United Nations Development Group Iraq Trust Fund
Project #: E4-15
Date and Quarter Updated: 1-July-30 September, 3rd Quarter 2008

| Participating UN Organisation: | UNDP | Cluster: E – Infrastructure Rehabilitation |
| Government of Iraq – Responsible Line Ministry: | Ministry of Electricity |

**Title**: Emergency Rehabilitation of Mussayib Power Station – Stage II

**Location**: Nation-wide

**Project Cost**: US$33,000,000

**Duration**: 24 months

**Approval Date (SC)**: June 2004

**Starting Date**: June 2005

**Completion Date**: June 2009

**Project Description**: The rehabilitation of Unit 1 of Musayab Thermal Power Station (TPS) is essential for improving electrical power supply to the national grid, particularly in Central Iraq. Under Stage I, previously identified rehabilitation/repairs of Unit 1 controls and turbine/generator problems were corrected wherever possible. Under Stage II, the technical capabilities of the plant staff will be upgraded to not only operate and maintain the unit once rehabilitated but also to assess the requirements for rehabilitation of other units and to undertake repair and maintenance works with minimum international supervision. MoE capacity for these undertakings will be supported by modern maintenance management software and installation of a mobile video/audio system for plant equipment condition assessment.

**Development Goal and Immediate Objectives**
1. To respond to the immediate humanitarian needs of war-affected Iraqi people through ensuring reliable and safe electricity supply to all consumer categories, in particular key humanitarian essential services.
2. The generating capacity, reliability, availability, and efficiency of Unit No.1 of Mussaib Thermal Power Station increased.
3. Plant staff able to conduct complete maintenance and full repairs of thermal units utilizing latest available technology, modern tools, and state-of-art software for unit maintenance and overhauls.
4. Core team of MoE staff specialized in the overall condition assessment of thermal units trained in the application of state-of-art maintenance management software for monitoring, recording, reporting and planning future maintenance of thermal units in the MoE Fleet.

**Outputs, Key activities and Procurement**

**Outputs**
1.1 Mussaib Thermal Power Station (TPS) Unit 1 rehabilitated and providing 60-80 MW greater capacity, reliability, availability and efficiency by June 2007.
2.1 Comprehensive set of selected and essential spare parts supplied to Mussaib TPS, which will be available in stock for emergency repairs and routine maintenance; in order to sustain Unit 1 future generation and reliability.
3.1 Thirty-four (34) plant staff trained in Unit 1 rehabilitation skills suited for erection, calibration, testing and commissioning. In addition, Core Team of MoE staff proficient in the application of maintenance management software and able to train other junior technical personnel to enlarge MoE in-house capabilities in maintenance management, planning, monitoring and record keeping.

**Activities**
1.1.1 Finalization of the list of equipment, parts and relevant components with their detailed technical specifications to be provided based on assessments of the unit
2.1.1 Unit repair and rehabilitations works conducted by plant staff under contractor guidance.
3.1.1 Implementation of the relevant training overseas for unit rehabilitation works and the training on maintenance management software in Amman, Jordan.

**Procurement**
(major items)

| Funds Committed | US$ 19,664,700 | % of approved | 59.59% |
| Funds Disbursed | US$ 10,928,547 | % of approved | 33.12% |
| Forecast final date | June 2009 | Delay (months) | 18 |

Quantitative achievements against objectives and results

| Scoping | Determining scope of rehabilitation needed, included full negotiation of prices and delivery schedules (Activity 1) | % of planned | 100% |
| Spare parts and equipment | Specifications for shipment prepared. | % of planned | 25% |
| Training of Trainers | Specifications for training prepared | % of planned | 25% |
| Pre-shipment inspection | Coordination and supervision of factory-witness tests in Japan of selected equipment successfully completed during March – April 06 | % of planned | 100% |

Qualitative achievements against objectives and results

- A boiler elevator assessment has been carried out.
- Specifications for upcoming training were prepared.
- 125 tonnes of equipment were delivered to Mussaib in a first shipment of 12 containers.
- 5 Mussaib Engineers completed the Aux. equipment implementation training course in Hitachi factory.
- Shipment No. 2 was delivered to Mussaib Power station.
- Shipment No 3, consisting of 5 containers has arrived in September.

Current Project Status within the reporting period July-September 2008

Shipment No. 2 was delivered to Mussaib Power station in August, consisting of two 40’ containers and one 20’ open top container. Total weight of the shipment: 10 tons. 5 Mussaib Engineers completed the Aux. equipment implementation training course in Hitachi factory. Shipment No 3, consisting of 5 containers has arrived in September.