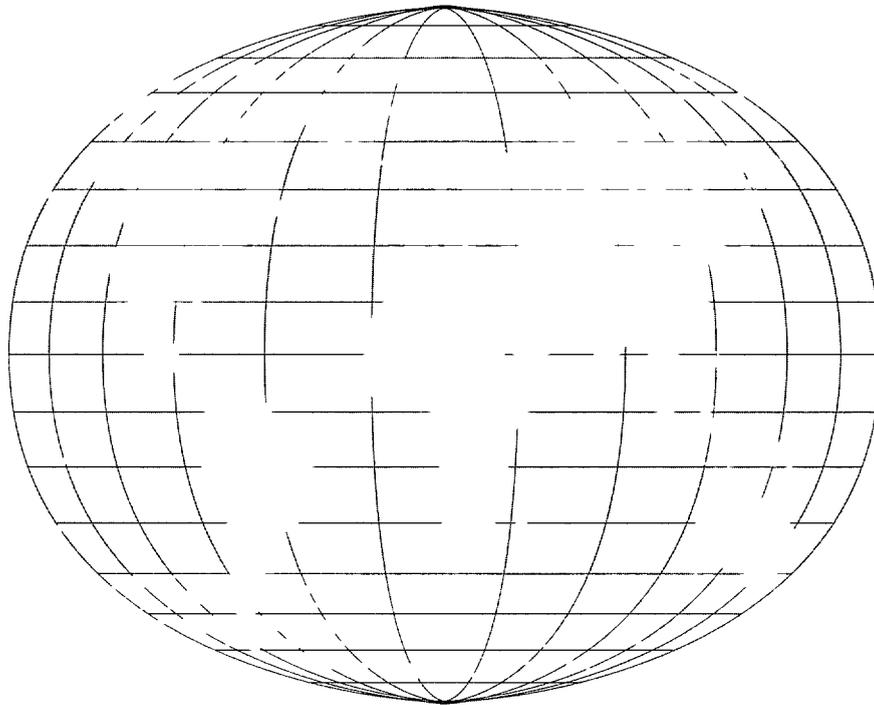


Report of Audit

Audit of USAID/Egypt's Reported Results in Power and Telecommunications

Report No 6-263-99-004-P
July 20, 1999



Regional Inspector General for Audit

Cairo, Egypt

OFFICE OF INSPECTOR GENERAL
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT

USAID



CAIRO, EGYPT

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**UNITED STATES OF AMERICA
AGENCY FOR INTERNATIONAL DEVELOPMENT
OFFICE OF THE REGIONAL INSPECTOR GENERAL/AUDIT**

**Report No 6-263-99-004-P
July 20, 1999**

MEMORANDUM

TO DIRECTOR, USAID/Egypt, Richard M Brown
FROM RIG/A/Cairo, Darryl T Burris *(D. Burris)*
SUBJECT Audit of USAID/Egypt's Reported Results in Power and Telecommunications

This is our report on the subject audit. Overall, the audit found that USAID/Egypt reported accurate results data on installed capacity for electrical power and on the number of telephone lines installed, two key results reviewed by the audit. Your comments were considered in finalizing the report and are included in Appendix II.

The report contains no recommendations.

I appreciate the cooperation and courtesies extended to my staff during the audit.

Background

Pursuant to the Government Performance and Results Act of 1993, USAID requires its missions to develop strategic plans, establish annual targets, and report annually on the results achieved in a document called the "Results Review and Resource Request" or R4. While the March 1998 R4 document which we reviewed for this audit reported numerous results in the power and telecommunications sectors, we limited our audit to the review of two specific results—one in the power sector and one in the telecommunications sector. We did so because USAID/Egypt has been simplifying its reporting and data collection efforts, and indicated to us that it regarded the twin areas of installed capacity¹ for power and number of telephone lines² for telecommunications as key to what the Mission has accomplished in the sectors (not only with regard to infrastructure, but also with regard to policy reform and institutional building).

¹ "Installed capacity" means equipment in place, capable of generating electricity up to specific ratings (manufacturer specified megawatts of power) for a generator/turbine unit.

² One telephone "line" represents a wire circuit connecting subscribers to a switch located in an exchange.

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Since 1975, USAID has expended about \$1.4 billion for the construction or modernization of the electric utility infrastructure in Egypt. USAID has assisted the Egyptian Electricity Authority in improving its planning and efficiency, strengthening its financial viability, increasing its autonomy, and promoting regulatory reform in the sector. With USAID and other donor assistance, total installed capacity in Egypt increased from 3,789 megawatts (MW) in 1976 to 13,303 MW in 1997.

USAID's investments in Egypt's telecommunications sector involves supporting the institutional strengthening of Telecom Egypt, an autonomous public utility, and the improvement and expansion of telecommunications networks in Cairo and Alexandria. Since 1978, USAID has financed the installation of 631,000 telephone lines in Cairo and Alexandria and expended about \$399 million under five major projects through March 15, 1999. Another 310,000 lines are currently under procurement. With USAID and other donor assistance, the number of telephone lines in Egypt increased from 0.5 million in 1977 to 4.5 million in 1997.

