IJGlobal
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Thailand's Ratchaburi IPP - a power project of its time

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22/03/2006

Almost nine years after the financial crisis ripped through the southeast Asian 'tigers', Thailand has bounced back to a situation of relative economic stability - reflected in healthy economic growth rates of 6 per cent, total FDI of some US$7.5bn in 2004 - and in the Ratchaburi IPP

As the country's first uncovered IPP together with its competitor KK2, it shows how far Thailand has come from the economic turbulence of the late 1990s when the investment picture was very different from what it is now.

At the same time, the project acts as a mirror in which to view the Thai economic, political and social zeitgeist.

Originally tendered back in 1994 as part of a wave of seven IPPs, it was intended to burn coal, not gas. That was the fuel of choice for the rapidly industrialising Thailand of the 1970s and 80s.

However, while the growth in generation capacity had helped the country's economy to boom, it had brought a host of other problems, including environmental degradation and public health problems.

Particularly etched on the public's minds were the 13 thermal projects in the Mae Moh valley, 350km north of Bangkok - where SO2 emissions were so high that some 1,200 local villagers were sent to hospital in 1992.

These kind of high-profile incidents provoked a level of opposition from local residents and environmental groups to news of a coal-fired IPP on their doorstep that probably wouldn't have been witnessed some ten years previously.

In spite of PPAs and most documentation being inked, the project failed to close on two occasions in 1999 and 2001 - so EGAT - the Thai public utility and offtaker - got together with the sponsors and decided to change it to a CCGT facility and also to relocate it 650km away in Rathchaburi province.

This obviously meant the bringing on board of a gas supplier, PTT, and some substantial changes to the PPA, involving an open book exercise - which took almost two years to complete.

The outcome of all this was that the project ended up being out in the market at the same time as Kaeng Khoi 2 (KK2) - a 1,400MW CCGT plant that also had JBIC backing - meaning that they got some pretty aggressive pricing on the senior debt from the commercial banks eager to get in on the deal - apparently only KK2 fared better amongst this particular round of Thai IPPs.

The CCGT plant also has a lower initial capital cost than a thermal counterpart, but then that gain might be balanced out to some extent by the possibility of some hefty fuel costs in the next few years.

The Project

Ratchaburi is a 2x700MW CCGT plant, located 150km west of Bangkok on land leased from the Ratchaburi Electricity Generating Holding Public Company, a firm which is 40 per cent owned by EGAT.

The sponsors are:

- Ratchaburi Electricity Generating Holding Public Company
- Hongkong Electric Holdings
- PTT Public Company
- Chubu Electric Power Company
- Saha-Union Public Company
- Toyota Tsusho Corporation

Power will be sold to EGAT under a 25-year agreement with a tariff which is calculated via 'a mechanism that protects sponsors against adverse interest rate movements', according to Nicolas LeClerc at SMBC - one of the MLAs on the deal - and is similar to that employed on previous IPPs.

A GSA is established with PTT for the same period.

Mitsubishi Heavy Industries and Mitsubishi Corporation are responsible for the gas-turbine works, while the local Sino-Thai Engineering and Construction Public Company will carry out most of the civil construction works. Construction started this month and will take 24 months for unit one and 27 months for unit two.

Operation is to be carried out by Chubu Ratchaburi Electric Services Co. (a Chubu Electric/Rathcaburi Holdings JV), with gas turbine O&M subcontracted out to Mitsubishi for a period of 12 years. The project has a duration of 25 years from completion of unit two.

Financing

The project has a total value of US$890m, with US$250m in equity made up in the following way:

- Ratchaburi Electricity Generating Holding Public Company (25%)
- Hongkong Electric Holdings (25%)
- PTT Public Company (15%)
- Chubu Electric Power Company (15%)
- Saha-Union Public Company (10%)
- Toyota Tsusho Corporation (10%)

The senior debt is uncovered and is split between an onshore Thai baht tranche and an offshore USD tranche. The Thai facilities work out at about 18 per cent of the total costs, reflecting the civil construction component and a desire to find a balance between providing a natural hedge against foreign exchange risks and the fact that USD debt works out cheaper than baht debt, with swap rates considerably lower than they are on the domestic front.

The participant banks all have MLA status and are as follows

- Calyon
- The Hong Kong and Shanghai Banking Corporation
- Sumitomo Mitsui Banking Corporation
- Bangkok Bank Public Company
- Krung Thai Bank Public Company
- JBIC

The first three - Calyon, HSBC and SMBC - took equal stakes in US$103 million of debt, followed by the Krung Thai and Bangkok banks with THB6,500 million, split 2:1 and JBIC with US$380 million.

