

Uganda and Rwanda, bright, shining examples

Monday, 19th November 2012

Half a billion people living in Sub-Saharan Africa lack access to electricity. **Ryan Ketchum** a partner in Hunton & Williams' Energy and Infrastructure practice, explains how Uganda and Rwanda are working to turn themselves into places where electricity investors want to be.



Jinja Dam, Uganda (Credit: Frederick Onyango)

Decades of underinvestment and mismanagement have resulted in poor performance in the electricity sectors of many, if not most, Sub-Saharan African countries. Electrification rates of under 10 per cent are not uncommon.

Unreliable and inadequate electricity adds to the cost of doing business, with businesses either pausing production during blackouts or paying for expensive backup generation.

The governments of many African countries are, however, gradually taking the actions that are required to turn their countries into desirable investment destinations with the electricity sector deservedly receiving much of their attention.



Uganda

Uganda provides a compelling example. For several years it has suffered from a shortage of generation capacity. The resulting rolling blackouts and sharp rise in electricity prices caused the government of Uganda to resort to paying millions of dollars per month in subsidies for short-term power generation projects. Together these issues are estimated to have reduced Uganda's economic growth by around 5 per cent per year.

In August the Bujagali Hydroelectric Dam – the largest private sector investment ever undertaken in the region at US\$900 million and 250 megawatts – achieved commercial operations, signifying a monumental change for Uganda's power generation.

Regulatory change

Many financial institutions, including the World Bank, have aggressively advocated regulatory reforms in the electricity sectors of developing, emerging, and least developed countries. They advocated the establishment of independent regulators that had an explicit mandate to regulate the sector in a manner that balanced the interests of consumers and investors. They concluded that the process of establishing electricity tariffs had to be de-politicised before utilities would be able to charge cost-reflective tariffs.

As a result, the first step in the project's development was to undertake a restructuring of the regulatory framework of the Ugandan electricity sector. In 1999 the Government of Uganda split the Uganda Electricity Board (the UEB) into three separate utilities with clear focus areas: owning and operating generating plants, the transmission system and the distribution system (which was privatised before work on the Bujagali project commenced). The Ugandan Parliament also passed the Electricity Act 1999, which established the Electricity Regulatory Authority of Uganda and granted the authority the power to regulate the now separate generation, transmission, and distribution sectors.

Yet these changes alone only went some of the way towards balancing the various interests involved in such a complex project. Indeed, while many emerging countries established independent regulators in the 1990's, many were simply unable to de-politicise the tariff-setting process and balance the interests of investors and rate-payers as politicians, investors, and rate-payers had hoped.

Clear contracts

By 2003, it had become clear that independence was not enough, and that a clearly specified regulatory contract must be negotiated by the political authorities for projects to gain public acceptance and retain it for the long term.

In January 2004, the government of Uganda launched a request for proposals (RfP) seeking investors to develop the project. The RfP contained a detailed set of formulas that collectively established a detailed tariff methodology that was annexed to the power purchase agreement.



This structure offered several distinct advantages over the alternatives. It enabled the project's sponsors to undertake a truly competitive bid to procure an EPC contract after the power purchase agreement had been executed; it enabled geo-technical risks to be allocated primarily to rate-payers, which avoided a risk premium being priced into the EPC contract; and it enabled the sponsors to arrange the financing after the power purchase agreement had been executed. Collectively, these advantages heightened private sector interest in undertaking the project. Given the tariff's structure, the bid evaluation criteria included an explicit internal rate of return on the equity invested in the project, a cap on the development costs the sponsors would seek to recover, and a fixed monthly operations and maintenance charge.

The Bujagali Hydroelectric Project has demonstrated that regulation by contract can be effectively applied to independent power projects. Uganda successfully navigated many of the regulatory challenges that trap countries with newly established regulators. This was possible largely as a result of the willingness of Uganda's Electricity Regulatory Authority to engage in a dialogue as to the types of tariff structures they felt would be consistent with their obligation to balance the interests of consumers and investors, but to ultimately permit that tariff structure to be embodied in a contract that is subject to international arbitration.

The strength of this structure is evidenced by the number of lenders that ultimately lent to the project company. Lenders on the project include the International Finance Corporation, the European Investment Bank, German development bank KfW and its subsidiary DEG, the African Development Bank, the French Development Agency and its subsidiary Proparco, Dutch development bank FMO, Standard Chartered, and ABSA Capital. The commercial loans are supported by a partial risk guarantee issued by the International Development Association. The Multilateral Investment Guarantee Agency provided political risk insurance.

Uganda's efforts have paid off. The Economist has identified the country as one of a select few that are at the forefront of reform, and Uganda's economy is now expected to achieve growth rates of between 7.5 per cent and 10 per cent during the 2012 to 2016 period.

Rwanda

Rwanda is another example of a country that has made tremendous strides in implementing reforms that promote investment. As an example, in Rwanda, four steps are involved in the establishment of a new company and the process can be completed in just a few days. In Kenya, the same process requires that an investor perform around 30 steps.

With a capacity of only 85 megawatts, Rwanda's electricity system currently serves approximately 10 per cent of its population. The country's utility – the Energy, Water and Sanitation Authority – has ambitious plans to connect another 40 per cent of the population to the electricity system and to expand generation capacity to almost 1,000 megawatts by 2017.



In addition Rwanda is, together with Energies des Grands Lacs (EGL – a regional organisation for cooperation in the energy sector of the Great Lakes countries), Burundi, and the Democratic Republic of Congo, developing a 145 megawatt cross-border regional hydroelectric project on the Ruzizi River, which forms the border between the DRC and Rwanda. EGL and the three countries have opted to develop the project under a long-term power purchase agreement with a tariff structure that is similar to the structure used for the Bujagali Hydroelectric Dam. Ruzizi III Regional Hydroelectric Project is thought to be one of the first cross-border IPPs in Africa to involve three offtakers.

These projects demonstrate that creative governments and investors can find the solutions that will solve the chronic problems that underinvestment in infrastructure have created. The rewards of faster economic growth and a commensurate reduction in poverty are within reach and are gradually being realised.