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THE WAY FORWARD: IPPs vs. TENAGA NASIONAL BERHAD

Just over two decades ago, Malaysia underwent what was then seen as a subtle form of liberalization pertaining to its energy sector, paving the way for the advent of the Independent Power Producers (IPPs). While proponents viewed this development as a win-win situation for both Tenaga Nasional Berhad (TNB) and the IPPs, several still felt that the move would be counter productive for both TNB and its consumers in the long run. The power business was initially perceived to be highly lucrative, with initial estimates of equity returns for IPPs of between 19% and 33%. Evidence of the private sector's belief of the inherent commercial value in IPP was seen in the government receiving more than 150 applications to build, operate and own (or transfer) independent power plants back in 1993. Within the short duration of just over a year, the first five IPPs were already in business, with expected equity returns of about 20%.

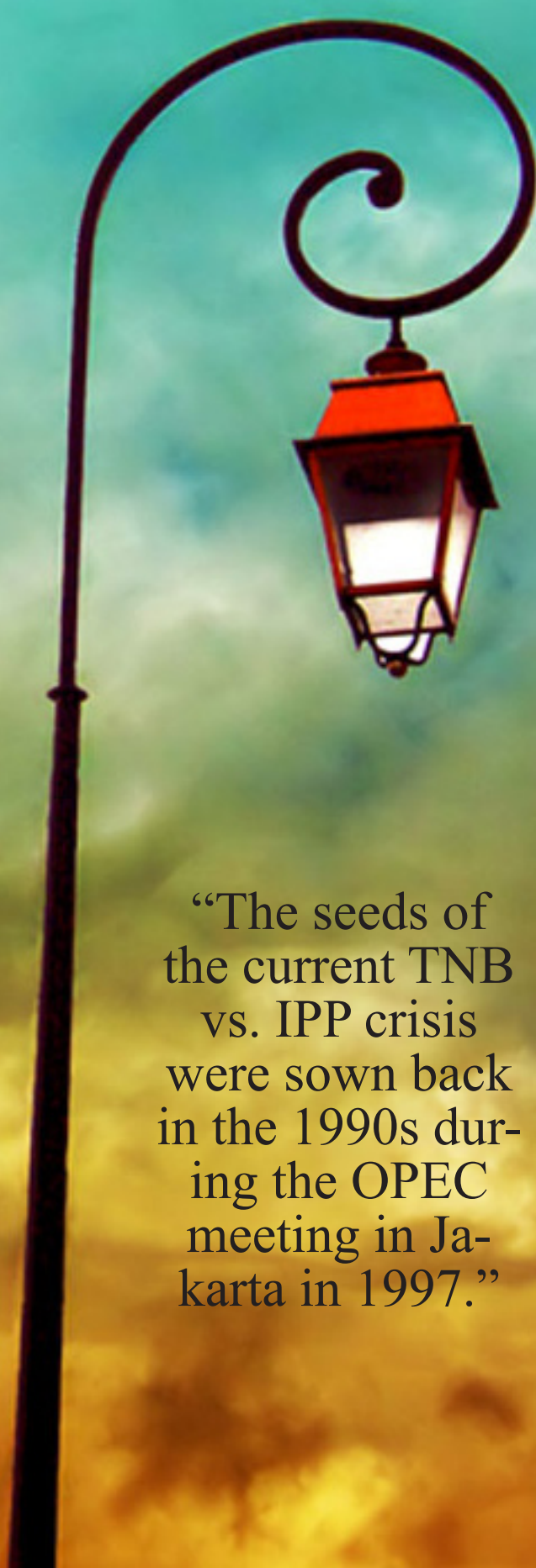
“Fast forward 13 years into the future, the future looks somewhat less promising for the IPPs, with the prospect of poor returns resulting from forced renegotiations of their long-standing power purchase agreements (PPAs) with Tenaga Nasional Berhad.”