At the time it went to the market, it clinched the most competitive pricing yet on Thai IPPs, around the 85bp mark, although KK2 ended up with a better deal when it was closed. Financing was done relatively quickly - it took six weeks to move from the first draft of the financing documents to signing - and the loans have 15-year tenors.

Future development in Thai market

A new wave of IPPs was due to be announced later this year, but a stormy political climate (recent charges of corruption against PM Thaksin Shinawatra and calls for him to resign before the 2 April election) has pushed the issue further down the policy agenda.

Still the government has committed itself to some 5 per cent additional generation capacity per year and this is likely to reflect a mix of coal, gas, some hydro and also renewables, as a result of both environmental and diversification interests.

The government wants a proportion, possibly around 10 per cent, of new IPP capacity to come from renewables, but it has still to issue clear guidance on the subject, according to Paul Elliott of the Singapore office of Baker McKenzie, who worked on the RPCL deal.

The other issue that could pose an obstacle to the process is the privatisation of EGAT, although it is also unknown as to when this might be completed.

As far as future deals go, the PPA that stands on this project is likely to be replicated, as it is 'one of the more bullet-proof PPAs in the region', says Thomas Fung, of Hong Kong Electric, who acted as project finance director:

'The track record speaks for itself. Originally there was no U.S. dollar indexation, but shortly after the currency crisis the Thai baht depreciated. Most of the capital costs are in U.S. dollars, so the only way to cover this was to increase the tariff and index all of the PPAs.'

This was very honourable of EGAT, in reality they have no contractural obligation to increase the tariff, but they don't want to see projects collapsing, they want to allow for capacity addition and show investors that they are not trying to frustrate the contract.'

There's no record of default of EGAT on any of the PPAs of the seven IPPs now closed, which bodes well for future investment in Thailand.

When compared with regional neighbours such as Malaysia, where the PPA tariff is not U.S. dollar indexed, or Indonesia, where it is indexed, but the offtaker PLN has made the tariffs so high that their risk of defaulting is much greater.

Ratchaburi, as the last of the seven IPPs to close and one of only two uncovered deals, signals the true end of the post-1997 period of uncertainty - investors are likely to flock to the next wave of IPP tenders when they emerge by Q2 2007.

And rather than being evidence, as another lawyer working on this deal said, that the 'Thai market has come full circle and we're back to the good old days', it might rather be a sign of a new period in the country's history which manages to combine economic stability and openness to investment with sturdier environmental and social credentials.

Project at a Glance

Project Name	Ratchaburi power project
Location	Ratchaburi Province Thailand
Description	2x 700MW gas-fired CCGT generating facility in the Ratchaburi Power Complex, Ratchaburi Province
Sponsors	Ratchaburi Electricity Generating Holding Public Company Hongkong Electric Holdings PTT Public Company Chubu Electric Power Company Saha-Union Public Company Toyota Tsusho Corporation

Operator	Chubu Ratchaburi Electric Services With gas turbine O&M subcontracted to Mitsubishi for 12 years
EPC Contractor	Mitsubishi Heavy Industries Mitsubishi Corporation Sino-Thai Engineering and Construction Public Company
Project Duration (Including construction)	27 years, 3 months
Construction Stage	Unit 1 - 24 months Unit 2 - 27 months
PPA	25-year to EGAT
Total Project Value	US$890 million
Total equity	US$250 million
Equity Breakdown	Ratchaburi Electricity Generating Holding Public Company (25 per cent) Hongkong Electric Holdings (25 per cent) PTT Public Company (15 per cent) Chubu Electric Power Company (15 per cent) Saha-Union Public Company (10 per cent) Toyota Tsusho Corporation (10 per cent)
Total senior debt	US$640 million
Senior debt breakdown	JBIC Facility (US$380m) Offshore USD Facility (US$103m) - split evenly between Calyon, HSBC, SMBC Onshore THB Facility (US$166.8m-equivalent) - split 2:1 between Krung Thai and Bangkok Bank
Senior debt pricing	In the region of 65 to 85bp
Debt:equity ratio	75:25
Political risk guarantees	None
Mandated lead arrangers	Calyon The Hong Kong and Shanghai Banking Corporation Sumitomo Mitsui Banking Corporation Bangkok Bank Public Company Krung Thai Bank Public Company
ECAs	JBIC
Participant banks	As above
Legal Adviser to sponsor	Baker & McKenzie
Financial Adviser to sponsor	Sumitomo Mitsui Banking Corporation Bangkok Bank Public Company SCB Securities
Technical Adviser to sponsor	Associated Technical Services (Hong Kong Electric affiliate)
Legal Adviser to banks	Shearman & Sterling - international counsel Chandler Thong-Ek - Thai counsel
Technical Adviser to banks	RW Beck
Date of financial close	1 March 2006