



KPMG Global Energy Institute

The Energy Report

Philippines

Growth and Opportunities
in the Philippine
Electric Power Sector

2013-2014 Edition

kpmg.com/energyaspac

The articles do not purport to give advice on any particular issue or situation but are meant to be a general guide to the reader who should seek the advice of qualified professionals on issues specific to his situations. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future.

© 2013 Manabat Sanagustin & Co., CPAs, a Philippine partnership and a member firm of the KPMG network of independent firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. KPMG International provides no client services. No member firm has any authority to obligate or bind KPMG International or any other member firm vis-à-vis third parties, nor does KPMG International have any such authority to obligate or bind any member firm. All rights reserved.

The Energy Report **Philippines**

Growth and Opportunities
in the Philippine
Electric Power Sector

2013-2014 Edition

Introduction



Roberto G. Manabat
Chairman & Chief Executive Officer
Manabat Sanagustin & Co., CPAs

In recent years, the Philippines has proven to be a leading high-growth economy in Southeast Asia. As many economies faced challenging circumstances, the Philippines continued to prosper on the heels of strong consumption and growth across sectors. Concurrently, investor interest improved in early 2013 as shown by the continued record-breaking performance of the Philippine Stock Exchange. Much attention has been given to the national government's role as a catalyst in the growing optimism of the country's business potential. As the Philippines enters the final half of the Aquino administration, a final swan song, specifically in the infrastructure space, will certainly headline the Philippine growth story as the economy is driven to new heights.

Focus will be given to the power situation facing the Philippines in order to help ensure the longevity of the country's positive economic performance. In the near future, the projected demand for power across the industrial and consumer sectors will likely exceed the committed capacity currently forecasted by the regulatory bodies. In line with the national government's aim of serving as a catalyst for continued economic growth, the availability of core utilities, specifically electricity, will be a key requirement in maintaining the commercial viability of potential businesses across industries.

Investment-grade rating of the Philippines

After years of urging credit raters to upgrade the country to investment-grade, the Philippines finally received an investment-grade credit rating for the first time in 2012 from Fitch, one of the world's major rating agencies. The upgrade had long been expected, considering that the Philippine economy has been outpacing key rating drivers of other investment-grade countries. There is now growing international investor interest driven by continued upward trajectory of sovereign credit ratings to invest. Fitch raised the country's rating to BBB- in March 2013 followed by Standard & Poor's rate of BBB- in May 2013. Another vote of confidence was also seen from the recent Moody's upgrade to Baa3 in October 2013.

Objectives of this guide

This guide is intended to give an overview of the energy sector in the Philippines with practical insights for foreign investors looking to enter the sector in this market. This publication is not intended to be a substitute for formal legal and other professional advice. To the best of our knowledge, laws and regulations referred to throughout the document reflect the position as of 1 July 2013.

We are grateful for the valuable insights of the following:

Hon. Sergio R. Osmeña III
Chairman, Senate Committee on Energy
Senate of the Philippines

Melinda L. Ocampo
President, Philippine Electricity Market
Corporation

Oscar S. Reyes
President and Chief Executive Officer
Manila Electric Company

John Eric T. Francia
President, Ayala Land Energy Holdings, Ltd.

Henry T. Sy, Jr.
President, National Grid Corporation of the
Philippines

Ernesto B. Pantangco
President, Philippine Independent Power
Producers Association

Emmanuel R. Ledesma, Jr.
Chief Executive Officer, Power Sector Assets
and Liabilities Management Corporation

Ma. Nanette G. Bugnosen
Chief Finance Officer, National Grid Corporation
of the Philippines

Francis Giles B. Puno
President and Chief Operating Officer
First Gen Corporation

Jesus T. Tamang
Director, Energy Policy and Planning Bureau
Department of Energy



Contents

Introduction	3
Philippine Power Sector: Challenges and Opportunities	8
History of the Philippine Power Sector	10
Quick Guide: The Transitory Rules on Retail Competition and Open Access	15
Power Pricing in the Philippines	20
2013: The Year of Renewable Energy in the Philippines	22
The Players: Philippine Power Industry	27
Value Added Tax in the Energy Sector	30
Glossary	33
About the Philippines	34
About KPMG	38

Contributors



Paul Patrick R. Afable

The Players: Philippine Power Industry

Paul R. Afable joined Manabat Sanagustin & Co., CPAs in 2009. He is currently a senior manager in the Transactions and Restructuring Group of the Advisory Services Department. He has service experience in different industries such as energy, financial services, public sector, retail and real estate. Paul has also once led a Commercial Due Diligence and Financial Due Diligence engagement for a Japanese firm looking to invest in the energy sector of the Philippines.



