

ATTRACTING PRIVATE INVESTMENT THROUGH POWER SECTOR REFORMS

Private sector investment is much needed in emerging markets to upgrade energy supplies, but too often power utilities in these markets are uncompetitive. In order to attract private investment, many aspects of how power utilities are operated need to be reformed. With their experience in helping to structure and finance successful infrastructure projects in emerging markets, development finance institutions are well positioned to support emerging market government efforts to translate power sector reforms into private investment.

A stable, low-cost power supply is essential to attracting investment in countries seeking to grow and industrialize. According to the International Energy Agency, additional investment of about \$900 billion is required between 2010 and 2030 to achieve universal electricity access. Around 40 percent of this additional investment would be in developing Asia.

The public sector has traditionally provided 70 percent of total infrastructure expenditures in emerging markets and has been central to the ownership, financing, and delivery of infrastructure services in these countries. But in the wake of the global financial crisis government budgets have been squeezed and cannot shoulder the entire financing burden of infrastructure projects, especially in the long run. As a result, emerging market governments are beginning to seek private sector investment.

The challenge to attracting private sector investment, however, is that many public power utilities are highly uncompetitive. As a result, several middle-income countries including India, Mexico, Colombia, Indonesia, and South Africa are reforming their energy policies in order to stimulate private participation. As demonstrated by the Magat Hydro Power Project in the Philippines and the Metro Power Company Limited Project in Pakistan, multilateral development banks are being encouraged to improve economic management in the sector and boost the financial position of off-takers. Those reforms in turn will enable development finance institutions to translate sectoral reforms into much needed long-term investment from both public and private investors through well-structured co-finance projects.

