

USAID ENERGY POLICY PROGRAM

SUCCESS STORY

CLOSING THE MEGAWATT GAP

Contract No: AID-EPP-I-00-03-00004

Order No: AID-391-TO-12-00002

©USAID Energy Policy Program
House 4, Street 88, Sector G-6/3
Ataturk Avenue, Islamabad, Pakistan
Tel: +92 (51) 835 7072, Fax: +92 (51) 835 7071

November 14, 2014

DISCLAIMER

The contents of this document are the sole responsibility of Advanced Engineering Associates International, Inc. (AEAI) and do not necessarily reflect the views of USAID or the United States Government.



SUCCESS STORY

Closing the Megawatt Gap

USAID extended US \$ 19.123 million for rehabilitation of Guddu Thermal Power Station



“With the help of USAID funding, the rehabilitation at Guddu increased the reliability, stability and assurance with a 10% improved output of the plant. The months spent in planning and monitoring the activities have resulted in more electricity for Pakistanis” says Rukhsar Qureshi CEO Guddu.

U.S. Agency for International Development
www.usaid.gov

Severe electricity shortages have resulted into an energy crisis impacting Pakistan’s political and economic stability. Unannounced power outages and regular load-shedding prevents routine access to electricity across Pakistan. In turn, businesses and education institutions are widely affected and hamper Pakistan’s development. In order to improve electricity access, the Government of Pakistan (GOP) and the United States Government (USG) are committed to closing the megawatt (MW) gap with interventions like the Energy Policy Program (EPP).

In an effort to mollify existing and growing shortage of electricity that supplies Pakistan’s economy, the U.S. Mission to Pakistan provided assistance to the Government of Pakistan (GOP) through government-to-government (G2G) funding and technical support. . The G2G mechanism offers supply of equipment, monitoring and implementation support for rehabilitation and construction while supporting project sustainability with policy advisement at the Ministry of Water and Power, GENCO Holding Company, Planning Commission, and other public sector entities tied to thermal energy.

One G2G project recently completed is the rehabilitation of the Guddu Thermal Power Station (GTPS) Combined Cycle Unit No.7, 8 and 5. GTPS lies at the confluence of three provinces, Sindh, Punjab and Baluchistan in district Kashmore at Kandhkot, Sindh Province. GTPS is owned and operated by Central Power Generation Company Limited (CPGCL) and had an initial installed capacity of 1655 megawatt, however, aging and lack of industry proven maintenance practices and poor operations degraded the plant’s capacity to 225 MW against installed capacity of 300 MW.

USAID provided US\$ 18.36 for the Jamshoro Power Plant. The project restored the lost generation capacity of the units and further improved it to 80 megawatts of generation capacity of the power station by virtue of rehabilitation of Block – I of the Combined Cycle Power Station at Guddu, coupled with trainings in best practices in Maintenance and Operation to the plant engineers. Because of these efforts, increase in power plant capacity was made possible and has also translated into improvements in heat rate and fuel savings.

In April 2012, EPP started rehabilitation work on 3 units (2 Gas Turbines and 1 Steam Unit) of GTPS to capture MW savings. Through equipment installations, and EPP implementation and monitoring, the rehabilitation of units GT-7, GT-8 and ST-5 lead to the restoration of 80 MWs; improving energy services to approximately 740,960 individuals. The rehabilitation work of Combined Cycle block -I under Fixed Amount Reimbursable Agreement (FARA) is successfully completed. USAID/EPP is devoted to creating sustainable practices at GTPS and ensure that MW savings will continue throughout the life of the plant.