,459.17 | Material Price Escalation. |
| 2 | August 30, 1978 | \$250,459.17 | Extend date to Sept.30, 1978. |
| 3 | October 25, 1978 | \$250,459.17 | Extend date to Dec. 31, 1978. |
| 4 | August 6, 1979 | \$250,459.17 | Extend date to Dec. 31, 1979. |
| 5 | September 27, 1979 | \$250,459.17 | Change in Banking Charges. |

SUMMARY OF PROCUREMENTS
PROJECT - POWER DISTRIBUTION EQUIPMENT
USAID GRANT 263-001

IFB NO. 4818-01-09

GROUNDING AND CABLE INSULATING MATERIALS

IFB Issued: August 12, 1975
Tender Opening: November 11, 1975
Bid Award: February 29, 1976
Contractor: Copperweld Industries International,
Contract Signed: April 26, 1976
Contract Amount - CIF: \$374,734.96

Contract Amendments - NONE

Letter of Commitment

No. 263-12-00110
Amount: \$375,134.96
Date: May 7, 1976 to April 30, 1976
Institution: Chase Manhattan Bank

L/Comm Amendments

| <u>No.</u> | <u>Date</u> | <u>Amount</u> | <u>Cause</u> |
|------------|-------------------|---------------|---|
| 1 | May 14, 1976 | \$375,134.96 | Correct Expiration Date to April 30, 1978. |
| 2 | February 22, 1977 | \$390,549.37 | Material Price Escalation and Freight Credit. |

SUMMARY OF PROCUREMENTS
PROJECT - POWER DISTRIBUTION EQUIPMENT
USAID GRANT 263-001

IFB NO. 4818-1-11

CABLE TRENCHERS

IFB Issued: March 13, 1979

Tender Opening: April 30, 1979/July 16, 1979

Bid Award: November 8, 1979

Contractor: Pengo Equipment

Contract Signed: November 15, 1979

Contract Amount - CIF: \$117,325.60

Contract Amendments - NONE

Letter of Commitment

No. 263-12-0013

Amount:

Date: January 3, 1980

Institution: Chase Manhattan Bank

L/Comm Amendments - NONE

SUMMARY OF PROCUREMENTS
PROJECT - POWER DISTRIBUTION EQUIPMENT
USAID GRANT 263-001

IFB NO. 4818-01-10

CABLE INSTALLATION EQUIPMENT

IFB Issued: March 13, 1979
Tender Opening: April 30, 1979
Bid Award: September 4, 1979
Contractor: Vermeer Manufacturing Co.
Contract Signed: October 10, 1979
Contract Amount - CIF: \$197,766.54

Contract Amendments - NONE

Letter of Commitment

No. 263-12-00112
Amount: \$198,167.00
Date: November 29, 1979
Institution: Chase Manhattan Bank