Henry D. Antonio

History of the Philippine Power Sector

Henry D. Antonio is currently the head of Advisory Services Division of Manabat Sanagustin & Co., CPAs. He has extensive experience on forensic and fraud investigations, business process reviews, corporate rehabilitation, and risk management and compliance. Some of his clients include the largest power distributor in the Philippines and other major financial institutions in the country.



Emmanuel P. Bonoan

Value Added Tax in the Energy Sector

Emmanuel P. Bonoan is the Chief Operating Officer and Vice Chairman for Tax of Manabat Sanagustin & Co., CPAs. He is a former Undersecretary of Finance who headed the team that proposed and shepherded the VAT Reform Law (Republic Act No. 9337) through the Philippine Congress. He also successfully defended its constitutionality before the Philippine Supreme Court. Presently, Atty. Bonoan advises large multinational companies and trade organizations.



Michael Arcatomy H. Guarin

2013: The Year of Renewable Energy in the Philippines

Michael H. Guarin is the head of the Transactions & Restructuring Group of Manabat Sanagustin & Co., CPAs. Mike has extensive advisory experience in the banking, mining, hospitality and media sectors in the Philippines. Mike has also been active in the Philippine mining sector. He has previously advised foreign investors on available market entry strategies into the Philippine mining market. In addition, he was the lead engagement partner for the advisory work for several companies engaged in power generation, production of bio-diesel, and a local investment holding company in the tankering business.



John Molina

Power Pricing in the Philippines

John Molina joined Manabat Sanagustin Co., CPAs in 2008. He is currently a partner in Audit Services and is the Energy Line of Business Head. Prior to joining the firm, John worked for an independent power producer. He brings with him many years of audit experience, having served multinationals and local companies in a wide range of industries. He handled the audit of clients engaged in oil and gas, mining, manufacturing, trading and service, and power generation companies. John is also accredited with the Energy Regulatory Commission as an external regulatory auditor.



Sharad Somani

Philippine Power Sector: Challenges and Opportunities

Sharad Somani is an Executive Director at KPMG in Singapore and he leads the Infrastructure and Projects practice focusing on the Asia Pacific region. He also leads the Asia Pacific Power and Utilities network for KPMG. Sharad specializes in Project Finance and has handled various projects across infrastructure sectors including broadband, industrial infrastructure, energy and transport. He works across Southeast Asia and the Middle East power sector. He has worked with Electricity Vietnam (restructuring), Energy Markets Singapore (tariff regulations), and IPP advisory (India, Myanmar). His skill set includes contract structuring, bid advisory, business planning, financial structuring and modeling, regulatory advisory, risk mitigation, project appraisal, fund syndication and negotiations with bankers for project financing.



Maria Pia A. Urgello

Quick Guide: The Transitory Rules on Retail Competition and Open Access

Maria Pia A. Urgello is Internal Legal Counsel of Manabat Sanagustin & Co., CPAs. Prior to joining the firm, she advised key stakeholders in various industries, including banks and other financial institutions, energy, utilities, infrastructure, construction and tollway companies, as well as telecommunications, real estate and insurance firms. She has extensive experience providing legal advice on national and transnational energy projects, acquisitions, project financing, asset-backed securitization and capital markets, loan syndication, debt restructuring and privatization. Currently, she handles all legal and compliance requirements of the firm by providing support to its operating functions and risk management group.



