## Turkmenistan Adopts Electric Power Industry Development Plan

Published in Field Reports

by Tavus Rejepova (05/29/2013 issue of the CACI Analyst)

On April 12, President Gurbanguly Berdimuhamedov approved a new Concept of Electric Power Industry Development of Turkmenistan for 2013-2020 and promised to invest US\$ 5 billion into the sector to boost electricity exports by a factor of five.

The new seven-year power generation plan was prepared jointly by the Ministry of Economy and Development and the Institute of Strategic Planning and Economic Development of Turkmenistan and was presented to the President by the Energy Minister Myrat Artykov. The energy minister mentioned that Turkmenistan currently has ten power plants and a total of 32 turbines including 14 steam, 15 gas and 3 water-run turbines.

The new power industry development plan will be implemented in two phases, 2013-2016 and 2017-2020. The first phase includes the construction of new eight gas turbine-run power plants in Akhal, Mary and Lebap provinces, the reconstruction of existing power plants in the cities of Seydi, Balkanabat and Abadan, and the installation of high voltage power transmission lines across the country. As per the first phase of this plan, Turkmenistan plans to double its current electricity production by 2016. The second phase covering 2017-2020 envisions the construction of six additional major plants and switching from gas turbine plants to a combined cycle that will increase the power supply without consuming any extra natural gas.

The country's power system renovation plan also includes a complete modernization of Ashgabat's electricity system in three stages within five years through close to 60 new substations to be constructed by the Turkish consortium Calik Holding. As the country re-builds the capital city Ashgabat and modernizes its power system, blackouts are still frequent during both winter and summer in older parts of the city and rural areas of the provinces.

The Turkmen government's decision to invest US\$ 5 billion in developing its electricity infrastructure is also a consequence of the sudden and massive power disruptions over the past winter in several provinces of Turkmenistan due to a serious malfunction at Mary DES, the main state power generation station in the country. President Berdimuhamedov then fired the chief of the Mary DES for failing to address the deficiencies in the plant and its substations in Lebap province. Frequent disruptions in the provinces also occur because the majority of substations around the country, built during the Soviet era, are worn out.

President Berdimuhamedov stated that once the new electricity plan is implemented, Turkmenistan expects to export electricity to Armenia, Pakistan and other countries in the region. Turkmenistan currently exports electricity to neighboring Afghanistan and Iran. In addition to the existing Mary-Serhetabat-Gerat power line, Turkmenistan is currently building a new 500 KW power transmission line between Mary-Atamyrat in Turkmenistan and Andhoy in Afghanistan to increase the electricity supply to Afghanistan.

In 2007, Berdimuhamedov absolved Afghanistan's US\$ 4.2 million electricity debt and plans to continue electricity supply at a reduced price. The Turkmen government also intends to resume electricity supply to Tajikistan, which was interrupted in January 2009 when neighboring Uzbekistan withdrew from the Central Asian power grid. In 2011, Turkmenistan produced 18.27 billion kWh of electricity, of which it exported 2.523 billion KWh to neighboring countries like Afghanistan and Iran. Domestic consumption in the same year was 15.796 billion.

Turkmenistan's investment into its electricity industry is part of the country's general policy of diversifying its energy export routes in the region. If the general concept is successfully implemented within the given time frame, Turkmenistan is expected to fully provide all of its provinces with uninterrupted power supply during all seasons of the year and to generate additional income through the growth of exports to other countries.