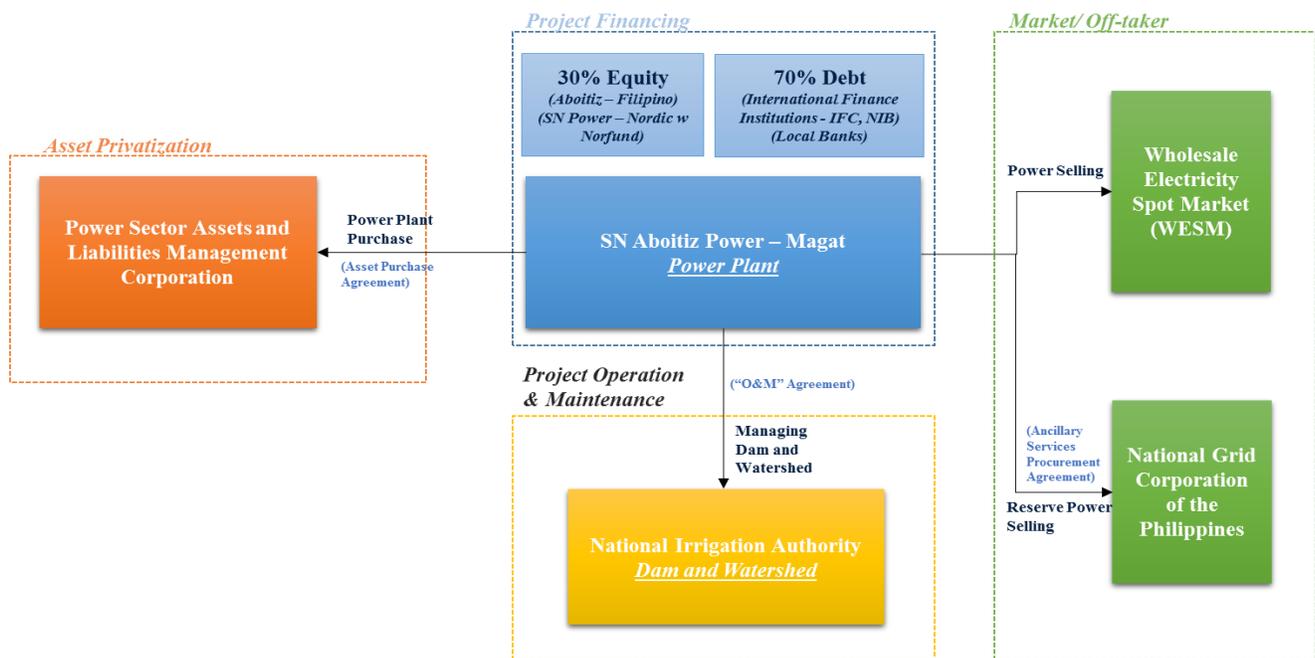
Magat Hydro Power Project

In the Philippines the poor financial condition of National Grid Corporation, the state owned electricity utility, resulted in unstable electricity and threatened the overall economy. Moreover, the efficient non-oil electricity supply barely met the demands of the country. In response to those challenges the government launched a comprehensive reform to transform the electricity sector into a fully competitive and market-based system, including enactment in 2001 of the Electric Power Industry Reform Act. Additional sector reform came in 2006 with the establishment of the Wholesale Electricity Spot Market, using a bid-based, energy-only, gross-pool model to help facilitate the privatization of power plants.

As part of the reform program, the Magat Hydro Power Project was privatized in December 2006 through an international tender process. SN Aboitiz Power-Magat, a joint venture between SN Power of Norway and Aboitiz Equity Ventures of the Philippines, submitted the winning bid of \$530 million.¹ In October 2007, IFC disbursed a \$105 million, 15-year loan to partially finance the process. IFC, the anchor lender, was followed by the Nordic Investment Bank (NIB), which provided 15-year financing under the same terms as that of IFC, and local banks, which provided a 10-year loan with a loan spread lower than IFC and NIB.

Under the privatization scheme, the ownership of the Magat Dam and watershed remains with the National Irrigation Authority,

Magat Hydro Power Project – Project Structure



MAGAT HYDRO POWER PROJECT: RISK MITIGANTS

Financial Risk Mitigants

- IFC's role as the anchor lender and provision of long-term 15-year loans with the NIB mitigated refinancing risk
- When rainfall was low, the project sponsor bore the loss through refilling the debt service reserve account
- The IFC-structured investment secured other security interests to form a strong security package

Construction/Operational Risk Mitigants

- The IFC's project appraisal, screening, and loan structuring alleviated private investors' concerns about complexities
- Private sector participants bore dam safety related losses through insurance covering property damage and business interruption
- Private sector participants bore sedimentation related losses through the major maintenance reserve account, business interruption insurance, and the debt service reserve account

Market/Off-taker Risk Mitigants

- Continuous dialogue with the government on the reform of energy sector mitigated regulatory uncertainty
- The conservative financial projection mitigated the risk of overestimating electricity prices
- The strategy of mixing peso and dollar borrowing mitigated foreign exchange risk

while the project company, SN Aboitiz Power Inc., owns and manages the generation facilities and dam under an operations and management agreement. The project is the first with significant foreign investor participation under the 2001 reform legislation that would operate as a purely merchant plant selling power in the newly established spot market. The project instilled confidence in the privatization effort, accelerating previously stalled private projects and creating a model for neighboring countries to follow.

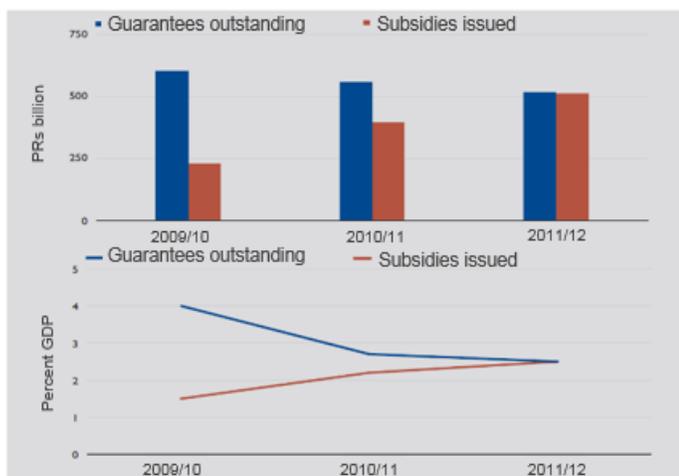
Strength of the Project

Even with low energy prices the Magat project was able to achieve a strong financial performance because the National Grid Corporation renegotiated the cost of ancillary services. Meanwhile, the reputable and experienced project sponsors, sound project fundamentals such as cost-competitiveness and peaking capacity, and the wholesale spot market's track-record all contributed to the successful privatization and operation of the Magat power plant.