Philippine Power Sector: Challenges and Opportunities



Sharad Somani
Executive Director
Infrastructure and Projects
T: +65 6213 2276
E: sharadsomani@kpmg.com.sg

The Philippines has had a very strong history of successful independent power producers (IPPs) implementations. The country started seeing private sector participation in power since the early 90s. One of the first successful IPPs was the 735MW Pagbilao coal-fired plant in Quezon. The formation of the Public-Private Partnership (PPP) framework under the Build-Operate-Transfer (BOT) Law enacted amid the power crisis in the early 90s led to a number of IPPs being set up to meet the power demand in the country. This resulted to investments from foreign companies (AES, Tokyo Electric, and Marubeni) as well as development of domestic power companies (Aboitiz, Ayala, Energy Development Corporation, Mirant, Meralco, SMC Global Power, etc.).

The big push for privatization and restructuring in the Philippine power sector came in the wake of a 1994 World Bank study proposing radical reforms in the industry. Pursuant to the Electric Power Reform Act 2001 (EPIRA), Power Sector Assets and Liabilities Management Corporation (PSALM) was mandated to reform and restructure the sector. Since its formation, PSALM has successfully privatized 26 generating plants and the National Grid Corporation of the Philippines (NGCP) through a 25-year concession while it appointed IPP administrators for five generating plants. Thus, by liquidating all of the financial obligations of the National Power Corporation (NPC), the stage is now set for the introduction of a competitive power market in the country.

Retail Competition and Open Access Mode

Introduction of retail competition and open access is the next big step for the Philippines to take its power market to the next stage of development. With over 90 percent of electricity coverage in the country, diversified energy supply base and supply being able to cover demand for the foreseeable future, the country has the necessary ingredients for setting up a competitive market structure. The slow process for approval of power projects under a single buyer Power Purchase Agreement-based (PPA) regime may be a thing of the past as the market is expected to send the signals for capacity addition. While the

journey towards Retail Competition and Open Access (RCOA) has not been smooth and not without delays, its start date has been set for middle of 2013. On 26 December 2012, a six-month transition period began, and at the end of this period, customers are now able to choose their electricity provider. From a regulatory perspective, the Department of Energy (DOE) and the Energy Regulatory Commission (ERC) would have to combine policies on open access.

The Philippine Energy Plan 2012-2030, which the DOE launched in December 2012, lays down the roadmap for future demand and capacity addition

plans. As per the plan, the current installed capacity in the country of about 16,250MW is expected to go up to 25,800MW (an increase of about 60 percent by 2030). This is still expected to be short of the projected demand of 29,330MW in the year 2030. In addition, various interconnection links between the island grids need to be developed.

The above plans are well-articulated and being coordinated for effective implementation. However, the country and its key sector stakeholders will have to address a few challenges in the process as detailed in the following section.

Key challenges

Continued capacity addition – The three regions in the Philippines viz. Luzon, Visayas and Mindanao will require substantial capacity addition in the coming years. Out of the expected capacity addition of close to 13,000MW until 2030, only 1,800MW has been committed. It would be critical to ensure that the market signals are robust enough to allow for these capacity additions to happen.

Grid connectivity and strengthening – The fact that the installed capacity in the country will increase a fair bit, sufficient investment needs to happen in strengthening the transmission and distribution infrastructure. In addition, the island grids also need to be interconnected. Mindanao is currently not connected with the Luzon Visayas grid. This will entail huge capital expenditure that needs to be sustained by the sector. ERC will play an important role in allowing for recovery on investment with appropriate regulated returns for this transmission infrastructure.

Readiness of the stakeholder – The move from a single-buyer PPA-based model to a complete RCOA model would require a very different approach to risk management and planning by the stakeholders. The capacity development both at the regulator and the key market players' level becomes critical in an open access retail competition environment. Focus should also be directed toward educating consumers – commercial and domestic – who may be new to this arrangement. While the underlying goal is to make the whole sector price competitive, there could be potential price spikes should the demand exceed supply anytime in the future for a certain period. Effective demand side management steps would help bring stability to the market.

Market price risk – The market price risk remains there for the generators as well. In situations of

oversupply, the market price may drop leading to erosions of the margin. This would mean that low cost competitive and efficient generators will have an intrinsic advantage.