L/Comm Amendments - NONE

APPENDIX II
TABLE I

MATERIALS & EQUIPMENT FOR THE POWER DISTRIBUTION SYSTEM CONTRACTED AND DELIVERED TO EEA

| Contract No. | Item Description | Unit | Quantity Contracted | Qty. Rec'd. @ EEA Warehouse | | Quantity Delivered to Canal Distribution Warehouse | | | | Qty. Stored @ EEA Warehouse | | Total Qty. Rec'd @ EEA Main Warehouse |
|--------------|---------------------------------------|------|---------------------|-----------------------------|---------|--|----------|---------|---------|-----------------------------|------|---------------------------------------|
| | | | | Port Said | Suez | Port Said | Israilia | Suez | Red Sea | Port Said | Suez | |
| 4815-01-1 | Distribution Points | No | 6 | 4 | 2 | 2 | 2 | 2 | - | 0 | 0 | 6 |
| 4818-01-2 | 11 KV Distrib. Transformer 300 KVA | No | 360 | 324 | 36 | 128 | 98 | 134 | - | 0 | 0 | 360 |
| 4818-01-3A | AL. Cable Type | | | | | | | | | | | |
| | 3/C, 500MCM, 15KV | FT | 326000 | 226360 | 113179 | 79404 | 47086 | 213049 | - | 0 | 0 | 339539 |
| | 3/C, 350MCM, 15KV | FT | 395600 | 270742 | 138859 | 202708 | 61105 | 145768 | - | 0 | 0 | 409581 |
| | 3/C, 2AWG, 15KV | FT | 3450 | *2445 | 1126 | 0 | 0 | 1126 | 0 | 0 | 0 | 3571 |
| | 3/C, 350MCM + 1/C #4/0 AWG, 1KV | FT | 3542400 | 2434412 | 1217853 | 194331 | 111888 | 1169708 | 64919 | 2003037 | 0 | 3652265 |
| | 3/C, 2/0AWG + 1/C 2AWG - 1 KV | FT | 196900 | 135409 | 66723 | 98712 | 8366 | 85792 | 0 | 8262 | 0 | 202132 |
| | Armour Terminator | | | | | | | | | | | |
| | 3/C-500 MCM | No | 55 | 38 | 18 | 24 | 14 | 18 | 0 | 0 | 0 | 56 |
| | 3/C-350 MCM | No | 800 | 534 | 266 | 322 | 212 | 266 | 0 | 0 | 0 | 800 |

* This item has been transferred to Saina

| Contract No. | Item Description | Unit | Quantity | Inventory | | Quantity Delivered to | | | Qty. Stored @ | | Total Qty. - Rec'd @ EEA Main Warehouse | |
|--------------|-----------------------------------|------|----------|-----------|----------|-------------------------------|----------|---------------|---------------|----------|---|---------|
| | | | | 10000000 | 10000000 | Local Distribution - House | | EEA Warehouse | | | | |
| | | | | 10000000 | 10000000 | 10000000 | 10000000 | 10000000 | 10000000 | 10000000 | | |
| | 1/C - 470 ANG | No | 4000 | 6140 | 3076 | 114 | 2346 | 3076 | 0 | 3160 | 0 | 9210 |
| | 3/C - 210 ANG | No | 7500 | 5000 | 6125 | 565 | 2525 | 6121 | 0 | 1910 | 4 | 11125 |
| | Cable Splices for ALL Cables | | | | | | | | | | | |
| | 3/C-500 MCM - 15 KV | No | 290 | 193 | 97 | 89 | 74 | 127 | 0 | 0 | 0 | 290 |
| | 3/C-250 MCM - 15 KV | No | 90 | 60 | 30 | 32 | 28 | 30 | 0 | 0 | 0 | 90 |
| | 3/C-350 MCM-15KV | No | 880 | 586 | 294 | 293 | 293 | 194 | 0 | 0 | 0 | 880 |
| | 2/C-0/GANG-15KV | No | | 33 | 17 | 16 | 17 | 17 | 0 | 0 | 0 | 50 |
| | Stress Cones | | | | | | | | | | | |
| | 3/C-500 MCM | No | 155 | 103 | 52 | 61 | 36 | 58 | 0 | 0 | 0 | 155 |
| | 3/C-250 MCM | No | 2400 | 1600 | 800 | 797 | 797 | 806 | 0 | 0 | 0 | 2400 |
| | 3/C-2 ANG | No | 600 | 400 | 200 | 200 | 200 | 200 | 0 | 0 | 0 | 600 |
| 4818-01-55 | ALL Cable Type | | | | | | | | | | | |
| | 3/C-#2ANG + 1/C- #4ANG - 600 V | FT | 934000 | 805079 | 187655 | 278594 | 251742 | 244090 | 0 | 183529 | 0 | 992734 |
| | 2/C-#2ANG-600V | FT | 1180800 | 1053394 | 152833 | 7033 | 84322 | 123889 | 439294 | 522997 | 0 | 1206227 |

