ANALYSIS 2

"Power producers should raise electricity tariffs..."
● China Electricty Council's Ye Rongsi, page 18

Building a new model for power in Asia

The power industry needs reforms in Asia. By Bill Ruccius

PERSPECTIVE

Bloomberg

A new era for the power industry in Asia

In the early 1990's many North American and European utilities and IPP's came to Asia to help solve the shortage of power generation in the region. They brought a western model with long term contracts that had worked well in the West. The contracts had formulas that adjusted the price they were paid for changes in fuel costs, inflation and exchange rates.

Beginning with the Asian financial crisis in 1997 many of these power projects started experiencing problems. Most of the North American and European utilities have gone home and we don't expect them to return soon.

Not enough new project development has been happening since 1997 and there are shortages of generation in many markets in Asia. We need to look at what did not work in the past, then try to find new ways of apportioning the risks and rewards to make it work for new investments today.

Foreign Exchange Risk

The power projects in the 90's had investments in US$, Euros or Yen but electricity customers paid in local currency. The contracts had adjustments for exchange rate variations which looked good on paper but when the Indonesian Rupiah goes from 1800 to 18,000 to the dollar in a month, there is no way the customers will accept that increase in price without a revolt. To mitigate this risk, I would look for a substantial amount of local currency financing before investing in a power project in Asia today. This is becoming possible in many countries with the help of ADB programs.

Capital Cost

The initial power purchase agreements in the West had availability payments so the IPP's built plants with very high reliability to take advantage of these payments. The Western investors carried this idea to Asia where it did not always apply. They used expensive imported equipment which could achieve availabilities over 95% but where the local market only wanted 60%. Chinese manufactured equipment can deliver acceptable performance and I would consider this in many Asian markets today.

Off taker Risk

In most cases all the electricity had to be sold to the local utility on their terms. Some of these had questionable financial soundness and once you made the investment you were stuck with that one customer. Today, in more and more markets, the laws have changed where a power producer can sell directly to industrial customers. Having a variety of customers is a much better situation and can be made even more attractive if you can locate in an industrial zone and co generate steam for large industrial customers.

Finally, I think we should realize that, although we have 20 to 30 year contracts, it is impossible to anticipate all the things that will happen over that period. We have to be prepared to renegotiate when unanticipated events happen and put one of the stakeholders in an unstable position. If each party is just out to maximize their short term profit the whole venture could fall apart. Asia has over half of the world's population, some of the fastest growing economies in the world and many people living in poverty. Without electricity those economies will not grow and millions of people will never have a chance to work their way out of poverty. Using these ideas we can meet the electricity needs in Asia and provide acceptable returns to investors.

Wind emerges as top market investment

By Marianne Stigset & Stephen Voss

From General Electric to Mitsubishi Heavy Industries to E.ON AG, the world's largest companies are investing in wind power, the best-performing energy in the past year.

Led by Vestas Wind Systems and Spain's Iberdrola, utilities and governments in the U.S., China and Europe will spend as much as $150 billion on wind projects in the next five years, according to CLSA Research. Lawmakers are providing financial incentives because windmills are non-polluting and cost less than solar projects.

"Wind has the biggest potential to meet renewable energy targets in the next decade compared with solar and biofuels," said Philippe de Weck, who started the Pictet Clean Energy fund.

The greatest returns so far are generated by equipment makers for farms with more than 400 windmills. Each has a tower as high as 135 meters (443 feet) and rotor blades with diameters that can reach 112 meters. Wind spins the blades, and a generator that converts the motion into electricity. The market value of Vestas, the world's biggest windmill maker, has more than doubled in the past year.

'Less Risky'

"Wind energy is cheaper than solar, it's a less risky investment," said Michael McNamara, a London-based analyst at Jefferies International.

Electricity from wind is a little more than 1 percent of global power supplies. China's National Development and Reform Commission will almost double wind generation by 2008, partly to produce clean power for the Beijing Olympic Games, said Shi Lishan, head of renewable development at the commission.

'Exceed Targets'

Tokyo-based Mitsubishi Heavy said that China plans to expand wind power at an annual rate of about 2 gigawatts in the run-up to the Olympics. Windmill rotors will be built to generate 5 gigawatts, enough to supply more than 7 million homes, by 2010, Shi said. That will increase to 30 gigawatts by 2020.

"We can easily exceed the targets because of the policy incentives," Shi said. China and the U.S., the top producers of carbon emissions that contribute to global warming, are under pressure from European nations to reduce pollution.

Demand for wind assets is driving up prices. India's Suzlon Energy beat out Areva SA, the world's biggest builder of nuclear plants, for German wind-turbine maker Repower Systems AG with a 1.2 billion-euro offer. That was double the French reactor maker's initial proposal. *-Bloomberg*