Regulatory framework – The success of the RCOA model depends to a great extent on the robustness of the regulatory framework and the market mechanisms. A proactive and prudent approach to maintaining a clear framework, which is equitable and balanced, would be critical to ensure longer term sustainability of the sector.

Opportunities and way forward

The Philippine power sectors offer great many opportunities for the private sector (both domestic and international) in years to come. In the generation sector capacity addition of over 13GW, coupled with setting up of high capacity interconnectors between different parts of this huge archipelago, would mean large opportunities for investment by the private sector. We estimate an aggregate investment opportunity of about US\$25 billion until 2030. The opportunity is clearly big and the sector has the players who could potentially handle that level of investment requirements. To make it more effective, there may be a need for:

- Capacity development for the existing stakeholders to thrive in the changed environment;
- Potential partnerships across the Generation, Transmission and Distribution sectors;
- Possibility for new players to enter the competitive markets in the Philippines to supplement the efforts of the existing players; and
- Philippine power companies moving to other competitive markets like Singapore, Australia and UK to learn and leverage their expertise (Meralco and First Pacific buying 70 percent stake in 800MW Combined-Cycle Gas Turbine or CCGT in Singapore is one such example).

In conclusion, we believe that the Philippine power sector is undergoing a huge transformation that offers opportunities but also high risks that need to be managed. Existing stakeholders would have to reorient themselves to be successful in this new environment.



A History of the Philippine Power Sector

The National Power Corporation (NPC) was established in 1936 to construct, operate and maintain facilities for the production of electricity. Since its establishment and until the landmark power industry reform law was passed in 2001, NPC has been at the forefront of the power industry, both in power generation and in transmission.

NPC's preeminent position in the power industry was cemented under the Marcos regime with the issuance of Presidential Decree No. 40 (PD 40) on 7 November 1972. Under PD 40¹, NPC controlled both the transmission grid and the setting up of power generation capacity within the grids.²

A decade and a half following the issuance of PD 40 and true to that decree's mandate, NPC owned and operated as "a single integrated system all generating facilities supplying electric power to the entire area embraced by any grid set up by the NPC." This meant that NPC controlled and monopolized both the transmission and generation sectors, which were accordingly, effectively nationalized.



Henry D. Antonio
Head of Advisory Services
T: +63 2 885 0605
E: hantonio@kpmg.com

By the late 1980s, or over a decade and a half after PD 40, and following the year of the successful people power uprising that toppled Ferdinand E. Marcos and installed Corazon C. Aquino to the Philippine presidency in 1986, NPC had accumulated billions in debt and hence lacked the financial capability both to efficiently operate and maintain its existing generation portfolio and to build and install critical capacity to forestall an impending power crisis.³ Thus, in 1987, the Aquino administration passed Executive Order No. 215 (EO 215).⁴

¹ NPC was constituted as the "authorized implementing agency of the [Martial Law] State" for the "setting up of transmission line grids and the construction of associated generation facilities in Luzon, Mindanao and major islands of the country, including the Visayas."

² In areas beyond any grid set up by NPC, cooperatives, private utilities and local government may be permitted to own and operate isolated grids and generation facilities, subject, however, to State regulation. With respect to private ownership of generating facilities within areas "embraced by a grid set up by the NPC," the State had the absolute discretion to authorize the same. [Presidential Decree No. 40, "ESTABLISHING BASIC POLICIES FOR THE ELECTRIC POWER INDUSTRY"]

³ A political and economic crisis in 1983 led the Marcos government to declare a moratorium on the payment of its foreign obligations, resulting in a shortage of available foreign funding for NPC's projects. In addition, NPC's foreign-currency costs (such as for fuel) increased due to the depreciation of the Peso and its operational performance was dismal. (Ma. Rowena M. Cham, "The Philippine power sector: issues and solution," *The Philippine Review of Economics*, Vol. XLIV No. 1, June 2007, page 37.)

⁴ Issued July 10, 1987.