| Contract No. | Item Description | Unit | Quantity | | Quantity in Inventory | | | | Quantity in Warehouse | | Total Quantity FSCD - BIA Main Warehouse | |
|--------------------|---|------|--|---------|-----------------------|-------|-------|-----------|-----------------------|-------|--|--------|
| | | | Original | Current | Port Said | Canal | Other | Port Said | Canal | | | |
| Armour Termination | | | | | | | | | | | | |
| | 3/0-#2AWG + 1/0 #4AWG | No | 19000 | 14325 | 2625 | 50 | 2000 | 2625 | 0 | 14325 | 0 | 19000 |
| | 2/0-#2AWG | No | 37500 | 33871 | 0 | 0 | 0 | 0 | 0 | 33871 | 0 | 33871 |
| 4818-01-3C | Cable Type | | | | | | | | | | | |
| | 1/0-15/10CM | FT | 30000 | 20000 | 10000 | 10000 | 10000 | 10000 | 0 | 0 | 0 | 30000 |
| | 1/0-10/13AC | FT | 10000 | 6656 | 3334 | 3333 | 3333 | 3334 | 0 | 0 | 0 | 10000 |
| | 1/0-#2AWG | FT | 20000 | 13333 | 6667 | 6666 | 6667 | 6667 | 0 | 0 | 0 | 20000 |
| | 1/0#4AWG | FT | 160000 | 106666 | 53334 | 53333 | 53333 | 53334 | 0 | 0 | 0 | 160000 |
| 4818-01-4 | Main Distri- bution Boxes | No | 3500 | 1800 | 1548 | 598 | 174 | 1660 | 42 | 826 | 0 | 3346 |
| 4818-01-5 | 300KVAR switched capacitor banks- time control | No | 24 | 24 | 0 | 0 | 10 | 1 | 0 | 13 | 0 | 24 |
| | 300KVAR switched capacitor banks- current control | No | 24 | 24 | 0 | 0 | 5 | 0 | 0 | 19 | 0 | 24 |
| | 450KVAR switched capacitor banks- current control | No | 48 | 48 | 0 | 1 | 11 | 16 | 0 | 20 | 0 | 48 |
| 4818-01-6 | Thermite welding equipment | Lot | Equipment has been transferred from Port Said Main Warehouse to Canal Distribution Co. | | | | | | | | | |

| Contract No. | Item Description | Unit | Quantity Contracted | Qty. Rec'd. @ EEA Warehouse | | Quantity Delivered to Canal Distribution Warehouse | | | | Qty. Stored @ EEA Warehouse | | Total Qty. Rec'd @ EEA Main Warehouse |
|--------------|--|------|---------------------|-----------------------------|------|--|----------|------|---------|-----------------------------|------|---------------------------------------|
| | | | | Port Said | Suez | Port Said | Ismailia | Suez | Red Sea | Port Said | Suez | |
| 4816-01-7 | Hand-operated mechanical compression tool including carrying case | No | 15 | 15 | | 5 | 5 | 5 | 0 | 0 | - | 15 |
| | Hand-operated hydraulic compression tool including carrying case | No | 15 | 15 | | 5 | 5 | 5 | 0 | 0 | - | 15 |
| | Complete set of dies required for the mechanical tool for the terminals and connectors | No | 15 | 72 | | 8 | 24 | 24 | 0 | 16 | - | 72 |
| | Complete set of dies required for the hydraulic tool for the terminals and connectors | No | 15 | 72 | | 8 | 24 | 28 | 0 | 12 | - | 72 |
| | Complete set of dies required for the mechanical tool for the connectors | No | 15 | 72 | | 8 | 24 | 24 | 0 | 16 | - | 72 |

| Contract No. | Item Description | Unit | Quantity Contracted | Qty. Rec'd. @ EEA Warehouse | | Quantity Delivered to Canal Distribution Warehouse | | | | Qty. Stored @ EEA warehouse | | Total Qty. Rec'd @ EEA Main Warehouse |
|--------------|--|------|---------------------|-----------------------------|-------|--|----------|-------|---------|-----------------------------|------|---------------------------------------|
| | | | | Port Said | Suez | Port Said | Ismailia | Suez | Red Sea | Port Said | Suez | |
| | Complete set of dies required for the hydraulic tool for the connectors | No | 15 | 72 | | 8 | 24 | 28 | 0 | 12 | - | 72 |
| | Al.bus to 500 MCM compact al., 4-hole NEMA spacing | No | 15 | 136 | 64 | 53 | 23 | 64 | 0 | 60 | 0 | 200 |
| | Al.bus to 250 MCM compact Al., 4-hole NEMA spacing | No | 2985 | 2067 | 1005 | 386 | 534 | 1005 | 0 | 1147 | 0 | 3072 |
| | Al.bus to #2 compact al., 2-hole NEMA spacing | No | 375 | 248 | 76 | 124 | 124 | 76 | 0 | 0 | 0 | 324 |
| | Sets of 1/2" x 1 1/2" long bolts, two flat round washers, one lock washer and one hexagonal nut, all stainless steel | No | 3600 | 2850 | 1200 | 950 | 0 | 1200 | 0 | 1900 | 0 | 4050 |
| | 350 MCM compact al. to 250 MCM concentric cu. | No | 31200 | 20800 | 10450 | 10399 | 10401 | 10450 | 0 | 0 | 0 | 31250 |

