



CRA Insights: Energy in the Asia Pacific

CRA Charles River
Associates

December, 2009

In this issue

What do you do when your Government tells you to privatize a power purchase contract that is not changeable nor assignable and whose output must be bid into a competitive market? This was the challenge facing CRA when PSALM, the holder of legacy electricity assets in the Republic of the Philippines, asked for help to privatize a number of its electricity contracts.

CRA supports PSALM in its successful Hydro IPPA transaction

The result of this project has been the successful privatization of two coal contracts and associated plants and three hydro contracts (and two associated hydro plants). In addition to the design of the commercial structure that allowed a tender process to take place. CRA also helped to implement the entire tender process and value the contracts using a combination of WESM market modeling and bespoke financial models of the contracts.

Stage 1 was a successful sale of two contracts with associated transfer of two coal fired power stations for a combined sum of over USD1.7 billion. Stage 2, the hydro's, was bid on 15th December with the result that the 345MW San Roque power station was sold for USD 450m to Strategic Power Development Corporation, a unit of San Miguel Corporation. Amlan Power Holdings Corporation won the other units, the 70MW Bakun power station and the Benguet Mini Hydro's.

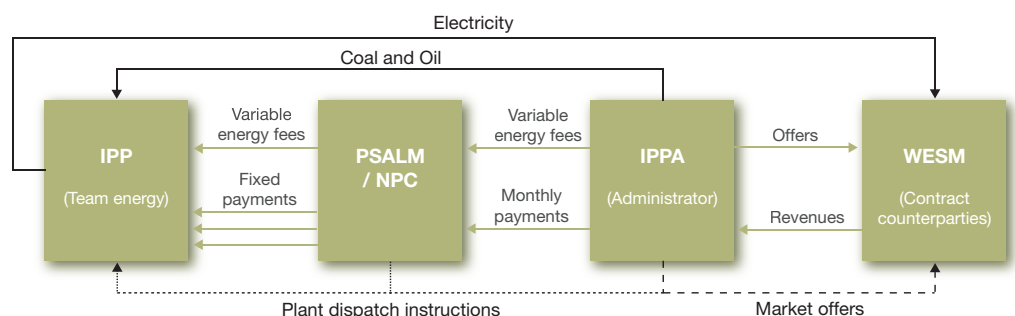
The IPPA arrangements in the Philippines enable a third party to secure the rights to dispatch capacity that is covered by Build-Operate-Transfer style power purchase agreements (PPAs). By using those rights to dispatch capacity into the WESM, the IPPA earns revenues from the sale of the associated output. At the end of the PPA term, the IPPA has the right to take the ownership of the associated power station for no additional fee. In exchange for these rights, the IPPA pays PSALM an amount of money determined by a competitive tender. The underlying PPA is left untouched. PSALM continues to honour all PPA obligations.

Figure 1: Schematic of the IPPA Arrangements for Sual and Pagbilao

The authors:

Mike Thomas
Vice President
+852 9226 2513
mthomas@crai.com

Sarah Fairhurst
Director
+852 9157 5367
sfairhurst@crai.com



The hydro IPPA's posed a different challenge for PSALM compared to the coal fired plants. To start with, we had only extremely limited historical hydrological data and only seven years of generation history to work with. At least one of these plants also relies on ancillary services revenue for a significant portion of its income – and new ancillary services market arrangements have yet to commence in the Philippines.

As plants with effectively zero fuel costs, it was important to give the right incentives to the hydro IPPA's to operate effectively in the market. On the other hand, the PPA contracts themselves imposed quite high variable costs that were not in line with current market prices.

With the success of the hydro transactions, the team is now working on issues related to PSALM's oil and gas-fired portfolio – in particular the Malaya and Ilijan projects.

The IPPA arrangements are motivated by the fact that the EPIRA, the enabling legislation supporting the Philippine wholesale electricity market, requires a transfer of control of dispatch from government-controlled entities, such as National Power Corporation (NPC) and PSALM, to private sector entities. Greater transparency and more effective competition are the intended results.

The IPPA concept is straightforward; but, as always, the devil is in the detail. The IPPA structure developed for Sual and Pagbilao (Figure 1) reflected consideration of each asset, the underlying PPA terms and conditions, the WESM market context and experience with transition mechanism design in other markets, such as Korea, Singapore, South Australia and Western Australia.

Working closely with PSALM's legal advisors, the CRA team developed and evaluated a modified back-to-back contract structure, which allows the commercial arrangements to flow through from the PPA but quarantines certain risks that remain with PSALM.