USAID/Egypt plans to conclude infrastructure activities in the power and telecommunications sectors in 2001 but will continue sector activities related to policy reforms and institution building after that time.

Audit Objective

Pursuant to our fiscal year 1999 audit plan (and at the request of USAID/Egypt) the Regional Office of the Inspector General for Audit in Cairo performed this audit to determine if USAID/Egypt reported accurate results data on installed capacity for electrical power and on the number of telephone lines installed.

Appendix I contains a discussion of the scope and methodology for the audit.

Audit Findings

Did USAID/Egypt report accurate results data on installed capacity for electrical power and on the number of telephone lines installed?

For the items tested, USAID/Egypt reported accurate results data on installed capacity for electrical power and on the number of telephone lines installed (See data reported by USAID/Egypt in the graphs on page 4)

In regards to the installed capacity for electrical power, we found no material exceptions to the installed capacity figures reported in USAID's March 1998 R4 report. We compared the R4 figure of 13,303 megawatts (MW) with data provided by the Egyptian Electricity Authority and also inspected turbines at eight power stations³ having a combined installed capacity of 8,630 MW (about 65 percent of the total installed capacity reported by USAID/Egypt in its March 1998 R4 report). We verified installed capacity by examining the manufacturer's name plate attached to the turbines and if name plates were not accessible, by obtaining technical documentation provided by the turbine manufacturer.

Regarding the number of telephone lines installed, we found no material exceptions to the figure reported in USAID/Egypt's March 1998 R4 report of 4.513 million lines installed. We compared this figure to various quarterly and monthly reports provided to us by Telecom Egypt. In addition, we performed additional tests on the number of telephone lines financed and installed under USAID projects in Cairo and Alexandria. For the current on-going Telecom Sector Support Project, we were able to trace 180,000 USAID-financed and installed lines to contractor bills of quantities, to acceptance test plans performed by USAID's monitoring contractor, and to final acceptance certificates⁴ signed by the monitoring contractor and by Telecom Egypt.

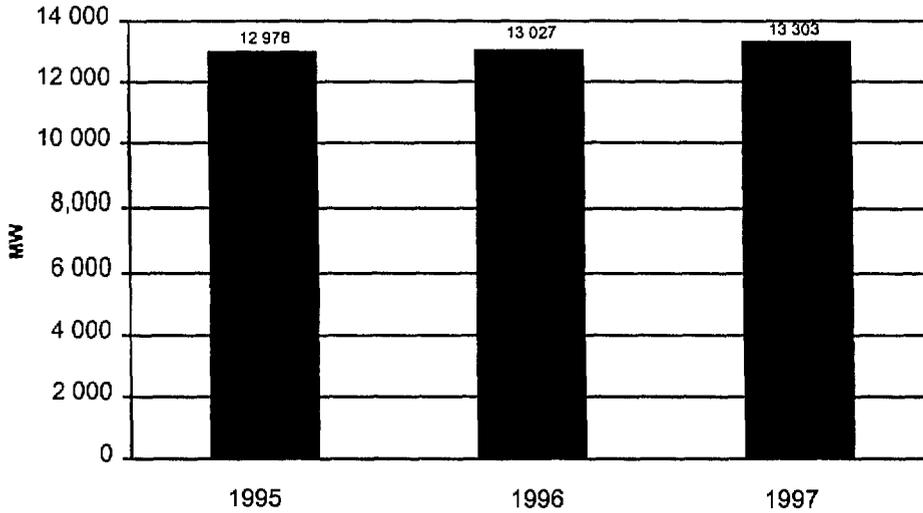
In conclusion, based on aggregate data provided to us by the Egyptian Electricity Authority and by Telecom Egypt and on more detailed tests performed on a sample of power plants and telephone lines, we believe that USAID/Egypt, for the items tested, reported accurate data for both installed electrical capacity and number of telephone lines in its March 1998 R4 report.

³ Five of these eight power stations were funded by USAID/Egypt, USAID spent about \$802.5 million to construct or rehabilitate these five.

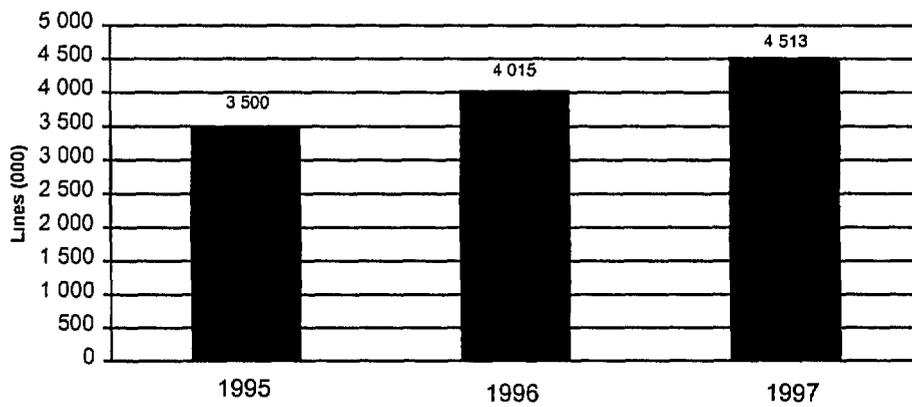
⁴ The only exception found was one exchange (25,000 lines) which had not yet been issued a final acceptance certificate but for which an acceptance test plan had been completed at the time of the audit.