| Contract No. | Item Description | Unit | Quantity Contracted | Qty. Rec'd. @ EEA Warehouse | | Quantity Delivered to Canal Distribution Warehouse | | | | Qty. Stored @ EEA Warehouse | | Total Qty. Rec'd @ EEA Main Warehouse |
|--------------|--|------|---------------------|-----------------------------|-------|--|----------|-------|---------|-----------------------------|------|---------------------------------------|
| | | | | Port Said | Suez | Port Said | Ismailia | Suez | Red Sea | Port Said | Suez | |
| | 4/0 compact al. to 2/0 concentric cu. | No | 10500 | 3100 | 3600 | 1550 | 1550 | 3600 | 0 | 0 | 0 | 6780 |
| | 2/0 compact al. to 2 concentric cu. | No | 40020 | 27250 | 10050 | 11875 | 3875 | 13550 | 0 | 0 | 0 | 37300 |
| | 2 compact al. to 4 concentric cu. & 2 compressed al. to 4 concentric cu. | No | 297900 | 191195 | 83250 | 13300 | 87649 | 99146 | 0 | 74350 | 0 | 274445 |
| | 2 compressed al. to 2 compressed al. | No | 21600 | 15400 | 3650 | 5750 | 0 | 7150 | 0 | 6150 | 0 | 19050 |
| | 4 compressed al. to 4 concentric cu. | No | 94020 | 66050 | 25150 | 1000 | 30200 | 30800 | 0 | 29200 | 0 | 91200 |
| | 2-groove with one groove for 2 compressed al. and one groove for 14 concentric cu. | No | 21600 | 21600 | 0 | 25 | 7200 | 7200 | 0 | 7175 | 0 | 21600 |
| | 2-groove with one groove for 2 compressed al. and one groove for 4 concentric cu. | No | 10800 | 7200 | 3600 | 250 | 3600 | 3600 | 0 | 3350 | 0 | 10800 |

| Contract No. | Item Description | Unit | Quantity Contracted | Qty. Rec'd. @ EEA Warehouse | | Quantity Delivered to Canal Distribution Warehouse | | | | Qty. Stored @ EEA Warehouse | | Total Qty. Rec'd @ EEA Main Warehouse |
|--------------|---|------|---------------------|---|-------|--|----------|-------|---------|-----------------------------|------|---------------------------------------|
| | | | | Port Said | Suez | Port Said | Ismailia | Suez | Red Sea | Port Said | Suez | |
| | Oxidation inhibitor, specifically designed for limiting & retarding oxidation of both aluminum & copper compression | No | 45 | 30 | 15 | 10 | 5 | 15 | 0 | 15 | 0 | 45 |
| | Wire brush equal or similar to Blackburn WB 1 | No | 15 | 10 | 5 | 0 | 3 | 5 | 0 | 7 | 0 | 15 |
| 4518-01-9 | Nare copper Cable Single 500 MCM | FT | 2000 | 1340 | 670 | 0 | 670 | 670 | 0 | 670 | 0 | 2010 |
| | 4/0 AWG | FT | 48000 | 38720 | 14520 | 8971 | 15514 | 4520 | 0 | 14235 | 0 | 53240 |
| | 1 AWG | FT | 160000 | 106800 | 53500 | 300 | 53400 | 33500 | 0 | 53100 | 0 | 160300 |
| | 1/0 AWG | FT | 20000 | 13340 | 6670 | 6670 | 6670 | 6670 | 0 | 0 | 0 | 20010 |
| | Ground Rods 3/4" x 10' | FT | 36500 | 24333 | 12200 | 435 | 1354 | 12200 | 0 | 22544 | 0 | 36533 |
| 4518-01-10 | Diesel Engine | No | 6 | Equipment has been moved from Port Said to EEA warehouse in Ismailia. Missing spare parts and instruction manuals are being traced. Insurance claim has been submitted. | | | | | | | | |
| | Trench Attach. | No | 6 | | | | | | | | | |
| | Backhoe Attach. | No | 6 | | | | | | | | | |
| | Backfill Attach. | No | 6 | | | | | | | | | |
| 4518-01-11 | Cable Trailer | No | 6 | 6 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 6 |

