

GNPower: Financing a Power Project in the Philippines (A)

In July 2008, after nine years of work developing a 600MW power plant project in the Philippines, Dan Chalmers and Tony Becker of GNPower Ltd. Co. ("GNPower"), were trying to come to grips with the news that Contractor A - the project contractor and provider of vendor financing - seemed not willing to proceed with the project they had all but completed developing. After their usual daily lunch together, they met in Dan's office from where they could see the job site on a clear day. The site, located in Bataan on the island of Luzon – the largest and wealthiest island in the country – was also the location of the last stands of American and Filipino soldiers in World War II before the Japanese defeated them. Dan and Tony feared their project would have a similar fate and were determined to fight hard to protect their staff, serve their customers and ultimately bring the power plant online.

GNPower's history thus far had given rise to numerous challenges but none had defeated the determination of the entrepreneurs. The Philippines was in desperate need of new power generation capacity and the entrepreneurs believed that their project offered a compelling model to fulfill this need. Developing a power project is however not an easy task. It entails the management of a large number of stakeholders: investors, contractors, lenders, employees, regulators, fuel suppliers and customers. In the development of any power project, every single party is essential to closing a deal. The GNPower deal was no exception, and there were a number of country- and project-specific issues for which there was no precedent that made this a particularly challenging one to manage.

Background

The Philippines – Country & Economy Overview

The Republic of the Philippines ("Philippines") is an archipelago of 7,107 islands in the western Pacific Ocean with an area of 300,000 square kilometers [Exhibit I] and a population of 90 million in 2008¹. The island country consists of three main geographical divisions: Luzon, Visayas and Mindanao; Luzon being the most prosperous and developed of the three. A Spanish colony until 1898, the Philippines gained independence from the United States of America ("USA") in 1946, after briefly remaining under Japanese control during the Second World War. Nonetheless, over the years, the Philippines has maintained strong economic and military ties with the USA and served as one of its most important strategic allies in the South East Asia.

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¹ World Bank Philippines Country Report

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Rich in rain forest and volcanic activity, the Philippines is an earthquake active zone abundant in minerals. It has the second largest gold deposits after South Africa and the world's largest copper deposits, yet one-third of the population lives below the poverty line due to unequal distribution of income². As one of the largest exporters of inexpensive labor, the Philippines economy relies heavily on remittances, which to some extent proved to be a sound buffer against the negative shocks of the Asian financial crisis in 1998. At that time, the country's Gross Domestic Product (GDP) declined by 0.6%, which was a smaller decline relative to other Asian economies.³

Primarily an agrarian society, the Philippines has been gradually transitioning into a services based economy over the last five decades.⁴ The Philippines has had a long-standing relationship with multiple international financial institutions like the World Bank (WB), the International Monetary Fund (IMF) and the Asian Development Bank (ADB) despite several democratic and dictatorial regimes over the years. These institutions had been actively involved in putting the country on the path of industrialization and proved quite influential in setting the tone for the economic liberalization of the country during the 1990s, which opened doors for public-private partnerships in infrastructure development.⁵

Like many other developing countries in Asia, infrastructure development in the Philippines had not kept pace with the economic growth and the growing demand of an ever-increasing population. The public sector, which had historically been the sole developer of infrastructure, lacked the required funds and management capabilities to support the sharp rise in urbanization and nurture the international competitiveness of local businesses. A working precedent of public-private partnerships (PPPs) had already been established in the developed world and many emerging market governments were eager to replicate the PPP model in their home countries in order to secure additional capital for infrastructure development and have access to private entities' management talent. Cash-rich international businesses were also attracted to the high return potential of the inherently risky investment opportunities available across different spheres of emerging economies. The Philippines followed suit and adopted PPP programs of its own.

The impact of economic liberalization initiatives implemented by the government led to an unprecedented GDP growth that averaged 5.6% from 2003-2008, as compared to 3% for the 1990-2000 period. This reflected the continued resilience of the service sector and improved exports and agricultural output.⁶

Philippines Power Sector

Up until 1987, the Philippines power sector was solely public-run and severely under-invested in the face of an acute capacity shortage and increasing demand. **Exhibit II** shows the forecasted power sector investment required in the Philippines and the other Asian countries over the next few years. The sector was truly redefined and revitalized by the enactment the Electricity Power

⁴ Asian Development Bank Philippines Fact Sheet http://www.adb.org/Documents/Fact_Sheets/PHI.pdf