Fast forward 13 years into the future, the future looks somewhat less promising for the IPPs, with the prospect of poor returns resulting from the government forcing them to renegotiate their long-standing power purchase agreements (PPAs) with their principal customer, Tenaga Nasional Berhad. While talks between both parties are yet to begin, the government has already set a two-month deadline for the companies involved to reach some sort of consensus pertaining to their reformed PPAs. Issues strongly contended are most likely to be focused on cuts in their respective reserve margins and capacity changes, in addition to the fragile bidding process for extra power generation requirements. The new accord may see the energy reserve margin halved to 20% and TNB charged according to the capacity used. Although the financially ailing TNB was given a lifeline with the government approving a 'non-burdening' 12% increase in electricity tariffs effective June 1, 2006, the proposed changes in the energy reserve margin is definitely favorable in easing the cashflow constraints afflicting TNB at present. It must be remembered that power purchases from IPPs collectively make-up close to half of TNB's operating costs. For the year ending Aug 31, 2005, TNB paid RM3.3 billion in capacity payments and RM3.14 billion in energy payments.

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As of July 2006, major IPPs supplying power to TNB (station, owner, month of commission) include Paka and Pasir Gudang (YTL Power, 1212MW, from April 93), Genting Sanyen (Genting Bhd, 762MW, June 93), Segari Lumut (Malakoff Bhd, 1303MW, June 93), Telok Gong 1 (Tanjong PLC, 440 MW, Dec 93), Port Dickson (Malakoff Bhd, 440 MW, Dec 93), Powertron (Time Engineering, 120 MW, Feb 97), Perlis TTPC (Landmarks Bhd, 650 MW, Aug 98), Prai (Malakoff, 350 MW, Aug 01), Telok Gong 2 (Powertek, 720 MW, Aug 01), Pahlawan Power (Cergas Unggol, 334 MW, May 99), Jimah Power (YTL Power, 1400, not completed), Tanjung Bin (Malakoff Bhd, 2100, not completed) and Bakun Hydroelectric Corp. (Ekran Bhd, 2400 MW, not completed). The phenomenal amount TNB is paying for close to 6400 MW of electricity generated from all the present IPPs (be it required or un-required wattage) is likely to increase further when the Tanjung Bin plant becomes operational in early 2007.

Whatever the case, it is evident that the rising cost of oil and gas is the principal issue behind the move to renegotiate the PPAs between TNB and the IPPs. The move to lower capacity payments, despite perceived as with noble intent, is likely to make the IPPs prospects uncertain even in the short term. There is likelihood that the PPAs may run their course prior to any major changes achieved with the first generation PPAs expiring by 2015. Furthermore, a reduction in payments could weaken the IPPs internal rate of return (IRR) despite the probability of an extended contract period, leading to a possibility of higher IRRs imposed on TNB. On the other hand, the proposed reduction in energy reserve margin to 20% may provide cost savings which offset the perceived detriment. The rising price of oil and gas further exacerbates the problem, although one may simplistically attribute it the iron law of supply and demand, which is supposed to balance each other out eventually. Still, the seemingly compelling need to review these PPAs are probably after-effects from the fact that there is virtually zero spare oil production available to cover large supply outages. To put it in another way, the seeds of the current TNB vs IPP crisis were sown back in the 1990s. Though many remain unaware, a key event would be the OPEC meeting in Jakarta in 1997, when the cartel raised its members' output quotas. Despite the initial success of the IPPs, oil and gas demand from the very region expected to be the greatest source of new demand was undermined as a result of the Asian currency crisis. It must be remembered that oil then fell to just over USD 10 per barrel, with pessimistic economists predicting even USD 5 per barrel, convincing oil giants such as ExxonMobil and Royal Dutch Shell. Since Shell later sliced its capital expenditure (from USD 16 billion to USD 10 billion), oil supply was naturally affected from reduced exploration initiatives, and exacerbated later by overestimating its reserves by 20%. Investment constraints were later found to be industry-wide, with post-tax profits falling by 90% for the six-biggest producers by the late 1990s. The arrival of USD 10 per barrel had an effect that was overlooked as demand boomed quickly from the recovery of Asia, led by China. However, supply was not kept up as investments pertaining to exploration had been slashed. With regards to meeting oil supply requirements, it is impossible to "just turn on the taps", since it takes up to a whole decade to get a new oil discovery to production. Saudi Arabia had recently announced that OPEC has been pumping as much oil as the refineries can handle. But the worry is if it could maintain that quota, for example if Iran (5.2% of the world's production) went offline, or if shutdowns in Nigeria (3.2%) escalated.



