

USAID ENERGY POLICY PROGRAM

SUCCESS STORY

RENEWED PLANT HELPS KEEP LIGHTS ON

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Renewed Plant Helps Keep Lights On

USAID support gives new lease on life to the power plant



Plant managers and engineers of Muzaffargarh power plant examining the super-heater boiler tubes.

With USAID support, Muzaffargarh Power Plant has already increased its power generation capacity by 500 MW for the energy-starved power grid of the country.

Returning home after another long day at work in late August 2009, Senior Engineer Nawaz Alvi was gripped with a feeling of helplessness. As manager of operations at the Muzaffargarh Thermal Power Plant in the southern part of Punjab Province, his once rewarding job had become a continual source of frustration: Continuing decreases in the plant's generation capacity was a leading cause of power leakages and breakdowns.

He was especially concerned about the leakages of the heater tubes of the boiler. The deteriorating tubes were gradually reducing the efficiency of the power plant and causing breakdowns. The plant engineers were constantly challenged by the leakages and had to shut down various units frequently to fix the problems. With units under repair, the plant could not operate at its full capacity, and it supplied less electricity for the national grid, which was already facing huge power shortages.

In October 2009, USAID initiated the Energy Policy Program (EPP) with support of the repair and rehabilitation of four power plants owned by the Government of Pakistan, including Muzaffargarh, as a major focus. The Muzaffargarh power plant received \$15.77 million from USAID to replace its aging equipment.

A set of new super-heater tubes was at the top of the priority repair list drafted by the plant managers. The management of the plant, worked with USAID to procure the needed equipment, and soon new super-heater tubes for the boiler arrived at the site. Less than two months later, the first of the planned three boilers had its tubes replaced and tested. By the end of first quarter of 2014, USAID-funded renovations had restored 500 megawatts of production capacity at the plant.

In an energy-starved country, this increase in power is sufficient to provide a continuous supply of electricity to more than four million Pakistanis. It holds the promise of improving the lives of millions of people as well as providing reliable energy for countless businesses, schools, and other facilities. "At a value of \$4 million for each tube, the payback in power is both significant and cost effective" adds Senior Engineer Alvi at the Muzaffargarh Power Plant. On the way home, his step is a little lighter these days.