² Asian Development Bank Philippines Fact Sheet http://www.adb.org/Documents/Fact_Sheets/PHI.pdf

³ World Bank Philippines Data and Statistics

⁵ Toussaint, E., The World Bank and the Philippines, 15 January 2006, Committee for the Abolition of Third World Debt http://www.cadtm.org/The-World-Bank-and-the-Philippines

⁶ Asian Development Bank Philippines Fact Sheet http://www.adb.org/Documents/Fact_Sheets/PHI.pdf

Industry Reform Act (EPIRA) in 2001. The motivation behind these reforms was three-fold: (i) transfer the ownership of power sector assets from public to private entities (ii) increase competition in electricity generation and supply, and (iii) develop a much-needed regulatory framework for the electricity power sector⁷. The law transformed the nature of interaction among multiple governmental authorities and industry participants across the three primary functional divisions, power generation, transmission and distribution. It also redefined the competitive landscape of these divisions.

The main governmental authorities in the Philippines power sector and their key functions under the EPIRA are as follows [Exhibit III]:

Department of Energy (DOE) was created in 1992 primarily to formulate and implement all governmental policies and programs for energy exploration, development, distribution and conservation to ensure sustainable, secure, reliable and accessible energy. It is the government's supervisory arm for all energy sector related initiatives. With the enactment of EPIRA, the DOE is also responsible for attracting private investment into the power sector and establishing the Wholesale Electricity Supply Market (WESM) to promote competition among power generators and introduce efficiency into the system.

Energy Regulatory Commission (ERC) is an independent commission comprised of five members, nominated by the President of the Philippines, to regulate all sectors of the electricity market and protect consumer interests. It promulgates the policies created by the DOE and guidelines formulated by the Joint Congressional Power Commission (JCPC); issues licenses to electricity suppliers and ensures compliance with the power sector laws. It is also responsible for setting the transmission, distribution and retail fees charged to end-users.

The National Power Corporation (NPC) was the largest electric power company in the Philippines. It owned 36 plants out of which 28 are operated by NPC itself, while the remaining six are operated by Independent Power Producers (IPP) under an agreement with NPC. At the heart of the Philippines power sector reforms lies the transfer of these NPC power generation assets to the private sector. In 2005, NPC together with its contracted IPPs accounted for approximately 72% (40,497 GWh) of the total electricity generated in the Philippines⁸.

The National Transmission Corporation (TRANSCO) was created in 2003 under the EPIRA to take over the transmission function and related assets of the NPC. Transco is now responsible for linking the power plants, owned by both NPC and IPPs, to the distribution utilities and electricity cooperatives, which in turn provide electricity to end-users. TRANSCO's assets include 21,319 circuit kilometers of transmission lines and substations with capacity of 24,310 million volt amperes.⁹

Power Sector Asset and Liabilities Management (PSALM) was created under the EPIRA to privatize and liquidate the NPC's assets, IPP contracts and liabilities. It also assumed the ownership of TRANSCO along with all its debt obligations and would oversee the transfer of control of its transmission assets through a 25-year concession agreement to private parties.

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⁷ The Philippines Power Industry Investment Memorandum 2007

⁸ The Philippines Power Sector IM 2007

⁹ Ibid.

PSALM has a 25-year corporate life, at the end of which its assets as well as liabilities would be transferred to the Philippine government.

Re-organization of the Power Sector

Power Generation

The EPIRA effectively restricted the government from building or guaranteeing the financing for electricity generating assets and opened it up to private entities, which could now get a Certificate of Compliance in line with the governmental rules, guidelines and frameworks from the respective authorities. Consequently, by 2008 the Philippines power generation sector had the capacity to produce 60,821GWh of electricity under three facility ownership categories¹⁰:

- Power plants owned and operated by the NPC
- Power plants owned by NPC but operated by IPPs; or owned and operated by IPPs with contracts to sell the output exclusively to NPC
- Power plants owned and operated by IPPs with contracts to sell electricity to customers other than NPC

Exhibit IV shows the breakdown of net generation capacity and electricity production by plant type as of December 2008.

Power Transmission

While power transmission had been solely in the public domain, the enactment of EPIRA separated the transmission and sub-transmission functions of the state-owned NPC from its generation function and transferred all the NPC's transmission assets to the newly created TRANSCO, which was wholly owned by the PSALM. These transmission assets would be privatized by PSALM under a 25-year concession agreement, whereas the sub-transmission assets (i.e. the power lines) would continue to be operated by TRANSCO¹¹.

