POWER TRANSMISSION EXPANSION AND CONNECTIVITY PROJECT

DECEMBER 2012 – DECEMBER 2018

$870 MILLION

OVERVIEW

Recent estimates indicate only 30 percent of Afghans have access to electricity. USAID’s Power Transmission Expansion and Connectivity project is working to increase access by expanding and improving Afghanistan’s electric transmission system and strengthening Da Afghanistan Breshna Sherkat (DABS), the national electric utility’s ability to manage, operate and maintain the national power system.

A top priority is widening the national power grid by connecting Afghanistan’s North East Power System (NEPS) from Kabul to the Southern Electric Power System in Helmand and Kandahar. USAID is funding the construction of a 515 km 220 kilovolt (kV) transmission line connecting the northeast network to the southeast network. Once completed, the transmission line will be capable of providing sustainable power to more than one million underserved and non-served Afghans in Kandahar and the major population centers along the Highway 1 economic corridor.

Another USAID objective is introducing utility management software in Kabul, Mazar-i-Sharif, Herat, Kandahar and Jalalabad to increase revenue collection and reduce revenue losses. With USAID support,
the project also trains and supports power utility management and technical staff, including a large female corps to staff their human resource and payroll departments and customer call centers.

USAID is implementing this program through a partnership with DABS and the Ministry of Finance. The $870 million project began in 2012 and is scheduled to be completed by December 2018.

**CURRENT ACTIVITIES**

- **Expand, Strengthen and Integrate NEPS:**
  - Construction of the first 125 km section of the 220kV transmission line connecting the northeast and southeast systems from Arghandi to Ghazni that will be complete by December 2016.
  - Construction 220/20kV substations at Sayedabad and Ghazni by December 2016.
- **Contractor Selection:**
  - Through a reverse auction process, to construct and operate a 10 MW photovoltaic power plant in Kandahar before July 2017.
- **Commercialization:**
  - Develop an Electricity Business Model, O&M staff training, Computerized Maintenance and Management System (CMMS), and provide technical advisory support to operators at the Tarakhil power plant, and develop a bulk metering plan for four major load centers.

**PLANNED ACTIVITIES**

- **Expand, Strengthen and Integrate NEPS:**
  - Construct the second 390 km section of the transmission line connecting the northeast and southeast systems from Ghazni to Kandahar East by December 2018.
  - Construct a 220/20kV substation at the Salang Tunnel to provide power and displace high-cost diesel generated power.
  - Install bulk meters and smart retail meters in DABS’ five largest load centers to reduce technical and commercial losses and increase revenues.
- **Clean Energy:**
  - Facilitate the construction of a 10 MW solar power plant in Kandahar

**EXPECTED RESULTS**

- **DABS Commercialization:**
  - Ensure the power utility becomes self-sustaining and profitable.
  - Improve distribution systems at the five major load centers and create revenue protection system.
  - Increase DABS’ overall cost recovery percentage by 30 percent at the load centers over three years.
  - Reduce revenue losses by 20 percent in three years.
- **Connect Northern and Southern Power Systems:**
  - Improve power supply for more than one million Afghans living in southern provinces.