EO 215's principal aim was to permit and encourage private sector participation in power generation and remit NPC's monopoly.⁵ Though NPC continued to possess principal responsibility for the construction of "associated generation facilities" within the grid, private sector entities could seek accreditation to construct and operate, among others, "electric generating plants, intending to sell their production to the grids, consistent with the developmental plans formulated by the National Power Corporation."⁶

Three years after the issuance of EO 215 on 9 July 1990, Republic Act No. 6957,⁷ more popularly known as the Build-Operate-and-Transfer Law (BOT Law), was enacted. The BOT Law permitted private contractors under a build-operate-transfer or build-and-transfer (BAT) scheme to construct and operate power generation facilities for an assured "reasonable return of its investment and operating and maintenance costs."⁸

Despite EO 215 and the BOT Law, however, by 1992, energy demand quickly outpaced energy supply.⁹ This was largely attributed to NPC's failure to prudently operate and maintain its plants. During this period, NPC plants operated at only 50 to 70 percent of their installed capacities.¹⁰ NPC also continued to wallow in debt, and hence was unable to build additional capacity.¹¹ Potential investors were also discouraged from investing since they were forced to negotiate power supply contracts exclusively with NPC.¹²

These factors exacerbated the already precarious power demand/supply situation created by the mothballing in 1986 of the 2 x 600MW Bataan Nuclear Power Plant (BNPP).¹³ In anticipation of the operation of the BNPP and NPC's continued dominance and control of the grid, there was underinvestment by the private sector in generation. All these events together plunged the country into a power shortage that caused daily blackouts of up to 12 hours a day.¹⁴

The Philippine government addressed the power crisis by strengthening the original BOT Law of 1990. Republic Act No. 7718 or the Amended BOT Law¹⁵ introduced, in addition to BOT and BAT, the build-own-and-operate (BOO), build-lease-and-transfer (BLT), rehabilitate-own-and-operate (ROO) and rehabilitate-operate-and-transfer (ROT) schemes, among others. It also introduced the concepts of the "unsolicited proposal"¹⁶ and the directly negotiated contracts¹⁷, which were bold departures from the stringent public bidding procedures previously required of government contracts.¹⁸ This landmark legislation served as a model for infrastructure development regulation in other parts of the world.

⁵ It recognized that "the generation of electricity by the private sector can provide a means of increasing power capacity to meet the projected increase in power demand in the future without in any way requiring financial assistance or guarantee from the government." [4th Whereas Clause, EO 215]

⁶ Section 1(c), EO 215.

⁷ Entitled "An Act Authorizing The Financing, Construction, Operation And Maintenance Of Infrastructure Projects By The Private Sector, And For The Other Purposes"

⁸ Returns were gained through the imposition of "reasonable tolls, fees, rentals, and charges for the use of the project facility" in the case of a BOT scheme (which may have a term of up to 50 years) and through amortization payments in the case of a BAT scheme. [Section 6, Repayment Scheme, BOT Law.]

⁹ Despite the privatization efforts implemented by the Aquino administration, only one contract for three 70-MW gas turbine powerplants was signed.

¹⁰ In addition, "tariffs were not adjusted to keep in step with costs..." [Ma. Rowena M. Cham, "The Philippine power sector: issues and solution," *The Philippine Review of Economics*, Vol. XLIV No. 1, June 2007, page 38.]

¹¹ *Id.*

¹² *Id.*

¹³ NPC began construction of the BNPP in 1977 at a cost of US\$1.9 Billion. Though completed in 1984, President Aquino, heeding strong opposition from Bataan residents and civic groups, stalled its commercial operation on grounds of safety. (Ma. Rowena M. Cham, "The Philippine power sector: issues and solution," *The Philippine Review of Economics*, Vol. XLIV No. 1, June 2007, page 37.) Allegations also abounded of graft and corruption.

¹⁴ According to the World Bank, at the height of the power crisis in 1993, the country experienced 103 days of blackouts resulting in 251 GWh of lost energy sales. And the situation was forecasted to worsen. Projections based on the 1993 and 1996 Philippine Development Plan estimated that the power demand and supply gap would increase in the succeeding years. [Source: DOE]

¹⁵ Entitled "An Act Amending Certain Sections Of Republic Act No. 6957, Entitled "An Act Authorizing The Financing, Construction, Operation And Maintenance Of Infrastructure Projects By The Private Sector, And For Other Purposes". Approved on May 8, 1994.