A major problem in the sector was constraints in the transmission system that prevented the efficient transfer of electricity from regions with a power surplus to those with a power deficit. A Transmission Development Plan (TDP), devised to address this problem, required TRANSCO to expand its transmission and sub-transmission lines to address these constraints.

Power Distribution

Power distribution in the Philippines is regulated by the ERC and involves multiple duly authorized players including local government units, cooperatives and private entities. Each distributor is awarded a franchise for a specific distribution area, as defined by the distribution code of the ERC. Distribution rates are also subject to ERC approval. Originally, authorized distributors used to sign Transition Service Contracts (TSCs) with NPC to ensure continued supply of electricity to their consumers, but in October 2005 the ERC issued Resolution 21 directing distributors to enter into future bilateral contracts with a power generator of their choice to promote private investment in the electricity generation sector 12.

¹¹ Ibid.

¹⁰ Ibid.

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Power Supply

The EPIRA introduced a fourth sector within the power market that allowed technically and financially sound private entities to broker, market and sell electricity to end-users upon getting proper authorization from the ERC. The motivation behind this act was to increase competitiveness and efficiency in the realm of electricity supply. The EPIRA would eventually also allow certain end-users with guaranteed demand beyond a certain threshold level to source electricity directly from the supplier or power generator of their choice.

Wholesale Electricity Spot Market (WESM)

An important step in the implementation of the EPIRA was taken in 2006 with the establishment of the first around-the-clock wholesale market for trading electricity as a commodity. The Philippines Electricity Market Corporation (PEMC) was created to govern the WESM and to ensure transparent and fair trading between buyers and suppliers of electricity; to encourage power generators to reduce their costs to remain competitive in the market; and to facilitate determination of electricity prices in real-time instead of being fixed rates based on historical costs and past usage. To further promote the use of this market, the ERC Resolution 21 also directed power distributors to source at least 10% of their future bilateral contracts from the WESM during the initial five years of its creation.

Privatization of the Power Sector

The EPIRA was enacted to restructure and privatize the power sector with US\$300MM in funding under the Asian Development Bank's Power Restructuring Program¹³. The IMF and WB also guaranteed an additional US\$300MM contingent on the privatization of NPC. Some of the rules and procedures designed to give the privatization process structure are as follows¹⁴:

Bidding

All prospective investors invited to bid participated in a pre-bid conference where they were given access to complete information and allowed to inspect the assets before submitting their bids by a set deadline. A bidding round was declared valid if there were at least two bids submitted by separate parties and at least one of them met PSALM's reservation price.

Transfer of Electricity Supply Contracts

An important aspect for the sale of the NPC assets was a provision under the EPIRA that allowed the transfer of previously NPC negotiated valid contracts with electricity distributors along with the sale of the corresponding electricity generating asset. This guaranteed future revenue stream allowed potential buyers to negotiate better terms with their financiers and improved the perceived value of the asset.

Deferred payment Structure

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¹³ ADB Loan to Help Privatize Philippines Power Sector, ADB Media Center http://www.adb.org/Documents/News/1998/nr1998099.asp

¹⁴ Philippines Power Sector Nomura February 2010

The privatization process was also made more attractive for potential buyers because of flexible payment options for the privatized assets. Successful bidders were required to pay only 40% of the price of the asset upfront. The remaining amount was amortized into fixed semi-annual payments over seven years, with a 12% annual interest.

Ownership Restriction for Foreigners

The Philippines constitution restricts foreign holding of certain assets including land and natural resources. However to facilitate the privatization process and attract foreign capital into the sector, qualified foreign parties were allowed to lease land or enter operating and maintenance agreements to get the non-power component of a generating asset. Private investors were also encouraged to enter joint-ventures, co-production and production sharing agreements with the government.

Privatization of IPP contracts

Another very important aspect of power sector privatization was to transfer the contracted Energy Conversion Agreement (ECAs) and Power Production Agreements (PPAs) that NPC had earlier negotiated with multiple IPPs, to private entities. The PSALM that now owned those contracts, had been conducting IPP Administrator (IPPA) public bidding rounds to select third-party managers to administer the sale of electricity to distributors or suppliers through the WESM or bilateral contracts [Exhibit V]. This initiative allowed selected IPPAs to enjoy the benefits of owning a power generation plant i.e. controlling the fuel, trading and contracting electricity without worrying about the plant maintenance and upgrade costs. It also allowed IPPAs to trade electricity on the WESM beyond their own electricity generation capacity.

