

# USAID ENERGY POLICY PROGRAM

SUCCESS STORY

# MITIGATING ENERGY SHORTAGE THROUGH MANGLA POWER STATION

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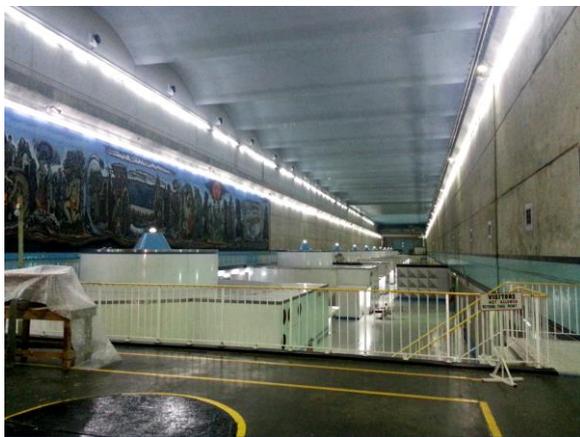
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## SUCCESS STORY

### Mitigating Energy Shortage Through Mangla Power Station



*Spill Ways of Mangla Dam Mangla*



*Mangla Power Station*

Located in the Mirpur District of Azad Kashmir, Mangla Hydroelectric Power Station has a power generation capacity of 1,000 MW from 10 generating units. However, as a result of degraded equipment, the plant's capacity has been reduced to 980 MW. This is why USAID has partnered with the Government of Pakistan to rehabilitate the Power Station. As the 12<sup>th</sup> largest dam in the world, initially constructed in 1967, Mangla is the third largest project of its kind in Pakistan. The current project rehabilitates 2 out of 10 generators and replaces turbines and upgrades electrical and related equipment.

The objective of working on the Mangla Power Project has been to mitigate Pakistan's energy shortage by adding 90 megawatts to the national grid through the refurbishment and upgrading of units 5 and 6 at the power plant. It will produce approximately 434 GWh/year of energy and is enough to supply electricity to 833,580 people. The generation capacity would increase from 80 MW to 135 MW for Unit 5; and from 100 MW to 135 MW for Unit 6. The project will also supply 169 MVA Capacity Power Transformers and supply, install and refurbish mechanical and electrical equipment, and conduct civil works.

New, modern equipment will ensure the availability of spare parts for preventive maintenance, and will improve the reliability and availability of this power plant for the next 40 years. USAID/EPP has managed to get the project implementation letter (PIL) signed by WAPDA and USAID on March 6, 2014.

Increasing available energy supplies is inextricably linked to Pakistan's economic development. Demand for energy increases roughly eight percent per year and blackouts are common with up to 16 to 22 hours a day. USAID works with the government of Pakistan to support high impact projects in new construction and existing energy plant rehabilitation. Mangla's environmental mitigation and monitoring plan has also been prepared and approved and the first invoice for \$13 million was disbursed into the WAPDA/Mangla Account. By upgrading Units 5 and 6, Mangla's revenue from electricity sales are expected to be approximately \$60 million per year.