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Still, the good news remains that prices of USD 75 per barrel is unsustainable as was USD 10 back in the late 1990s. Still, it is not impossible for oil to breach even higher prices in the near future. Just over a month ago, Goldman Sachs predicted that a 'super-spike' of USD 105 is even possible, reasoning that oil prices needed to be high enough or long enough to reduce global energy consumption meaningfully.

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With such pessimistic global outlook regarding the stability of oil prices, the case for reviewing the PPAs between the IPPs and TNB remains strong. It is evident that the national oil company, Petronas, cannot continue to supply gas at significantly lower rates than the market price to both TNB and the IPPs (i.e. subsidized at RM 6.40 mbtu versus the global rate of RM 20.00 mbtu). Apart from plain unsustainability, it is also simply not efficient for the national economy for manufacturers to continue to enjoy cheap electricity. Coupled with the more efficient IPP setup (with operating costs confined mostly to single plant operations), TNB remains at a disadvantage as it is unable to pass the additional cost it incurs to consumers. IPPs on the other hand, are able to simply 'bill TNB' under the present PPA provisions, so to speak. Perhaps the single most compelling reason to renegotiate the existing PPAs is the fact that while TNB's revenue has been growing, peak demand has not been growing at the rate new capacity is coming onstream. TNB therefore, is forced to pay for power it doesn't need under the existing provisions.

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Nevertheless, in all fairness, the question that remains is if it is right for the government to penalize the IPPs simply because they have proved to be more profitable? Just because the actual project returns are much higher than what was projected when the PPAs were signed, would it be right now for the government to introduce some sort of a 'social obligation' clause - compelling them to share some of the returns in the form of lower tariffs? Rightly, they should not be penalized as the onus was all along on the part of the government to be as prudent as possible when deciding to invite the private sector to provide power generation. Perhaps the biggest winner from the government's decision to force the IPPs back to the negotiating table is the consumer, as they are the ones likely to gain from the 'rechanneling' of the IPPs' profits back to them via TNB. This is good for the government, as it appears to have settled on the best way of getting itself out of its commercial predicament whilst successfully fulfilling its electoral obligations. Whatever the case, it is evident that the IPPs do have a strong case against revamping their PPAs with TNB. Their main contention is that TNB's capital expenditure of between RM 4 and RM 5 billion per annum is simply not sustainable. They point that while they are penalized for high equity returns, credit is not given for the savings they bring to TNB in terms of higher plant availability rate. At present, the availability rate under the PPAs is 90% or above, higher than the 85% availability rate accorded to TNB's plants. Once commercial operations have commenced, the plant must run at the higher availability rate stated in its PPA agreement with TNB. Non-conformity results in reduced capacity payment, with a substantial penalty imposed for further decline. In short, while it is undeniable that PPAs are lucrative contracts, there is on the other hand, execution risks and heavy penalties imposed for failure to perform according to contractual obligations.

As such, it would be prudent for external consultants such as Intelligent Insights International to examine several issues and instruments utilized in administering the existing PPAs in order to improve delivery.

Primarily, a study is necessary to examine the introduction of a two-tiered CRF (capacity rate financials) governing all IPPs, especially those centered on the first generation PPAs. The proposal forwarded would be based on the premise that refinancing of IPP debts have been undertaken, in addition to increased plant efficiency and life span. Functional determination of the lowered debt cost would suggest that it is favorable for IPPs to lower tariffs in return for perks such as contract extensions. Additionally, it is necessary to address the removal of several PPA 'sensitive' clauses to facilitate review of the IPPs' fixed and variable operating costs (FOR/VOR) annually,

compared to the present frame of reviewing them every four or five years. Examination of yet another sensitive area within the ambit of the PPA is the 'take or pay' clause, currently enjoyed by several IPPs, which impose mandatory purchase of power regardless of requirement. The way forward for Malaysia's energy sector is clearly necessitated by urgent reexamination of the agreement governing power purchases between TNB and the IPPs. It is with this in mind that Intelligent Insights International serves to address this urgent need by initial submission of research proposal bids to the energy stakeholders. Thus, kindly forward all queries or comments to triple-i@i-insights.com. □



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