Progress on Privatization

The PSALM targeted to privatize 70% of the NPC's assets and IPP contracts by 2004, but managed to off-load only 10% of the assets and IPP contracts by 2006¹⁵ as shown in **Exhibit VI.** Sale of the transmission assets of the TRANSCO has also been behind schedule as the last attempt to conduct a bidding process failed with only one out of the three prospective bidders submitting a final bid on the scheduled deadline date.¹⁶ The slow pace of privatization demonstrates that the woes of the Philippines power sector are far from over. The PSALM was assuming a large amount of NPC and TRANSCO's debt and needed to generate cash by selling their assets to the private sector to re-pay its liabilities, otherwise it will be left with no option but to go to the credit market.

Philippine Power Sector Dynamics

Current situation and future outlook

The Philippines has a generation capacity of 15,681MW mostly powered by fossil fuels. Coal is the leading generation source with 26.9% of total installed capacity and is followed by Oil at 21.4% [Exhibit VII]. Geothermal is also a substantial energy source in the country. With 1,958MW installed, the archipelago is the second largest geothermal generator in the world,

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¹⁵ Philippines Power Industry Restructuring and Privatization Fact Sheet http://www.pcij.org/blog/wp-docs/Philippine Power Fact Sheet.pdf

¹⁶ The Philippines Power Sector IM 2007

just behind the USA. While more than 65% of the Philippines power was generated in Luzon in 2008, the island is expected to need much more capacity. According to an equity research report by Nomura, Luzon will require 3,000MW of new capacity by 2017 in order to maintain a reliable supply. Given the large scale of this expansion, Luzon would need to rely heavily on Coal and LNG. However, both these sources face major obstacles. Coal projects are being highly scrutinized given their environmental impact and LNG projects face major commercial barriers in the current Filipino environment.

The Philippines power sector is poised for strong growth. Filipino's power consumption per capita is still at a very low level compared to its Asian peers [Exhibit VIII]. The growth of the economy is expected to increase the country's middle class population. In turn, this population's lifestyle will evolve requiring higher power consumption per capita. Business Monitor International expects electricity generation in the country to grow from 59.6Twh in 2008 to 77.3Twh in 2014, a 29.7% growth in 6 years. Along with the privatization of NPC assets, this development provides ample growth opportunities for established players and potential future investors in the country's power sector.

Competitive landscape

The recent privatization efforts and regulatory developments were instrumental in harnessing competition in the Philippines power generation sector; with the NPC's share of total generation declined to 21% in 2008 compared to 28% in 2003. The major progress was made on Luzon where only 14% of the power was produced by NPC owned plants. In turn the share of Independent Power Producers (IPPs) the generation mix grew from 26% in 2003 to 32% in 2008 [Exhibit III]. Since 2003 and up to July 2008, the DOE issued 56 Certificate of Endorsements (CoE), which is a required regulatory approval to engage in electricity generation as a new company¹⁷ in the Philippines. During this period 6,400MW of capacity from new entities was approved. Overall, private entities operating in the countries could be categorized in two broad categories:

- Local players: Consist mainly of family businesses with interests in power generation assets. While the most sizeable operations are listed, the families are still very influential in running the business. Additionally some of these families have substantial interests in other businesses such as power distribution and retail. For instance the Aboitiz family is still a major shareholder of Aboitiz Power while the Lopez family still owns a substantial stake in First Gen¹⁹.
- International players: Mirant is the largest international player in the Philippines and is fully owned by US based Mirant corporation. Several other players operate in the market such as Team Energy Corporation, which is a joint venture between Marubeni and Tokyo electric venture and KEPCO Philippines, a subsidiary of Korean headquartered KEPCO. The privatization of NPC assets is expected to attract more international players

¹⁹ Installed capacity of approximately 1,840MW in 2008

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¹⁷ According to the DOE definition: "The DOE Certificate of Endorsement is a requirement under the Amended Guidelines for the issuance of Certificate of Compliance (COC) by Energy Regulatory Commission (ERC) promulgated on March 7, 2003"

¹⁸ Installed capacity of approximately 580MW in 2008

and help the established ones expand their operations in the country. As an illustration, in late 2007, AES Philippines won an auction for the privatization of the 600MW coal-fired plant Masinloc while Suez bid the highest for the 600MW coal fired-plant Calaca.