¹⁶ Section 5, Amended BOT Law.

¹⁷ Section 7, Amended BOT Law.

¹⁸ Also significant was the manner by which a contractor / proponent could earn a reasonable rate of return on its investment and operation and maintenance costs, i.e., "in the form of a share in the revenue of the project or other non-monetary payments." [Section 8, Amended BOT Law.]

In addition to strengthening the BOT Law, the Ramos administration pushed for the passage and implementation of Republic Act No. 7468, otherwise known as the Electric Power Crisis Act of 1993 (Power Crisis Act).¹⁹ The Power Crisis Act, which was approved on 5 April 1993, gave the President the power to “enter into negotiated contracts for the construction, repair, rehabilitation, improvement or maintenance of power plants, projects and facilities”²⁰ and to reorganize NPC.²¹

As a result of these efforts, a total of US\$6 billion in investments in approximately 4,800MW of installed generation capacity²² had been made by independent power producers (IPPs)²³ by 1998.²⁴

1990-1998 IPPs Net Income Php Million per MW

First Wave: Fast Track BOTs	Second Wave: Negotiated and Bidded out IPPs
Pagbilao 8.87	SUAL 5.19
Enron-Bat 8.2	Enron-Subic 8.2
Buang 5.2	Panay 5.2

NPC, however, continued to wallow in debt.²⁵ By 2001, NPC owed approximately US\$16.39 billion to creditors. These loans consisted of US\$10.42 billion worth of IPP obligations and US\$5.97 billion of debt and comprised 31.3 percent of the country’s total external debts.²⁶ Pressure mounted from various sectors, including NPC’s creditors²⁷, for the government to implement sweeping regulatory changes if the industry was to avoid another foreshadowed power crisis.

In 2001, the Congress enacted Republic Act No. 9136, or the Electric Power Industry Reform Act of 2001 (EPIRA), which was meant to achieve a total

overhaul of the power industry and wrest control of the generation and transmission sectors from beleaguered NPC.

The EPIRA’s thrusts were manifold. Among these are:

1. The deregulation of the generation sector;²⁸
2. Creation of a new government-owned transmission company and the eventual privatization²⁹ of the operation of the transmission system;³⁰
3. Unbundling of supply activities (unregulated) from the regulated distribution sector;
4. Elimination of cross-subsidies within and among various grids, and among various classes of consumers; and
5. Creation of an independent regulatory body (Energy Regulatory Commission) and a Joint Congressional Power Commission to oversee implementation of the law.

The most revolutionary changes introduced by the EPIRA, however, are:

6. Privatization and sale of NPC assets and contracts with Independent Power Producers (IPPs) which would give government the cash flows needed to pay off NPC’s debts and create a level playing field among generators, which in turn would encourage the influx of private sector investments in the industry;
7. Creation of a wholesale electricity spot market for the trading of energy, by which competitive market forces would establish generation tariffs and make costs more transparent; and
8. Implementation of retail competition and open access³¹.

¹⁹ Entitled “An Act Prescribing Urgent Related Measures Necessary And Proper To Effectively Address The Electric Power Crisis And For Other Purposes”.

²⁰ Section 3, Power Crisis Act.

²¹ Id., Section 5.

²² Noel Eli B. Kintanar, Ma. Lourdes S. Baclagon, Rodolfo T. Azanza, Jr. and Rina P. Alzate, “Locking Private Sector Participation Into Infrastructure Development In The Philippines,” Transport and Communications Bulletin for Asia and the Pacific, No. 72 (2003).

²³ “Independent Power Producers or “IPPs” was a term used to distinguish private sector players who were “independent” of government from NPC.

²⁴ The 1997 Asian financial crisis slowed peak demand resulting in huge oversupply of power as economy slowed and demand dropped below forecasts.

²⁵ <http://www.psaln.gov.ph/liability.asp#liabma>

²⁶ <http://www.bsp.gov.ph/publications/media.asp?id=810&yr=2002>. This was exacerbated in 2004 when President Gloria Arroyo capped NPC’s rates at Php0.40/kwh, further eroding NPC’s financial condition.