The project was the first power privatization project with foreign participation to be financed internationally in East Asia and created a model for the country. Fourteen successful power plant privatizations followed, of which 12 were processed without IFC's participation during the period of 2007 to 2014.

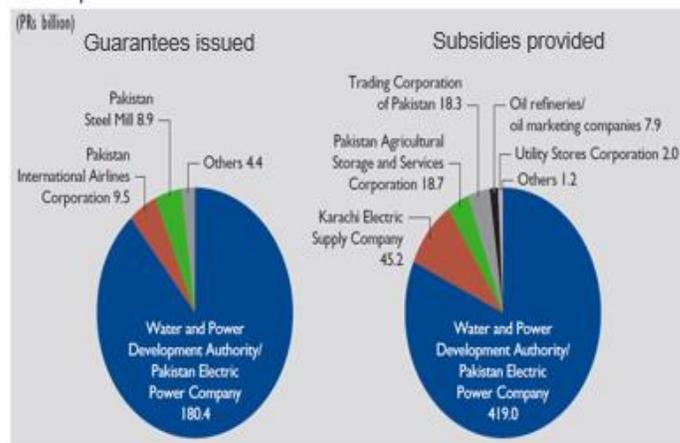
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Figure 1 Guarantees outstanding and subsidies issued to state-owned enterprises.



Source: Government of Pakistan 2012b; Ministry of Finance *Debt Policy Statement* various years; Ministry of Finance *Fiscal Policy Statement* various years.

Figure 2 Guarantees and Subsidies issued to State-Owned Enterprises 2011-12



Source: Government of Pakistan 2012a; Ministry of Finance 2013.

Among all guarantees issued and all subsidies provided by the Pakistani government, the power sector absorbs by far the largest shares in both categories.³ Figures 1 and 2 provide a vivid illustration of the uncompetitive nature of the country's power sector, the reason that the public sector faces challenges in providing the investments needed to provide sufficient power to the population and business community.

IFC's investment in the Metro Power Company Limited Project provides additional power of 50 megawatts through a wind farm.

METRO POWER COMPANY LIMITED RISK MITIGANTS

Real risks:

- Financing and Project Development Risk: IFC provides both direct financing and support to bring in additional investors
- Project Revenues Risk: Revenues are backstopped by a government guarantee. The specific project will sell electricity to a state-owned off-taker under a 20-year energy purchase agreement and the Pakistani government will guarantee payment obligations
- Wind Risk: The government included a shortfall compensation mechanism to reduce specific sector risk
- Foreign Exchange Rate Risk: Capital and operating costs in the tariffs are indexed

Systemic risks:

- Regulatory Risk: If laws change, compensation offered by the government could be affected
- Macroeconomic Risk: Pakistan currently generates 39 percent of its electricity through imported oil, a needless drain on the country's foreign reserves and terms of trade. Increasing renewable energy projects decreases its dependence of imported oil and also on oil overall, a tangible mitigant to climate change

