USAID ENERGY POLICY PROGRAM

SUCCESS STORY

DELIVERING MORE RELIABLE POWER

Contract No: AID-EPP-I-00-03-00004
Order No: AID-391-TO-12-00002

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June 16, 2014

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SUCCESS STORY

Delivering More Reliable Power

New 40MVA transformer installed at the D.I. Khan Grid station

The additional power transformer ensures a reliable supply of electricity for the residents of South Waziristan and helps to increase their hours of uninterrupted electrical service.

Frequent and long power outages had become a routine part of the summer for the residents of South Waziristan. The power interruptions were partly due to insufficient capacity of the local grid stations' transformers. The existing power transformers simply did not have enough capacity to meet the higher seasonal load demand of the area, resulting in the chronic loss of electric service.

Transformers play a key role in the reliable and economical transmission and distribution of power from generators to consumers. They are designed to step up and step down the voltage of the electricity travelling through the transmission lines They increase the voltage supplied by power station generators to the higher voltages necessary for the economical transmission of power across long distances, and when the power reaches the local grid stations, they reduce the voltages to lower levels to safely and efficiently distribute the power throughout the community.

Peshawar Electric Supply Company (PESCO), which serves the South Waziristan area, could not furnish the grid station with the much needed additional transformation capacity. At PESCO's request, USAID's Energy Policy Program (EPP) stepped in to fill the gap. EPP's transmission experts worked with the PESCO engineers to identify the problem and to upgrade the facility. In May 2014, EPP provided a new 40MVA power transformer that was installed alongside the three existing transformers at the D.I. Khan Grid Station.

The new transformer shares the load with the existing transformers, which were otherwise being loaded beyond their rated capacity, helping to reduce by 30% (around 25MWs) the forced load shedding that had been taking place in the area.

The new transformer has increased the throughput capacity of the grid station, enhancing PESCO's capability to reliably supply 280.32 GWhs energy annually and benefitting 409,356 individuals.