

Public-Private Partnership Stories

Myanmar: Myingyan IPP



Bagan, Myanmar

Myanmar has one of the lowest electrification rates in the world, with less than 30% of the population having access to electricity and annual per capita electricity consumption at less than 100 kWh. Many rural areas have almost no electricity at all. With regular blackouts and electricity shortages, the Government of Myanmar ("GoM") set out to develop the country's first privately financed Independent Power Producer ("IPP") to augment power supply and alleviate short- and medium-term shortages. The GoM, through the Ministry of Electric Power (now called the Ministry of Electricity and Energy), asked IFC's Advisory Services team to select a qualified sponsor to construct and operate a combined cycle power plant in the Myingyan region through a competitively tendered public-private partnership (PPP). The tender resulted in a partnership with Sembcorp Utilities Consortium, comprised of Sembcorp Utilities Pte Ltd and MMID Utilities Pte Ltd signed in April 2015. The 22-year Power Purchase Agreement (PPA) that IFC and Allen & Overy developed for this deal will provide the framework for all of the Ministry of Electric Power's (MOEP) subsequent gas-fired IPP projects. Once completed, the project will generate 225MW of power, is expected to benefit 5 million residential customers with improved access to electricity, and will facilitate USD300 million in private financing.

This series provides an overview of public-private partnership stories in various infrastructure sectors where IFC was the lead advisor.

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BACKGROUND

Myanmar faces blackouts, electricity shortages, and the lowest electrification rate in ASEAN. The installed capacity in Myanmar is 3,300 MW, comprising 76% hydroelectric generation and the balance being primarily thermal (mostly gas-fired). Peak load is 1,700 MW, but due to severely curtailed generation from hydroelectric plants in the dry season, there are large shortfalls in the dry season and the country has been experiencing blackouts for the last ten years. Further, less than 30% of the population has access to electricity and annual per capita electricity consumption is the lowest in South East Asia at about 100 kWh. Electricity shortages hinder local business development and are cited as a key deterrent to foreign investment in manufacturing. These shortages are estimated to result in a loss of 1 to 2% of GDP annually for Myanmar, which already has the second lowest GDP per capital in the ASEAN region.

The Myanmar power sector is characterized by: (i) a low electrification ratio of only 27%; (ii) transmission and distribution (T&D) losses of 25% or more; and (iii) supply shortages of about 25% of demand during the April - May dry season. At the same time, the country has huge potential to not only satisfy its domestic demand but also to become a regional power exporter, capitalizing on its sizeable natural gas reserves and hydropower potential of 100 Gigawatt (GW). However, several challenges remain, starting with budgetary and capacity constraints on the part of government, but also including fragmentation in legal and regulatory areas. It is recognized and acknowledged by the MOEP that the private sector can play a critical role in helping to address these constraints. But to harness this private sector capacity and innovation, Myanmar will need to put in place the systems and standards required by private investors, such as reliable and accurate information, transparency in the procurement process, and a stable regulatory framework. In an effort to help establish this, the Government of Myanmar sought to implement a well-managed, privately financed, and competitively tendered IPP to augment power supply. However, the country lacked a tested framework for IPPs.

IFC'S ROLE

On March 26, 2014, IFC signed a Financial Advisory Services Agreement with MOEP that appointed IFC as lead transaction advisor for the tender of the Myingyan IPP project. The project is envisioned to be an approximately 225 MW gas-fired combined cycle power plant in the Taung Thar Township near Mandalay.

TRANSACTION STRUCTURE

IFC and its legal and technical advisors (Allen & Overy and Mott MacDonald) drafted a power purchase agreement (PPA) to be entered into between the state-owned electricity off-taker and the eventual winning bidder for the IPP. The PPA was based on an initial format developed by the Asian Development Bank, and

precedents from Thailand, Indonesia, and the Middle East. As there was no framework for Ministry of Finance guarantees, a Build, Operate, and Transfer (BOT) Agreement provided for a guarantee from the MOEP. The plant is expected to operate on baseload basis and supply to the national grid. The PPA and other project agreements are also expected to be used as templates for future power projects in the country.

The scope of the project includes transmission facilities that will be constructed by the project company and handed over to MOEP. The power plant will initially operate in simple cycle mode for one year, following which it will operate in combined cycle mode for the remainder of the PPA term, using 37 million cubic feet of natural gas per day provided by MOEP from the 'Shwe' natural gas project.

Combined cycle gas turbine technology would maximize efficiency and minimize emissions from the power plant.

BIDDING

IFC assisted MOEP to shortlist nine global industry players and structure a tender process that would result in the selection of a winning bidder based on lowest levelised cost of electricity generated (taking into account plant efficiency and cost of gas). A consortium composed of Singaporean firm Sembcorp Utilities Pte Ltd and MMID Utilities Pte, was selected and awarded the project. The PPA between the project Special Purpose Vehicle and the Myanmar Electric Power Enterprise was signed in 2016 and the BOT Agreement was signed in January, 2017. Financial close took place in 2017.

EXPECTED POST-TENDER RESULTS

- About USD300 million in private investments.
- Access to improved electricity services to over 5 million people daily.
- Enhanced electricity reliability for both residential customers and sustained industrial activity in the Myingyan region.
- Adoption of model PPA and its framework for subsequent gas-fired IPPs throughout the country.
- Price discovery of actual cost of power generation for gas-fired power plants provide for a credible benchmark for tariffs in the country.