In the past, competition was limited between power plants as most were operating under long term PPAs. Currently, all generators must sell their physical output on an hourly basis to the wholesale electricity market. The market balances demand and supply by ranking the plants according to their marginal cost. IPPs with the lowest marginal cost have an edge as they rank higher in the merit order, securing a higher priority on dispatch. Therefore, having a low marginal cost compared to existing IPPs is a very valuable competitive advantage.

GNPower Project

Origins of the Project

Dan Chalmers and Tony Becker – respectively an entrepreneur and former investment banker both had a love for the Philippines and a deep knowledge of the power sector. They had worked together on the groundbreaking Quezon Power transaction²⁰ and were well aware that the country was desperate for additional power generating capacity. In 1999, Chalmers and Becker joined forces to sponsor a much-needed new liquefied natural gas (LNG) fired power plant in Luzon. By 2005, the project was almost fully developed but the delay in implementing the law governing the power sector caused delays and complications. The world economy was also booming, commodity prices were rising, and LNG was no longer available at pricing that made the project feasible, so they needed to reevaluate how to proceed.

Project Development 2005-2008

In the fourth quarter of 2005, the entrepreneurs had a team of experienced staff, a site, a number of necessary permits, and knew that the Philippines would desperately need additional capacity by 2011. They needed an alternative to LNG, and at the time coal was the only viable alternative for a large-scale plant. The partners wrestled with different options for building and financing the project at a competitive price, which would be critical in the new fully competitive market.

In early 2006, the team debated where to source its coal supply from and considered both Australian and Indonesian suppliers. GNPower management decided to use low-calorific ("LC") value coal from Indonesia, which is also characterized by low sulfur and ash content. There was an abundant supply of this coal in Indonesia (60 billion tons from Kalimantan and Sumatra). Further, there was limited demand for LC coal because it was relatively expensive to export to faraway locations. The proximity of the Philippines to Indonesia made it among the very few markets where it could be transported economically.

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²⁰ 460MW power project in the Philippines developed by Dan Chalmers, with Tony Becker as Financial Advisor. This project was the first baseload plant financed in the country without a government guarantee. It also represented the largest non-recourse financing by the US Export-Import Bank and the first international project to issue public bonds in the US capital market while under construction.

The team explored a number of alternatives for sourcing the equipment and financing the project, but each option had its tradeoffs:

- China: There was a lot of talk of China's "going out" strategy but there were few tangible results and no one had ever done a US\$1B deal like the GNPower project. While Chinese equipment had been proven and was cheap, it was not clear whether Chinese lenders and/or equipment providers could finance it without government guarantees, as there was no precedent for financing a project on a private basis.
- **USA:** The partners had a good relationship with the US Export Import Bank (EXIM), which could serve as a potential source of financing, and American equipment manufacturers were world renowned for the quality of their equipment and construction expertise. However, American contractors were very expensive, did not engage in fixed price contracts (which would be critical to get low cost, non-recourse financing), and were very busy given the boom in the Middle East and elsewhere.
- **Japan:** While Japanese equipment was acceptable (indeed Mitsubishi Corporation had a large installed base of power plant equipment in the Philippines), the Japanese government financial institution support (JBIC²¹, NEXI²²) would not be an option because they would only lend if there were government guarantees.
- **IFC and ADB:** These institutions could be a source of capital but at the time they had limited capacity to lend because they had already allocated a significant amount of capital toward supporting the Philippine privatization efforts.

After a competitive bidding process, the team chose to sign a deal with a Chinese EPC contractor: Contractor A. Contractor A is a State-owned conglomerate, made up of several state owned enterprises and is active in mostly government projects in China and Asia. Most importantly, Contractor A agreed to extend a limited-recourse loan, under a Supplier's Credit structure, to finance the majority of the construction-related costs. Contractor A's loan would be guaranteed against certain political and commercial risks by the China Export & Credit Insurance Corporation ("Sinosure")²³. The loan covered the EPC costs of US\$480 million at a favorable 9-year fixed-rate financing of 6.5%.

