IJGlobal
A Green Street Company

Kenya's power ambitions meet lending market realities

20/09/2013

The 310MW Lake Turkana wind farm in northern Kenya has had a difficult journey to financial close. It has an experienced group of sponsors, led by UK-based developer Aldwych International, and a number of development finance institutions and commercial banks have committed to its financing. But the commercial lenders have struggled to get comfortable with Kenyan political risk and transmission issues have challenged all the lenders. Lake Turkana neatly illustrates the opportunities and challenges of the Kenyan power market.

Last year, the World Bank withdrew its offer of a partial risk guarantee (PRG) of the governments obligations on the Eu600 million ($787 million) Lake Turkana deal, arguing that the project was too large and expensive for local power consumers to absorb the costs. It took several months for the African Development Bank (AfDB), which is also arranging the financing, to offer to step in as provider of the PRG. These delays mean that a project Aldwych that had hoped to close last year will be lucky to sign before the end of 2013.

The deals main complication is its 428km transmission line connecting the plant in northern Kenya to the countrys main grid in the south. Isolux is building the transmission line and Spanish export credit agencies (ECAS) are financing the work. The PRG is intended to guarantee against offtake and interconnection risk, because the plants location far from urban areas increases both.

Connection challenges

Kenyan transmission and distribution infrastructure needs significant upgrades, and government is developing both domestic power lines and cross-border projects connecting the national grid to neighbouring countries. Among these regional projects is the $1.3 billion Eastern Electricity Highway interconnection project between Kenya and Ethiopia, financed by the World Bank, and the Lessos-Tororo line between Kenya and Uganda, which the AfDB is financing.

Kenya Electricity Transmission Company (KETRACO) is building about 10 new transmission lines and upgrading existing lines, and debt for these developments is mostly coming from development finance institutions such as the AfDB, the European Investment Bank and AFD. KETRACO was established in 2008 as part of the unbundling of the transmission and distribution operations of state-owned Kenya Power and Lighting Company (KPLC). KETRACO will continue to build large transmission projects in the country, while KPLC will continue to be the offtaker for independent power projects. But market participants expect that new independent power projects will have to build and finance their own associated high voltage lines.

As the World Banks withdrawal from Lake Turkana suggests, a bigger problem could lie in whether user demand justifies new large-scale power developments. The governments target of 5,000MW of new capacity coming online in the next five years is almost four times Kenyas existing installed capacity. As Bob Chestnutt, project director at Aldwych, explains there are only so many projects that can be absorbed at any one time to prevent supply and demand running out of balance. In Kenya, the system needs to grow at the same pace as a new customer base can be connected. The total generating capacity of the confirmed power pipeline is more than 1,800MW, some of it baseload and some of it

All content © Copyright 2024 IJGlobal, all rights reserved.

intermittent, and there is no guarantee that sufficient demand exists to purchase all of this new power.

The Kenyan governments plans to accelerate economic growth will require more power capacity, and some of this will need to come online before large-scale industrial and commercial customers exist for this capacity. KPLC will need to pick up the bill for surplus capacity while demand catches up. In a country with no reserve margin, domestic consumers are typically used to using their own generators, and KPLC will need to spend heavily to connect new customers, both with their own generators and without.

The governments target of raising grid access rates to 40% of the population by 2020 suffered a setback in June this year when KPLC suspended connecting any new customers. KPLC suspended connections after government clocked an incremental increase in connection charges a month before. KPLC had wanted to double connection rates from the local currency equivalent of $411 to $822 per customer.

The government is in a difficult position because it can only encourage greater use of power from the grid if connection charges remain affordable, but KPLC, which is state-owned, but for practical purposes independent, argues that the increased investment requires higher charges. Government initially seemed to back down in the face of KPLCs demands, but then said in August that connection charges would remain at the lower price.

Smaller wind, better prospects

Despite the transmission setbacks for Lake Turkana, its group of sponsors, which also features KP&P Africa, Industrial Fund for Developing Countries, Vestas and Norfund, now appears to have funding in place. South African commercial banks Nedbank and Standard, along with the AfDB and EIB, have committed to the deal, with the banks likely to provide commercial risk guarantees on an EIB-funded tranche. Because of the presence of Vestas as a sponsor and turbine supplier, the Danish export credit agency EKF will also participate.

Lake Turkana is not the only wind project in Kenya nearing close. Aeolus is close to signing on the 61MW Kinangop project, which has a total cost of $150 million, and GE Energy has the financing in place for its $300 million 100MW Kipeto Energy deal. Standard Bank is sole lender on both of the deals. These financings have been more straightforward, not just because of their size relative to Lake Turkana, but also because they are nearer to urban load centres. Kenya has some of the highest wind speeds in the world, and partially privatised generator Kenya Electricity Generating Company has at least two more wind developments of 50MW and 150MW in the pipeline.

