



## Project Information Sheet Billings and Collections

### An efficient, accurate and transparent system of billing and collection

Implementing Partner	AEAI
Project Start Date	October 2004
Anticipated Finish Date	June 2006

#### Objective

Between March 2002 and March 2004, billing and collection for power provided to the distribution systems of Da Afghanistan Brishna Moasisa (DABM) was virtually non-existent. Less than 75% of the power delivered was billed to the consumer and of that, less than 70% was collected.

*Approximately \$5 million during 2003, in Kabul alone, was lost due to inadequate billing and collection.*

As the majority of the power generated in the country is delivered to the capital city of Kabul, it was imperative to establish a billing and collection system for the Kabul Electricity Department (KED). This could enable the utility company, DABM, to generate sufficient cash to maintain the system improvements provided by USAID and other donors. Although Kabul was the initial focus, the same system will be implemented in other areas of Afghanistan.

The objective of the project was limited to:

- Review and assessment of the current billing and collection system to determine what could be retained and what improvements are needed to implement an effective system
- Preliminary steps to implement an appropriate billing and collection system

#### Project Description

Economic growth is dependent upon a reliable energy supply, which in turn is dependent upon the flow of cash from end users. In order for the consumer to pay, usage must be accurately measured and the customer must be informed of the amount owed. Further, it should be explained to consumers that timely payments enable the utility company to use the funds to maintain the physical

assets and purchase fuel to generate the power to keep the lights on.

Currently, billing and collection in Afghanistan is a manual process. In Kabul alone there are over 128,000 customers, with the potential for thousands more. Because of the large number of customers it is extremely difficult to manually track who has been billed and who has paid. It is even more difficult to track who has not been billed and who has not paid. Customer accounts have not been maintained/updated for years, contributing to a lack of transparency that in turn increases the likelihood of the utility to ignore the lack of payment from specific customers.



Where no adequate system exists, it takes months to develop an efficient, accurate, system of billing and collection. Existing manual records are unreliable, incomplete and outdated. These records need to be verified and converted into an electronic format, requiring new software. Staff must be trained and management must learn how the new system should function and revise policy accordingly.

#### Project Accomplishments

Since 2004, a significant amount of work has been done to identify the needs for implementing an efficient and transparent billing and collection systems.

The current system has been reviewed, with site visits to various parts of Kabul to determine the physical status of the metering and distribution system. Visits to Mazar-i-Sharif and Herat confirmed the policies and procedures used were essentially the same as Kabul, although Herat



was in the process of converting to a computerized system developed by an Iranian company.

A pilot project was established and implemented using a locally developed program to prepare bills and track customer payments. The pilot program tested customer reaction to hand-delivered bills as well as identifying those procedures that need to be changed to utilize a computerized billing system.

The pilot was initially developed for 700 industrial and commercial customers. After successful implementation of the pilot project, the program was expanded to include 8500 residential customers.

A database for all the customers in Kabul was developed in preparation for the implementation of a computerized billing program. Advanced Engineering Associates International (AEAI) a USAID contractor, hired an Afghan team to collect data from Kabul Electricity Department (KED) records. The data was entered into a Microsoft Access database by KED employees, trained in computer applications as part of USAID's efforts to build capacity. As of February 2006, 143,000 active and inactive customer records out of an estimated 190,000 have been computerized. A second local team was hired to verify the computerized records in the field. A basic computer-training course was developed and implemented to provide personnel with sufficient computer skills to run a computerized billing system. A total of 118 employees from DABM in Kabul and Mazar-i-Sharif have successfully completed the course. The participants were taught basic skills specific to the billing system and the course included training to enable the staff to use MS Office products.



*Training Award of Certificate Ceremony*

Several offices in the KED complex were rehabilitated in order to support computer equipment that requires an environmentally sound and secure site. Renovations included a new roof, establishing a network, rewiring the electrical circuits, as well as new paint and carpets. These were used both as office space for the billing and collection team as well as for a training center. Portions of this office will eventually become the KED billing center.

## Future Activities

The following future activities are contemplated:

- Refine the data base
  - Verify meter data, names and locations
  - Calculate customer balances
- Establish customer addresses
  - Mark each service location by number
  - Aid billing delivery process
- Implement Software
  - Customize and translate
  - Test
  - Train users
- Develop Control Procedures
- Provide Management Training
  - Internal controls
  - Customer Service
  - Effective use of billings and collections data

Data entry of KED records will be completed. Recognizing the existing data is not sufficiently reliable to run a billing system, additional basic data, such as the number of digits a meter has will be collected and entered into the system.

The proposed software will be translated, customized, installed and tested in Kabul during a three-month time frame. After that, it should be ready for implementation at other sites, providing the customer database is ready for loading.

It is recognized the billing systems will need to be implemented in the small cities once distribution systems are completed.