TABLE 2

MATERIALS & EQUIPMENT INSTALLED AND STORED BY CANAL DISTRIBUTION COMPANY

| Contract No. | Item Description | Unit | Qty. Delivered from EEA to Canal Distribution Co. Ltd. Warehouse Located at | | | Installed Quantity by Canal Distribution Company at the Various Locations | | | Stored Quantity at Canal Distribu Warehouse | | |
|--------------|---------------------------------------|------|---|----------|---------|---|----------|--------|--|----------|--------|
| | | | Port Said | Ismailia | Suez | Port Said | Ismailia | Suez | Port Said | Ismailia | Suez |
| 4818-01-1 | Distribution Points | No | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 |
| 4818-01-2 | 11 KV Distrib. Transformer 300 KVA | No | 128 | 98 | 134 | 128 | 88 | 134 | 0 | 10 | 0 |
| 4818-01-3A | AL Cable Type | | | | | | | | | | |
| | 3/C, 500 MCM, 15KV | FT | 79404 | 47086 | 213049 | 79404 | 47086 | 213049 | 0 | 0 | 0 |
| | 3/C, 250 MCM, 15KV | FT | 202708 | 61105 | 145768 | 202708 | 61105 | 145768 | 0 | 0 | 0 |
| | 3/C, 2AWG, 15KV | FT | 0 | 0 | 1126 | 0 | 0 | 1126 | 0 | 0 | 0 |
| | 3/C, 350 MCM + 1/C #4/0 AWG, 1KV | FT | 144331 | 111888 | 1168708 | 13541 | 111888 | 873235 | 8920 | 0 | 360392 |
| | 3/C, 2/0AWG + 1/C 2AWG - 1 KV | FT | 98712 | 8366 | 86792 | 98712 | 8366 | 67523 | 0 | 0 | 19469 |
| | Armour Terminator | | | | | | | | | | |
| | 3/C-500 MCM | No | 24 | 14 | 18 | 24 | 14 | 8 | 0 | 0 | 10 |
| | 3/C-250 MCM | No | 322 | 212 | 266 | 300 | 97 | 96 | 22 | 115 | 170 |