²⁷ <http://www.pids.gov.ph/erbl/html.php?bid=252>

²⁸ Only missionary electrification was left with government-controlled NPC through its Small Power Utilities Group (“NPC-SPUG”).

²⁹ The National Grid Corporation of the Philippines (“NGCP”) was awarded the franchise to operate the transmission system under a 25-year concession agreement starting January 2009. As of 2012, NGCP has identified 20 new transmission projects in various locations in the Philippines, aiming to promote reliability of power supply in these areas.

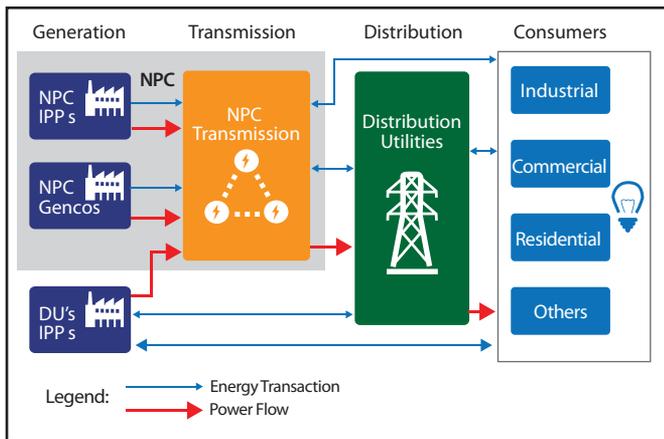
³⁰ The deregulation of the generation sector and privatization of the transmission sector encouraged and laid

³¹ Hailed by Ms. Melinda L. Ocampo, President of the Philippine Electricity Market Cooperation (“PEMC”) as creating “new opportunities for both current and entering industry players, as open access to distribution lines and facilities will finally open up competition in the retail supply sector. Existing generation companies, distribution utilities, and completely new entities may now apply for a license to become Retail Electricity Suppliers, who will be authorized to sell, broker, market, or aggregate electricity to end-users who meet a certain demand threshold for contestability.” See related article on Retail Competition and Open Access.

The last three structural reforms are critical to achieving the policies advanced by the EPIRA, including to ensure “transparent and reasonable prices of electricity in a regime of free and fair competition and full public accountability,” to “enhance the inflow of private capital, participation in the attendant risks, and broaden the ownership base of the power generation,” and to “ensure fair and non-discriminatory treatment of public and private sector entities in the process of restructuring the electric power industry.”³²

An illustration of the structural changes introduced by the EPIRA is provided below.

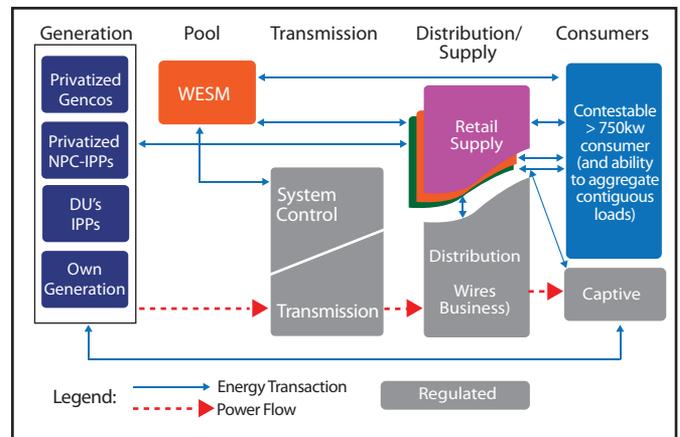
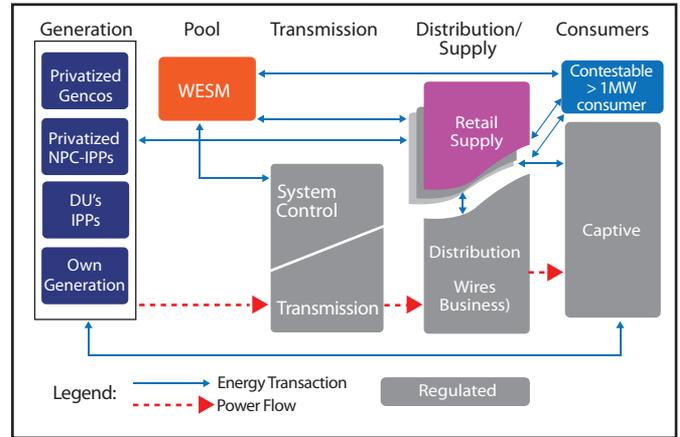
Pre-EPIRA Industry Structure