Metro Power Company Limited Project

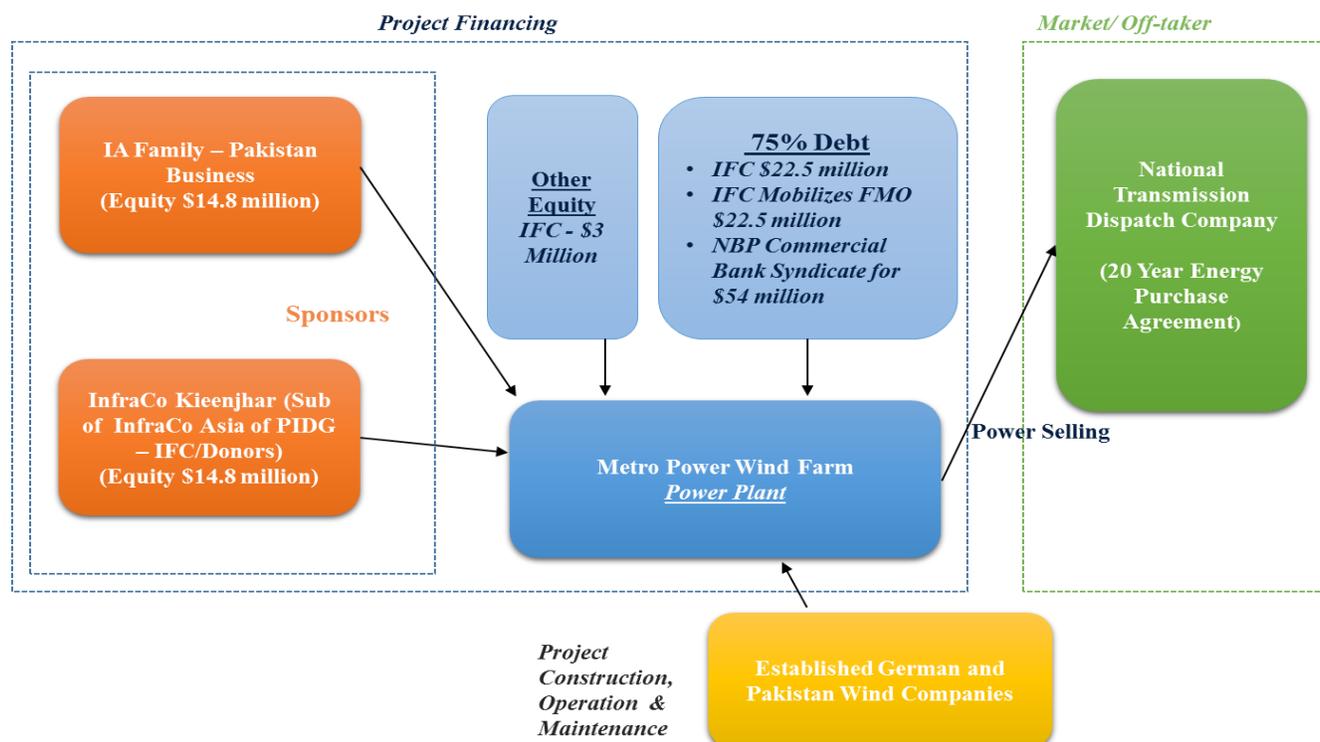
As part of the World Bank Group's Pakistan Transformational Energy Initiative, the Metro Power Company Limited Project aims to close the significant power gap in Pakistan by facilitating investment in incremental power generation based on low-cost indigenous resources. The overall project cost is \$131 million, of which IFC is financing \$26 million through an A Loan worth \$22.5 million and equity investment worth \$3.25 million. IFC has also mobilized \$22.5 million financing through a parallel loan.

Pakistan has a large and growing power gap that in 2014 stood at around seven gigawatts, or one-third of the summer peak demand of 21 gigawatts. The persisting and recurring power outages that result from that gap present a tangible impediment to economic growth in the country, as daily outages range from eight to 10 hours in cities and 12 to 15 hours in rural areas.

Public investment in additional capacity was close to zero from 2000 to 2008. It was limited not only by fiscal constraints, but by the uncompetitive nature of the power industry in Pakistan, with significant fiscal resources spent on rising tariff subsidies on account of less than full cost recovery in consumer tariffs.²

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Metro Power Company Limited Project – Project Structure



That helps the project meet multiple goals of the World Bank Group’s power strategy in Pakistan and globally, including providing universal access to power as a means to inclusive growth, increasing the share of renewable energy, and increasing the participation of the private sector in power generation projects.

How Risks Are Mitigated

Demonstrating the ability to correctly identify risks and to address them comprehensively is a major factor in convincing other interested private sector investors to enter the power sector in Pakistan.

Because the key participants were all experienced investors, the focus of risk mitigation efforts was on real and systemic risks rather than the perceived risks that often prevent less experienced investors from considering an investment.

¹ J. Virola, and T. Pamintuan, “Expanded Project Supervision Report 2012 on the Magat Hydro Project,” International Finance Corporation of the World Bank Group.

The Magat project follows a new national power strategy that has clarified roles of the government, of state-owned enterprises, and of the private sector. Because many local parties also participated in the project, local banks were also included and provided long-term financing and local knowledge.

Conclusion

Public utilities in emerging markets are often uncompetitive, creating a drag on economic growth and development. Public sector reform, however, can create the enabling environment needed to attract much needed private sector investment to energy projects. IFC projects in the Philippines and Pakistan demonstrate how development institutions can play a role in spurring reform and bringing in private capital. ■

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² Sarwat Aftab and Sarmad Shaikh, *Reforming State-owned Enterprises*, The World Bank, Pakistan Policy Note 4, 2013.

³ Aftab and Shaikh 2013.

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