| Contract No. | Item Description | Unit | Qty. Delivered from LEA to Canal Distribution Co. Warehouse Located at | | | Installed Quantity by Canal Distribution Company at the Various Locations | | | Stored Quantity at Canal Distribution Warehouse | | |
|--------------|-----------------------------------|------|--|----------|--------|---|----------|--------|---|----------|------|
| | | | Port Said | Ismailia | Suez | Port Said | Ismailia | Suez | Port Said | Ismailia | Suez |
| | 3/C-350MCM + 1/C - 4/0 AWG | No | 634 | 2346 | 3070 | 554 | 336 | 790 | 80 | 2010 | 2280 |
| | 3/C - 2/0 AWG | No | 565 | 2525 | 6121 | 536 | 515 | 870 | 29 | 2010 | 5251 |
| | Cable Splices for AL. Cables | | | | | | | | | | |
| | 3/C-500 MCM - 15 KV | No | 89 | 74 | 127 | 89 | 74 | 127 | 0 | 0 | 0 |
| | 3/C-250 MCM - 15 KV | No | 32 | 28 | 30 | 32 | 28 | 30 | 0 | 0 | 0 |
| | 3/C-350 MCM-1KV | No | 293 | 293 | 194 | 293 | 293 | 194 | 0 | 0 | 0 |
| | 2/C-2/0AWG-1KV | No | 16 | 17 | 17 | 16 | 17 | 17 | 0 | 0 | 0 |
| | Stress Cones | | | | | | | | | | |
| | 3/C-500 MCM | No | 61 | 36 | 58 | 61 | 36 | 58 | 0 | 0 | 0 |
| | 3/C-250 MCM | No | 797 | 797 | 806 | 797 | 797 | 806 | 0 | 0 | 0 |
| | 3/C-2 AWG | No | 200 | 200 | 200 | 200 | 200 | 200 | 0 | 0 | 0 |
| 4818-01-3B | AL.Cable Type | | | | | | | | | | |
| | 3/C-#2AWG + 1/C- #4AWG - 600 V | FT | 278994 | 251742 | 244090 | 263617 | 251742 | 244090 | 15377 | 0 | 0 |
| | 2/C-#2AWG-600V | FT | 7033 | 84322 | 123889 | 7033 | 84322 | 123889 | 0 | 0 | 0 |

| Item Description | Unit | Qty. Delivered from EBA to Canal Distribution Co. Warehouse Located at | | | Installed Quantity by Canal Distribution Company at the Various Locations | | | Stored Quantity at Canal Distribution Warehouse | | |
|---|------|--|----------|-------|---|----------|------|---|----------|------|
| | | Port Said | Ismailia | Suez | Port Said | Ismailia | Suez | Port Said | Ismailia | Suez |
| Armour Terminator | | | | | | | | | | |
| 3/C-#2AWG + 1/C-#4AWG | No | 50 | 2000 | 2625 | 15 | 20 | 0 | 35 | 1980 | 50 |
| 4818-01-3C Cu. Cable Type | | | | | | | | | | |
| 1/C-250MCM | FT | 10000 | 10000 | 10000 | No available data | | | No available data | | |
| 1/C-#2/0AWG | FT | 3334 | 3333 | 3334 | No available data | | | No available data | | |
| 1/C-#2AWG | FT | 6666 | 6667 | 6667 | No available data | | | No available data | | |
| 1/C-#4AWG | FT | 53333 | 53333 | 53334 | No available data | | | No available data | | |
| 4818-01-4 Main Distribution Boxes | No | 598 | 174 | 1660 | 321 | 174 | 1660 | 277 | 0 | 144 |
| 4818-01-5 300KVAR switched capacitor banks-time control | No | 0 | 10 | 1 | 0 | 1 | 0 | 0 | 9 | 1 |
| 300KVAR switched capacitor banks-current control | No | 0 | 5 | 0 | 0 | 2 | 0 | 0 | 3 | 0 |
| 450KVAR switched capacitor banks-current control | No | 1 | 11 | 16 | 1 | 1 | 1 | 0 | 10 | 15 |
| 4818-01-6 Thermite welding equipment | Lot | The supplied equipment shall be used in the construction of the components furnished under this grant. | | | | | | | | |

| Contract No. | Item Description | Qty. Activated from EEA to Canal Distribution Co. | Warehouse located at | | | Installed quantity by Canal Distribution Company at the Various Locations | | | Stored Quantity at Canal Distribution Warehouse | | |
|--------------|--|---|----------------------|-------|-------|---|-------|-------|---|-------|-------|
| | | | Algeria | Libya | Sudan | Algeria | Libya | Sudan | Algeria | Libya | Sudan |
| 4818-01-7 | Hand-operated mechanical compression tool including carrying case | No | No available data | | | | | | | | |
| | Hand-operated hydraulic compression tool including carrying case | No | No available data | | | | | | | | |
| | Complete set of dies required for the mechanical tool for the terminals and connectors | No | No available data | | | | | | | | |
| | Complete set of dies required for the hydraulic tool for the terminals and connectors | No | No available data | | | | | | | | |
| | Complete set of dies required for the mechanical tool for the connectors | No | No available data | | | | | | | | |

