

The Looming Brown Out of Asia And the Light at the End of the Tunnel

by

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There is a crisis on the horizon and it is approaching fast. Most surveys of professional economists now point to Asia as the world's leader in economic growth in the next few years. To the extent that this growth materializes, the demand for electric power in Asia will rise quickly. Yet the availability of new power sources will be hard to find. The resulting imbalance represents an enormous potential bottleneck and a challenge that threatens to choke off the promise of future economic growth across many parts of Asia.

Even those countries that are thought to have abundant or excess supply of power, such as China or the Philippines, will need new generating capacity in the not too distant future. In many cases, the excess supply is frequently located in pockets like Fujin Province or on Luzon Island. In some cases, the need is almost immediate. And yet, the average power project takes roughly four years to plan and implement. The longer the delay before the available capital is made available and planning commences, the greater will be the problem and the greater will be the crisis that envelops it. Indeed numerous regions within Asia are already experiencing brown outs and regular blackouts. This problem can only grow worse.

Unfortunately, just as the demand for electric power is rising, the independent power producers (IPPs) are retrenching (globally) and fleeing the Asian region. At the same time, the region's governments are far less able than ever to support new power generation needs. The resultant imbalance between rising demand and static (in some cases falling) supply will manifest itself in Asia within five years, if not sooner. In some regions such as India the lack of electric power is already apparent. While there are very few reliable statistics on the subject, the handwriting is on the wall.

In a very real sense, we have seen this storm twice before. First in the late 1980s and then again, in the mid 1990s, Asia was headed for

a very similar crisis. It was only the economic crisis of 1997 that in a sense "saved" Asia from the power crisis it was then facing. With the economic crisis came a sharp drop off of power demand.

Quite possibly, the current crisis on the horizon is far more complex and difficult to solve. In the mid-1990s, the shortage was a result of an industry that was in the initial phases of privatization and the inability of governments to come to grips with the capital demands being placed upon them. That problem was solvable because in a period of robust economic growth the price could be paid to IPPs to rush new generation on-line. The price might have been higher than the governments wished to pay. But they reflect the high risk premiums needed to cope with the uncertainties in the emerging markets. Initially, when consumers have a real shortage of electric power they were willing to pay almost anything for reliable power. But this type of situation is not sustainable and can only last for a brief period. Once power is available, the pressure on governments to reduce the price per kilowatt rises very quickly. In many cases this resulted in government imposed tariff caps being imposed despite contracted levels.

In one sense, the IPPs moved too quickly, well before the required policy framework (covering the governance of power projects) for such infrastructure projects was in place by the host governments. Hence, when the political pressures resulting from high electric prices were making themselves felt, the IPPs were easy targets to blame in the short term. Soon the political pressure on the region's governments rose and the painstakingly negotiated contracts were torn up.

To the layman the electric power business looks remarkable simple. Yet the truth is that the power business is enormously complex and difficult. Drawing capital into developing countries is always very hard and the uncertainties mentioned above makes this

challenge that much more difficult. There are moreover, numerous other challenges including the difficulties associated with the transmission grids and distribution network, the currency conversion risks, the mismatch between the short-term nature of the business and the required long term financing, etc. The fact that privatization efforts across most of Asia have stalled have also contributed to the current problems.

For a variety of reasons, investment capital is now hard to find for most project financings. In the short and medium term it is hard to see how the various market investors will willingly step back into this cauldron of challenges. The first and second generations of investors are gone and will not be back for years to come.

The threat is there that the power crisis will choke off the newly resurgent Asian economies or at the very least slow down the recovery. Unless this problem is addressed now, in a calm, methodic manner, the problem will be addressed in a crisis environment which will not serve anyone properly. As the energy consumers will face delays and blackouts, their governments and political leadership will be under tremendous pressure and the new providers of energy will prove hesitant to enter lest they suffer the same experience as did the IPPs in the 1990s.

The environmental impact is also apt to be less than favorable. The new plants that go up will probably be rushed on line as coal-fired facilities to expedite their availability. The more environmentally favorable gas-fired facilities generally take longer to plan and implement given the nature of the capital expenditures and planning that must be applied. Historically, the thrust has generally been on coal-fired projects. Asian governments now desire an appropriate mix of gas, coal, hydro and other renewable energy resources.

Equally as troubling are the financial constraints that are apt to threaten future power generation. Most, if not all, of the historic sources of both debt and equity in the region have severely retrenched. The major American and European international banks have all scaled back their activities in Asia and any discussion of international expansion is

quickly cut off. Debt financing can be had, but is very cautious and skittish.

