



Project Information Sheet Fuel Management and Supply

Diesel Fuel— providing a critical supply of electricity

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

Objective

The primary goal of the Fuel Management and Supply effort is to ensure sufficient amounts of High Speed Diesel (HSD) fuel is delivered to the North West Kabul, Lashkar Gah and Qalat generating stations – providing:

Over 130,000,000 liters of diesel fuel to the generating stations; enough electricity for

- **about 2.2 million households**
- **increasing GDP by \$1.1 billion**

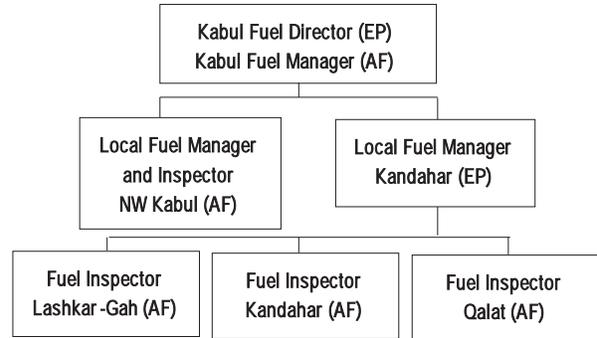
Aside from the sheer quantity of fuel needed for these stations, arduous terrain, poor roads and infrastructure, security concerns, and inadequate law enforcement make the task more difficult.



NW Kabul GT Station

Project Status and Impact

The project is successfully monitoring the procurement of fuel by USAID/Afghanistan. As well as the identification of suppliers, and the establishment of scheduling, monitoring, quality control, testing and overall fuel management procedures.



Fuel Management Project Organization

The project continues to ensure sufficient quantities and quality of fuel are delivered to the generating stations to support sustained operations in a timely manner. Advanced Engineering Associated International (AEAI) has taken on all actions in support of fuel and fuel equipment procurement, reporting and monitoring that have been directed by USAID. This has included, but is not limited to, preparation of daily fuel and performance reports, fuels requirements forecasts, fuel receipt logs and fuel receipt data bases for each fuel procurement contract as well as expediting fuel deliveries from each fuel supplier, directing the preparation of supplier delivery plans and schedules, assuring the fuel meets the OEM fuel technical requirements and the establishment of fuel receipt inspection and testing procedures.



NW Kabul Fuel Decanting Staff



Project Accomplishments

- Successful and continuous scheduling of diesel fuel procurement based on power plant needs to ensure sustained plant operations
- Provided a record of fuel needs under varying load conditions and electric demands through issuing fuel requirement forecasts
- Issued daily fuel and performance reports identifying electricity generation, fuel consumption rates and emerging problems and concerns
- Established and maintained reliable on site fuel testing to ensure quality
- Verified fuel quantities to assure contract specifications and delivery requirements are met
- Increased the professional and technical capacity of Afghan national staff
- Assessed DABM and other power entities' ability to procure and manage fuel deliveries and implement quality control
- Trained Afghan staff to conduct fuel procurement and management and quality control to foster independent performance
- Assisted DABM staff in conducting fuel testing at the NW Kabul Lab
- Trained DABM staff in equipment operations and maintenance
- Identified least cost options for fuel purchases and optimal fuel management
- Identified reliable suppliers of fuel and prepared a fuel supplier database for future use

Future Activities

Fuel Management objectives are continuous while the USAID supported generating stations are operational.

Additionally, there are continuing schedules to accomplish specific tasks concerning fuel management, such as operating, maintaining and replacing or repairing necessary equipment. The fuel delivery schedule is used to ensure that fuel suppliers have a plan and a schedule to deliver sufficient amounts of fuel to each generating station to support scheduled operations within the relevant contracts and purchase orders, and that fuel suppliers follow their fuel delivery plans and schedules.

Generating Station	Daily Fuel Requirements for Operations (Liters)	Useful HSD Fuel Storage Capacity (Liters)	Days of Operation Available with Full Storage Tanks
NW Kabul	220,000	9,640,800	44
Kandahar	55,000	1,140,000	21
Lashkar-Gah	12,500	231,000	18
Qalat	3,400	40,000	12
Total	290,900	11,051,800	NA

This effort requires at least 290,000 liters per day to be delivered to each site.

Finally, a second fuel storage tank is being installed at Qalat that will increase the usable storage capability to 80,000 liters and increase the days of operation with full storage tanks to 24 days.

Specific tasks include, but are not limited to:

- Determine HSD fuel requirements 30 June 2006
- Continue daily fuel and performance reports to USAID and the US State Department
- Train Afghan staff to prepare Daily Fuel and Performance Reports
- Track fuel deliveries, maintain fuel delivery logs and database
- Prepare fuel contract closeout reports
- Prepare request for proposals for Tirin Kot fuel storage and transfer system
- Repair or replace fuel transfer and forwarding pumps and motors as needed
- Install replacement fuel storage tank level meters at NW Kabul