| Contract No. | Item Description | Qty. | Qty. Delivered from LEA to Canal Distribution Co. Warehouse Located at | | | Installed Quantity by Canal Distribution Company at the Various Locations | | | Stored Quantity at Canal Distribution Warehouse | | |
|--------------|--|------|--|---------|-----|---|---------|-----|---|---------|-----|
| | | | WASH DC | PHOENIX | SPR | WASH DC | PHOENIX | SPR | WASH DC | PHOENIX | SPR |
| | Complete set of dies required for the hydraulic tool for the connectors | No | No available data | | | | | | | | |
| | Al.bus to 500 MCM compact al., 4-hole NEMA spacing | No | No available data | | | | | | | | |
| | Al.bus to 250 MCM compact Al., 4-hole NEMA spacing | No | No available data | | | | | | | | |
| | Al.bus to #2 compact al., 2-hole NEMA spacing | No | No available data | | | | | | | | |
| | Sets of 1/2" x 1 1/2" long bolts, two flat round washers, one lock washer and one hexagonal nut, all stainless steel | No | No available data | | | | | | | | |
| | 350 MCM compact al. to 250 MCM concentric cu. | No | No available data | | | | | | | | |

| Description | Qty. Delivered from EEA to Canal Distribution Co. Warehouse Located at | Installed Quantity by Canal Distribution Company at the Various Locations | | | Stored Quantity at Canal Distribution Warehouse | | |
|--|--|---|----------|------|---|----------|------|
| | | Port Said | Ismailia | Suez | Port Said | Ismailia | Suez |
| 1/0 compact al. to 2/0 concentric cu. | No | No available data | | | | | |
| 2/0 compact al. to 2 concentric cu. | No | No available data | | | | | |
| 2 compact al. to 4 concentric cu. & 2 compressed al. to 4 concentric cu. | No | No available data | | | | | |
| 2 compressed al. to 2 compressed al. | No | No available data | | | | | |
| 4 compressed al. to 4 concentric cu. | No | No available data | | | | | |
| 2-groove with one groove for 2 compressed al. and one groove for 14 concentric cu. | No | No available data | | | | | |
| 2-groove with one groove for 2 compressed al. and one groove for 4 concentric cu. | No | No available data | | | | | |

| Contract No. | Item Description | Unit | Qty. Delivered from USA to Canal Distribution Co. | | | Installed Quantity by Canal Distribution Company at the Various Locations | | | Stored Quantity at Canal Distribution Warehouse | | |
|--------------|---|------|---|----------|-------|--|----------|-------|---|----------|------|
| | | | Port Said | Ismailia | Suez | Port Said | Ismailia | Suez | Port Said | Ismailia | Suez |
| | | | | | | | | | | | |
| | Insulating wire - 347 #, specifically designed for limiting & retarding oxidation of both aluminum & copper compression | No | No available data | | | | | | | | |
| | Wire brush equal or similar to Blackburn #11 | No | No available data | | | | | | | | |
| 4818-01-09 | bare copper Cable single 500 MM | FT | 0 | 670 | 670 | 0 | 670 | 0 | 0 | 670 | |
| | 4/0 AWG | FT | 8971 | 15514 | 14520 | 8971 | 15514 | 7540 | 0 | 0 | 6980 |
| | 4 AWG | FT | 300 | 53400 | 53500 | 300 | 53400 | 53500 | 0 | 0 | 0 |
| | 1/0 AWG | FT | 6670 | 6670 | 6670 | 6670 | 6670 | 6670 | 0 | 0 | 0 |
| | Ground Rods 3/4" x 10' | FT | 435 | 1354 | 12200 | 435 | 1354 | 12200 | 0 | 0 | 0 |
| 4818-01-10 | Diesel Engine | No | 0 | 0 | 0 | The supplied equipment shall be used in the installation of underground distribution system. | | | 0 | 0 | 0 |
| | Trench Attach. | No | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| | Backhoe Attach. | No | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| | Backfill Attach. | No | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| 4818-01-11 | Cable Trailer | No | 2 | 2 | 2 | | | | 2 | 2 | 2 |