Increased Capacity in Electrical Power and Telecommunication in Egypt 1995 – 1997*

Installed Capacity for Electrical Power



Telephone Lines Installed



* **Source** "USAID/Egypt's Results Review and Resource Request," dated March 1998
Data for 1997 is audited while data for 1995 and 1996 is unaudited. Amounts reported by
year are as of June 30

Management Comments and Our Evaluation

USAID/Egypt requested that the report be issued in final since it did not contain any recommendations

SCOPE AND METHODOLOGY

Scope

We conducted our audit of results data on installed capacity for electrical power and on the number of telephone lines installed, in accordance with generally accepted government auditing standards. We performed this audit from February through May 1999. In conducting this audit, we examined the internal controls related to the audit objective, and considered prior audit findings applicable to the areas under review.

We performed the audit at USAID/Egypt, the Egyptian Electricity Authority in Abbassia, a suburb of Cairo, and Telecom Egypt in Cairo. For the power sector, we visited power stations at Abu Qir, Abu Sultan, Ataka, Cairo South, Cairo West, Demitta, Shoubrah, and the Aswan High Dam. For the telecommunications sector, we visited contractor offices in El-Rodah and Dokki, suburbs of Cairo, and the Ramsis exchange, which is the oldest telephone exchange in Egypt and where USAID had financed the installation of about 20,000 lines in 1993.

Methodology

To verify the accuracy of installed capacity figures reported by USAID/Egypt in its March 1998 R4 report, we obtained annual reports⁵ of statistics from the Egyptian Electricity Authority and used by USAID/Egypt to report performance data on power stations throughout Egypt. Using the July 1, 1996 to June 30, 1997 annual report, we selected for review a judgmental sample of 8 of 9 power stations having 600 megawatts (MW) or greater installed capacity. The eight power stations sampled had a combined installed capacity of 8,630 MW which represents 65 percent of the total installed capacity of 13,303 MWs reported by USAID/Egypt. The sample provided a fair cross-section of types of steam, gas, and hydro turbines used to generate power in Egypt and

⁵ The reports showed installed capacity of 12,978 MW, 13,027 MW, and 13,303 MW for the host government fiscal years of 1994/1995, 1995/1996, and 1996/1997, respectively.

includes five power stations⁶ where USAID had made investments of about \$802.5 million since 1975

To test the reasonableness of the number of telephone lines reported by USAID/Egypt in its March 1998 R4 report⁷, we obtained and compared monthly and quarterly reports prepared by Telecom Egypt on the number of telephone lines installed throughout Egypt. We did not do additional testing of the accuracy of the overall figures provided to us by Telecom Egypt, limiting our tests on the management controls implemented by the engineering and construction consultant (monitoring contractor) to ensure that USAID-financed lines were installed, as required, under the Telecommunications Sector Support Project. The controls reviewed included tracing telephone lines at selected exchanges to a bill of quantity (contractor equipment and cost schedule), a test plan for each exchange, a final acceptance certificate (signed by Telecom Egypt and the contractor) which confirms the number of lines and associated equipment installed, and a so-called "configuration audit" of installed lines and associated equipment.

In planning the audit, we established a "materiality threshold" of 5 percent for both installed capacity and number of telephone lines. That is, we considered only errors in excess of 5 percent to be significant enough to affect the audit's conclusions and thus require disclosure in the audit report.

⁶ These five power stations and associated USAID investments are as follows: Shoubrah \$261.5 million, Abu Sultan \$249.6 million, High Dam (Aswan) \$139.5 million, Cairo South \$116.6 million, and Cairo West \$35.3 million.

⁷ The R4 report showed 3.5 million telephone lines for 1995, 4.015 million for 1996, and 4.513 million for 1997.



UNITED STATES AGENCY for INTERNATIONAL DEVELOPMENT

CAIRO EGYPT

MEMORANDUM

Date July 5, 1999
To Darryl T. Burns, RIG/A/C
From *Mary Eileen Devitt*
Mary Eileen Devitt, Division Chief, FM/FA
Subject Audit of USAID/Egypt's Reported Results in Power and
Telecommunications - Report Dated June 23, 1999

Mission has reviewed the subject report on Power and Telecommunications in which RIG/A stated that USAID/Egypt reported accurate results data on installed capacity for electrical power and in the number of telephone lines installed. As a result, the report contains no recommendations.

Since the report did not contain recommendations for Mission action, Mission requests RIG/A to issue the report in final.

Your assistance is very much appreciated.

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USAID/Egypt
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