Defining a plan to market the power generated is essential in developing any power project and developers often chose between selling to the spot market, to contracted clients through PPAs or a balance of both. A merchant power plant²⁴ was not an option for GNPower because this would tremendously impact the project's ability to secure financing. At the same time securing PPAs was very challenging because the Philippines stopped issuing government-guaranteed power purchase agreements. The only route was to contract with private companies and smaller distribution utilities. But this route presented a number of challenges. First, there was no precedent and it was difficult to approach companies to commit to a contract to buy power from a plant that was yet to be built. Second, GNPower needed to structure the PPAs in such way to protect it against certain risks (which would be a requirement of the lenders) which will not be an easy sale with its prospective clients. Last but not least, the need to have creditworthy clients reduced GNPower's addressable market substantially. GNPower needed a strong sales

²¹ Japan Bank for International Cooperation (formerly The Export-Import Bank of Japan)

²² Nippon Export and Investment Insurance

²³ At the time of the award the insurance covered 95% political risk and 95% commercial risk

²⁴ Plant that does not have long term PPAs

and marketing organization for a product that was not yet produced. The sales process garnered the senior management's full attention which helped the rest of the team assemble a unique portfolio of PPAs with highly rated clients. The contracts were structured on a take-or-pay basis and had features that insulated the project against dispatch, fuel, currency, transmission and other cost risks. These PPAs were a very valuable asset since this is the most time consuming part of any power deal. In fact getting the final regulatory approval takes approximately 14 months per utility. First the technical staff of the utility assesses a number of proposals and options. A recommendation is then made to the Board of the utility which is followed by a formal process of public bidding. Once the bid is awarded, final negotiations and execution of the contract take place. Finally, the distribution utility ("DU") and GNPower file the executed contract for approval by the ERC. As part of the ERC approval process, at least one public hearing is conducted in the franchise territory of the DU followed by consideration of all the submitted evidence by the full Commission Board. By July 2006, the team managed to secure more than 20 PPA contracts to purchase 76% of the 525MW capacity expected to be contracted - the balance of 75MW being allocated to merchant capacity. Such a large number of contracts had an additional advantage because the actions of a single buyer would not jeopardize the whole project; a fact that would reassure potential investors and lenders.

JPMorgan was hired to advise on the equity financing in October 2006. An outline of the transaction opportunity was sent to potential strategic and/or financial investors in January 2007 seeking an investment of approximately US\$280mm in partnership interests. Interested buyers that signed a confidentiality agreement were given access to a comprehensive electronic dataroom established by GNPower to be able to perform their due diligence. In June 2007, GNPower received a number of bids but none was fully satisfactory to the company. Issues in the bids included low valuations and changes in proposed investment sizes. The team decided to accept the bid of Denham Commodity Partners Fund IV LP ("Denham"), despite the fact that it did not cover the full amount. This decision was based on the fact that the team had a long-standing relationship with the head of Denham's power and energy business that went back over 15 years. The team also wanted to partner with Denham to establish a platform for future energy deals in the Philippines and the region. The capital contribution of Denham would enable the project to achieve additional critical milestones that would better position the project for another round of equity financing.

To the team's surprise, in September 2007, Sinosure changed its coverage policy to cover only 50% of the commercial risk from a standard 95% coverage. This was a big setback, as the standard coverage was critical for Contractor A, and the team had to engage in a very complex restructuring of the financing which was both expensive and time consuming. Ultimately, the company succeeded in inviting other lenders to the table and creating a structure that gave comfort to the different stakeholders of the deal. The equity raise process continued while the company was progressing with project development, ending with an international strategic and financial investor with a presence in the Philippines ("Investor I") and a regional strategic investor ("Investor R") signing on at the end of 2007. The deal structure ended up having an equity participation of 30%-30%-40% respectively for Investor I, Investor R, and a partnership between GNPower and Denham.

By May 2008, the company signed the documents for the full equity financing but then something unexpected happened again [**Exhibit IX**].

The Crisis

By mid-2008 all of the hard work seemed to be paying off. The team had replaced investor R, who was now unable to participate in the deal under the original terms, in just nine-days with Sithe Global who would hold a 30% equity stake on the same terms as Investor I. This was a major accomplishment and the team thought the deal was at last ready to close.

Then Contractor A suddenly indicated that the original terms of their EPC contract were no longer viable given the trends they were observing in the global economy. At the time commodity prices were rising rapidly, the Renminbi was appreciating at 20% per annum, and the world economy was picking up so interest rates were rising. These conditions made the original structure of the agreement unviable for Contractor A and they were now demanding a higher price of US\$725MM at 8.5% interest. This represented a more than 50% increase above the original price and a 200 basis point rise in interest rate on the financing.

For GNPower, the EPC contract was as critical as every other piece of the deal. The pricing on the PPAs would be too low under Contractor A's new terms and the deal would not provide adequate returns to the equity partners. Four years of planning seemed to have vanished in a heartbeat and GNPower now had to decide what to do.