The regional sources of capital, particularly the Japanese banks which heavily funded the last expansion, are in a state of crisis and can ill afford to be as expansive as they were in the past. Few American or European banks seem to have the appetite for new Asian investment.

As it stands now, the resolution of this problem is apt to be addressed in a crisis environment. As such, the resolution will not be cost effective or as well thought out as it should be.

In this sort of climate the only practical solution is to adopt "captive energy" sources where every major user invests in and establishes their own power generators. This is hardly an optimal solution as such generating capacity is both expensive (lacking the economies of scale) and environmentally damaging. Most large hotels for example have their own back up generators which are powered up as needed.

The principal problem plaguing has been the lack of a policy framework in place in each country. Lacking a coherent and well thought out set of industrial guidelines and regulations, each project is created in an ad hoc manner, easily susceptible to the short term political currents in the host countries. A comprehensive policy framework establishes the legal foundation under the power sector. Having a proper framework agreement in place will also help to reduce the uncertainty associated with new projects. This in turn will reduce the required risk premium that will be demanded by investors, resulting in a lower cost to the end consumer.

We at the Asian Development Bank have been working to help establish the proper policy framework arrangements in each of our developing member countries. Unfortunately, such framework agreements are very hard and time consuming to negotiate, susceptible to the demands of special interests and political factions. They require in most cases a strong political will in each country and a commitment to take on special interests which are often very politically powerful.

But, this looming power crisis does not have to happen. There is a way forward, although it requires leadership on the part of both the governments of Asia and the new generation of energy providers. As noted above, the first and second generation of sponsor companies are almost invariably gone. Their shareholders and boards will probably have no confidence in IPP investments for the time being. The financial pain they have suffered and the damage it has taken on their stock price and the loss of confidence they have endured has been considerable.

The third generation of IPP providers in Asia will probably be composed of the regional players who know the Asian market, have the political support of their home countries. Examples of these firms could possibly include; China Power and Light, J Power, etc. A few European companies that have not been particularly hurt by the latest disappointments such as Tractabel and they have been quietly looking for opportunities.

But first the policy framework will need to be put in place. The ad hoc approach that caused so much economic loss will not be acceptable to the next generation of power suppliers.

Fortunately, there are examples to look to where the power industry has made progress in implementing public-private understandings that insured the proper management of energy investment. These would certainly include the Philippines and Mexico. That's not to say that these examples are perfect role models for all the countries of the region; far from it. But they do suggest that the problems can be worked out and that there is the glimmer of a solution on the horizon.

One of the central problems that caused past difficulties has been the fact that capital expenditures were made with hard currency funding against local currency revenue streams. As a result, the frequent devaluations that plague the currencies of emerging countries can quickly damage the economics of even the most well designed and executed projects. Where ever such projects can be denominated and funded with local currencies, they should be and progress is slowly being made to make such funding more readily

available. Even though the national authorities would far prefer to have foreign capital injected into their economies the projects themselves are far too important to future economic growth to do so.

International banks, including European and US banks, would want to structure the financing for power projects through rated capital market bonds rather than in the form of long term bank loans as it affects banks' own liquidity ratios. In selected countries, the ADB is moving to provide long term local currency financing for such infrastructure investments.

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Weak enforceability environment and abrogation of the sovereign contractual obligations has caused real financial damage. Contingent liabilities on sovereign's balance sheets were not recognized in the past. New contracts will need credit enhancement for such risks through political risk guarantees from multilaterals such as ADB.

It is only with such an arrangement can the assurance be put in place that the "train wrecks" of the past in the power industry can be averted. Such a framework agreement will help significantly reduce the risks of owing and operating power projects in the future. By containing these risks the risk premium associated with future projects can be reduced, ensuring that the cost of power is minimized. New energy providers will certainly be far more willing to invest in future ventures if they know that sustainable projects are viable and that they are backup by regional governmental arrangements that protect them from arbitrary treatment.

We at the ADB are testing a new approach to the problem. With the support of both the developing member countries and the potential sponsors we are proposing the negotiation of much more specific framework agreements, aimed not at restructuring the entire sector, but ones targeting the specific project at hand. In a very real sense, such a

framework could be likened to a “keep-well agreement” pledging the central government and the relevant Ministries to honoring the underlying contracts that have been established.

To further support the agreements, the ADB will “wrap” the agreements with its own political risk guarantees. The new feature at hand is thus that for the first time, we are seeking link up the benefits of political risk insurance with a well crafted framework

agreement for the project.

It will not be easy and painless even if the problem is immediately addressed. But it must be addressed soon as the problems are already emerging even in the absence of economic growth. With creative new structures, local currency financing, political risk guarantees and an ongoing dialogue with the host governments, we at the ADB are doing what we can to stave off the worst of the problems.