OrPower 4: Rift overcome

09/02/2010

The Kenyan power market has made slow and steady progress throughout a period of local political and wider economic uncertainty. The country's small but robust pipeline of independent power projects, supported by a small but self-contained lending and sponsor community, has proven resilient in the face of these shocks. Geothermal power, however, presents its own set of technical challenges.

The $105 million debt financing for Ormat Technologies' Olkaria plant is the first independent geothermal power project financing in Kenya, and the first geothermal project financing anywhere in Africa. While the deal's development bank supporters understand the outlines of the Kenyan electricity market, geothermal resource risk is less well understood. In the end, however, the obstacles to the deal's closing were as much typical to power projects in Africa as to geothermal deals.

Funding geothermal exploitation has usually been left to national utilities. Kenya Electricity Generating, which has since been part-privatised, developed two earlier plants at the Olkaria site, a first unit in 1985, and a second in 1993. These plants were developed with financing from the KfW and European Investment Bank, but could not truly be considered independent power projects.

Ormat signed an agreement with the Kenyan government in 1998 to develop a third distinct Olkaria project, using a separate resource. It signed a 20-year power purchase agreement with Kenya Power & Light Company that year, which became effective in 1999.

By early 2000, Ormat brought 8MW online, and later that year, in response to power shortages, and at the Kenyan government's request, it increased the plant's capacity to 13MW. It also established that the resource could support at least 36MW of capacity. By 2001, Ormat had approached the International Finance Corporation, the Multilateral Investment Guarantee Agency, US Ex-Im and an unnamed commercial bank to support the project with financing.

These lenders, however, could not get comfortable with resource risk, and opted to pass on a construction deal, with the exception of Miga, which stayed with the sponsor by providing political risk insurance for its equity investment. Ormat chose to expand the resource, as it had built the first phase at Olkaria, using sponsor equity.

By the time it had mandated DEG as lead arranger, in 2003, it had verified the resource and upgraded its potential to 48MW. Since most of the expensive drilling necessary to produce these estimates was complete, lenders were faced with a much smaller degree of resource risk. The project will also be eligible for carbon credits, though at the time of writing Ormat has not completed the registration process.

The project still faced a high degree of political risk. The offtaker KPLC is, unlike KenGen, still fully government-owned, although the extent of sovereign support for the PPA was a major factor in the negotiations. Discussions between government and sponsor about the degree of government support for the PPA, as well as the ability of lenders to take security for this agreement, dragged on for years. In 2005, Ormat decided to press ahead with Olkaria's phase 2, or at least declined to cancel the project, despite not receiving a letter of support from the country's government.

The period coincided with a lull in Kenyan infrastructure, which was not broken, bar some telecoms and mining deals,

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until the Rift Valley Rail privatisation in late 2006. But strong growth in the country encouraged the government to turn again to the private power industry. Another beneficiary of this movement was Aldwych International's Rabai diesel-powered plant, which was awarded in November 2006, but had a tortuous path to close in late 2008.

By January 2007 Ormat and KPLC agreed an amended PPA, which extended it to 2027 and covered the extra 33MW capacity covered by phase 2. DEG, joined by this time by FMO, needed some tweaks to the agreement to make it financeable, and despite the political violence that consumed Kenya in late 2007, Ormat continued with construction at the plant, bringing it online in December 2008. It had financed the entire $150 million cost with its own equity.

Shortly afterwards, however, in January 2009, it signed the loan documents for the financing of the project with DEG, as administrative agent, and the other lenders. DEG acts as lender of record for all lenders, except Proparco, since the two enjoy withholding tax exemptions with Kenya. The Emerging Africa Infrastructure Fund andEuropean Financing Partners participated as B lenders, with FMO and KfW acting as A lenders, despite DEG taking the lender of record role.

The eventual financing included a cautious attitude to political risk, a justified posture given that rioting coincided with the official opening ceremony for the project. It also leans heavily on the balance sheet of Ormat to overcome lenders' resource risk scruples. There is evidence that the development bank community understands this obstacle. The FMO, IFC and Infraventures are looking at a resource in Djibouti that could benefit from early stage financing from a newly-launched geothermal development fund.

Orpower 4
Status: Signed 5 January 2009
Size: $153 million
Location: Rift Valley, Kenya
Description: 48MW geothermal project
Offtaker: Kenya Power & Light Company
Sponsor: Ormat Technologies
Equity: $48.1 million
Debt: $105 million
Lenders: DEG (administrative agent), Proparco, FMO, KfW, Emerging Africa Infrastructure Fund, European Financing Partners
Equity political risk provider: Multilateral Investment Guarantee Agency
Lender resource consultant: Geothermex
Sponsor resource consultant: Reykjavik Energy
Lender market consultant: T. Templitz-Sembitzky
Offshore security agent: Bank of New York
Sponsor legal adviser: Chadbourne & Parke (international), Kaplan and Stratton (Kenya)
Lender legal advisers: Trinity (international), Becker Glynn (New York) Walker Kontos (Kenya)
Lenders' model auditor: Ernst & Young
Insurance consultant: Moore-McNeil
Independent engineer: Shaw

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