Options

Dan and Tony had invested nearly ten years and approximately US\$35MM in development costs to bring this coal-fired power plant to life. They now had ownership over a set of "shovel ready" assets with real value, including:

- A portfolio of 13 ERC-approved PPAs with distribution utilities covering a capacity of 356MW and a portfolio of PPAs to the contestable market²⁵ covering 87.7MW
- All of the licenses required to operate as an independent power producer
- A parcel of land ready for construction
- An experienced team of managers, experts, and employees

At this point, GNPower's top priorities were to protect its employees and investors and serve its customers. As such, it was paramount that the plant be built one way or another so doing nothing was not considered an option. As they thought through how to make this happen, it became clear that there were only two viable options. They could either (a) sell the assets to a strategic buyer with an interest in the Philippines, or (b) redo the deal yet again, by finding a new EPC contractor and raising the required debt capital from other sources.

Sell to a Strategic Buyer

A number of international and local players were active in the Philippine power market. If GNPower could find a willing buyer for their assets, they might be able to recoup some of their investment. Selling to a local entity was appealing because there were a number of local players that understood the industry dynamics well and could potentially bid up the price if they auctioned off the assets. However, GNPower had sold PPAs to its customers with the

²⁵ PPAs for power to be sold to contestable market customers do not require ERC approval

understanding that an international firm would own the plant and the GNPower team would therefore continue to manage the company; this was a key selling point for their customers. If GNPower sold to a local player, its customers could easily pull out of their agreements over concerns about increased local competition.

On the international side, there were a number of multi-national firms that developed, owned and operated power plants throughout the world. Two well capitalized and experienced international players already had a presence in the Philippines, and both would be interested in expanding their footprints in the country. Selling to an international player had the advantage of not jeopardizing GNPower's relationship with its customers. On the other hand, the international firms were not desperate to acquire the assets and there would be little competition so they would likely bid a low price.

Did it make sense to sell to a local player and risk damaging their relationship with customers in a country where they had been building a reputation for nearly ten years? Or, should GNPower enter into negotiations with the internationals knowing that they had little leverage and might be in a weak negotiating position? Both options had their downside, but there was a strong possibility that they could recover their investment and potentially even making a small return.

Redo the Deal

The other alternative was to "double-down" on their investment and try to complete the project themselves. When asked about what this would entail, Tony Becker from GNPower said:

"the deal couldn't be rebid overnight; it would require more money (approximately US\$20MM), more time (at least one more year), the PPA contracts would have to be extended, and both the EPC contract and debt financing would have to be rebid."

Given the hurdles they had run into in the past three years, this was clearly not an easy decision.

However, there were a number of macroeconomic and market trends now moving in GNPower's favor. The US sub-prime credit crisis had metastasized and the global economy was slamming on the brakes. Commodity prices were falling precipitously, China had essentially fixed the renmimbi to the US dollar, and suppliers and contractors were now desperate for work, while they had been turning away business just a few months earlier. While the global downturn was wreaking havoc on most businesses, GNPower perversely now found itself in a more favorable position. It might now be possible to secure a new contract with lower supply costs and more favorable financing terms.

If it worked and they finally managed to close the deal and build the plant, the upside potential would be tremendous. However, if they failed, they risked losing the nearly US\$50MM of capital they would have invested in development costs. In ten years of project development the balance between risk and reward had never been greater.

APPENDICIES

Exhibit I: Philippines Map



Source: The World Bank (www.worldbank.com)

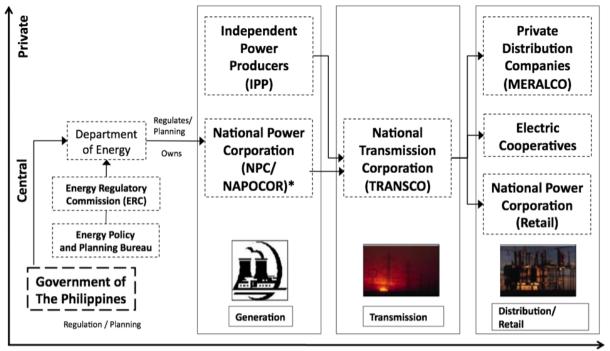
Exhibit II: Infrastructure investment requirement

Investment requirement for infrastructure, 1995-2004 (US\$bn)

	Power	Telecom	Transport	Water	Total
China	200	141	302	101	744
Indonesia	82	23	62	25	192
Korea	101	32	132	4	269
Malaysia	17	6	22	4	50
Philippines	19	7	18	4	48
Thailand	49	29	57	10	145
East Asia	493	256	607	153	1,509