Geothermal, a more dependable resource, has a longer track record than wind in Kenya. Since Ormat Technologies closed the $105 million financing for the first privately funded expansion to the Olkaria plant in 2009, the geothermal complex has grown again several times. Olkaria is located near the town of Naivasha in the Rift Valley, close to a fault in the African tectonic plate. Africa Geothermal International is an interested private developer, and signed a 25-year power purchase agreement with KPLC in April for the 140MW Logonot plant.

KenGen, which partly owns the site, is tendering feasibility studies for expansions to Olkaria. It hopes to add a sixth unit to the first phase and build three more units for Olkaria 4 by 2016, adding a further 210MW of capacity. The first Olkaria unit was commissioned in 1981, though wind development might be key to its prospects. The Lake Turkana transmission line will run right alongside the Rift Valley, giving future geothermal developments in the area much better access to the grid.

Initial studies show that Kenya boasts 14 high-temperature prospects, and a potential generating resource of 7,000MW. Geothermal tariffs in Kenya are generous, in an attempt to compensate sponsors for the resource risk they run in developing prospects. Sponsors receive $0.035 per kWh for steam, and a fixed feed-in-tariff of $0.085 kWh for 20 years.

Wind tariffs have been fairly stagnant in recent years, exemplified by the refusal of the Aldwych consortium to renegotiate its power purchase agreement for Lake Turkana, despite the World Banks concerns. The developers and KPLC agreed the Eu0.075 per kWh tariff on Turkanas 20-year power purchase agreement (PPA) in 2011. Kenyas solar tariff is not competitive enough to support new installations.

All content © Copyright 2024 IJGlobal, all rights reserved.

Conventional concerns

One reason for renewables sponsors optimism is that conventional alternatives have not proven to be much cheaper. Melec PowerGens 87MW Thika Power project, which runs on heavy fuel oil, has a 20-year PPA with a tariff of around Eu0.074, although Thikas final power cost is understood to depend on dispatch levels and fuel costs at the time of dispatch.

ABSA provided hedging and Eu28 million in commercial debt on the financing for Thika, while the International Finance Corporation (IFC) and the AfDB each provided loans of a similar size. The debt has a tenor of 15 years and the deal closed late in 2012. The World Bank provided a partial risk guarantee to Citibank, which was the lender of the projects bridge financing, and through its Multilateral Investment Guarantee Agency provided a $61.5 million cover against breach of contract. Thika is located 38km north-east of Nairobi.

But the Kenyan government wants to develop newer and larger coal- and gas-fired plants. It will be hard to find suitable benchmarks for PPAs and financings for such plants, so the first deals to come to market will be subject to intense scrutiny. KenGen is building a 300MW coal-fired plant near Mombassa, and has awarded its construction contract to Daewoo International, but is expected to launch tenders for several independent power projects (IPPs) over the next year.

With the larger projects that Kenyas government has in mind come bigger borrowing requirements, and there are few indications that Kenya can attract the commercial debt to make them a reality. Bilateral and multilateral development banks dominate the lending landscape, though Aldwychs Chestnutt says that these institutions would like to help bring more banks into the market. Kwame Parker, head of debt solutions and infrastructure finance for East Africa at Standard Bank, argues that local banks are already comfortable with lending to state utilities like KPLC, but lack lending opportunities.

What makes commercial banks not lend is access to cheap long-term funding, Parker says. You could argue that on some level DFIs have crowded-out commercial banks. If a DFI can offer debt at, say, 400bp over Libor for 15 years, why would the developer take a 10-year loan at 800bp over Libor from a commercial bank?

Blue sky bond promise

There is a lot to make lenders feel comfortable about Kenya. It has a strong pipeline of deals and a robust regulatory structure. Projects have bankable offtake agreements, and KPLC is profitable, has a reputation for honouring contracts, and has no history of late payments. Kenyas energy regulator is independent and its current administration is keen to promote private sector investment. Almost all of the DFIs operating internationally have been involved in one Kenyan power deal or another.

Parker believes that commercial banks may have an opportunity to become more active in Kenyan power by giving generators access to the capital markets. Bond refinancings of the next crop of IPPs, once they have been operating reliably for a year or so, could provide opportunities four or five years down the line. At that time, insurance companies and pension funds will be ready to share the financing burden, but for the upcoming batch of greenfield deals DFIs will remain crucial.

Thank you for printing this article from IJGlobal.

As the leading online publication serving the infrastructure investment market, IJGlobal is read daily by decision-makers within investment banks, international law firms, advisory firms, institutional investors and governments.

*If you have been given this article by a subscriber, you can contact us through **www.ijglobal.com/sign-in**, or call our London office on +44 (0)20 7779 8870 to discuss our subscription options.*

All content © Copyright 2024 IJGlobal, all rights reserved.