Source: World Bank (1996), Infrastructure development in East Asia and Pacific towards a new public-private partnership (Washington)

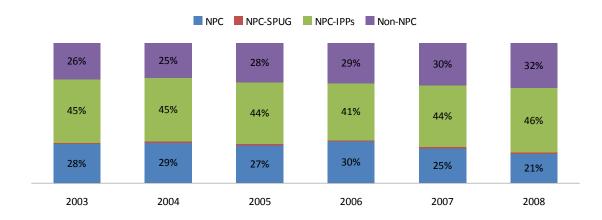
Exhibit III: Power Industry Structure in 2008



Functional Areas

Source: Frost & Sullivan

Exhibit IV: Philippines power generation mix by owner

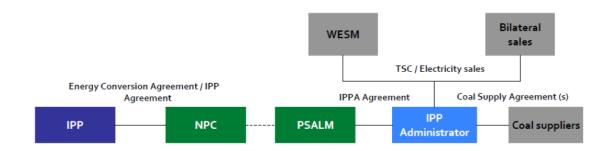


NPC-SPUGs are NPC Small Power Utilities Group

Source: Nomura Equity Research

^{*} Currently, the assets of NPC are being privatized

Exhibit V: Illustration of back to back contracts



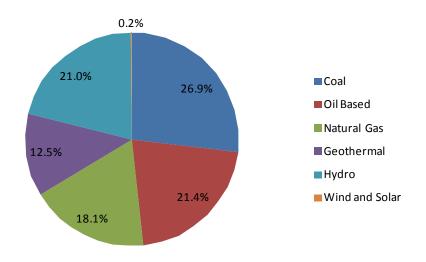
Source: Philippines Power Sector Nomura Equity Research

Exhibit VI: Power generation assets privatized by July 2008

PowerPlant	Grid	Location	Date	Capacity	Privatization receipts	
Hydroelectric						
Talomo	Mindanao	Davao City	Mar-04	3.5MW	US\$1.4mm	
Agusan	Mindanao	Bukidnon	Jun-04	1.6MW	US\$1.5mm	
Barit	Luzon	Camarines Sur	Jun-04	1.8MW	US\$0.5mm	
Cawayan	Luzon	Sorsogon City	Se p-04	0.4MW	US\$0.4mm	
Loboc	Visayas	Bohol	Nov-04	1.2MW	US\$1.4mm	
Pantabangan-Masiway	Luzon	NuevaEcija	Se p-06	112MW	US\$129mm	
Magat	Luzon	Isabella	De c-06	360MW	US\$530mm	
Binga-Ambuklao	Luzon	Benguet	Nov-07	175MW	US\$325mm	
Geothermal						
Tiwi-MakBan	Luzon	Laguna & Batangas	Jul-08	747.5MW	US\$446.9mm	
Coal						
Masinloc	Luzon	Zam balas		600MW	US\$930mm	

Source: Philippines Power Sector Nomura Equity Research

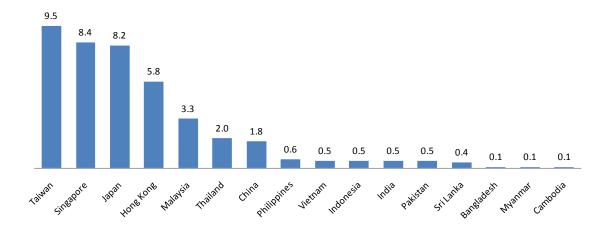
Exhibit VII: Installed power generation capacity in the Philippines (2008)



Total = 15,681 MW

Source: Philippines Department of Energy

Exhibit VIII: Regional per capita electricity consumption (2005, MWh)



Source: Nomura Equity Research

Exhibit IX: Project Development Timeline

	1999	Start development of LNG project
	Q4 2005	Power sector regulation change forces team to transition to Coal instead of LNG
	Q1 2006	LCV Indonesian coal sourced for the project
	Q2 2006	Chinese EPC contractor wins bid process and provides vendor financing for project. Sinosure provides commercial and political risk insurance. 20 PPA contracts signed securing 76% of capacity
	Q3 2006	JP Morgan hired to raise equity financing
	Q2 2007	Equity investor response is weak. Denham Capital Management signs on as equity sponsor
	Q3 2007	Sinosure reduces coverage policy and commitment, causing use of expensive bridge loans
	Q4 2007	Equity raise process completed with the investment from Investor I and Investor R
	Q2 2008	Crisis: Contractor A surprisingly backs off
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