Though implementation of the EPIRA had been severely delayed,³³ by end-2012, the Power Sector Assets and Liabilities Management Corporation (PSALM) had privatized more than 70 percent of the total capacity of generating assets of NPC in

Luzon and Visayas and more than 70 percent of the total energy output of power plants under contract with NPC to the IPP administrators.³⁴

Post-EPIRA Industry Structures



³² Rule 2, Implementing Rules and Regulations of EPIRA.

³³ EPIRA mandated that 70% privatization and RCOA to be implemented within 3 years from its effectivity. The remaining assets and contracts are mandated to be privatized within 8 years.

³⁴ According to the DOE: (a) “Negotiations between PSALM and the Trans-Asia Oil (TAOil) and Energy Development Corporation for the sale of Power Barges (PBs) 101-104 were declared a failure after TAOil declined to meet the reserve price set by the PSALM Board for the power facilities”; (b) “The bidding for the procurement of a one (1)-year Operation and Maintenance Service Contract (OMSC) for the 650- megawatt (MW) Malaya Thermal Power Plant was conducted on 17 August 2012. SPC Power Corporation was the lone bidder which was declared eligible during the bidding. However, SPC was post disqualified due to some documentary deficiencies rendering the bid a failure on 29 August 2012”; (c) “The Temporary Restraining Order (TRO) on the transfer of the 218 MW Angat to Korea Water Resources Corporation (K-WATER), was lifted last 09 October 2012 by virtue of a decision/resolution issued by the Supreme Court (G.R. Number 192088) x x x”; and (d) PSALM will resume the bidding for the one-year OMSC of the 145.8-megawatt (MW) Naga Power Plant Complex on November 2012.” [“21st EPIRA Implementation Status Report” of the Department of Energy, on <http://www.doe.gov.ph/power-and-electrification/power-industry-reforms/369-status-report-on-epira-implementation>. (“DOE 21st EPIRA Status Report”)]

Generation Assets Sold³⁵

Name of Plant	Rated Capacity (MW)	Location	Bid Date	Winning Bidder	Winning Bid Price (Million US\$)
Talomo	3.5	Davao	25-Mar-04	Hydro Electric Development Corp.	1.37
Agusan	1.6	Agusan	4-Jun-04	First Generation Holdings Corp.	1.53
Barit	1.8	Camarines Sur	25-Jun-04	People's Energy Services Inc.	0.48
Cawayan	0.4	Sorsogon	30-Sep-04	Sorsogon II Electric Cooperative, Inc.	0.41
Loboc	1.2	Bohol	10-Nov-04	Santa Clara International Corp.	1.43
Pantabangan- Masiway	112	Nueva Ecija	6-Sep-06	First Generation Hydro Corp.	129
Magat	360	Isabela	14-Dec-06	SN Aboitiz Power	530
Masinloc	635		26-Jul-07	Masinloc Power Partners Ltd.	930
Ambuklao-Binga	175	Benguet	28-Nov-07	SNAP Hydro	325
Tiwi-Makban	747.53	Albay, Laguna/Batangas	30-Jul-08	AP Renewables	446.89
Panay and Bohol*	168.5	Iloilo, Bohol	12-Nov-08	SPC Power Corporation	5.86
Amlan		Negros Oriental	10-Dec-08	ICS Renewables Inc.	0.23
Calaca Coal-Fired Thermal Power Plant	600	Batangas	8-Jul-09	DMCI Holdings Inc.	361.71
PB 117*	100	Campostela Valley	31-Jul-09	Therma Marine	14
PB 118*	100	Agusan Del Norte	31-Jul-09	Therma Marine	16
Limay*	620	Limay, Bataan	26-Aug-09	San Miguel Energy Corporation	13.5
Palinpinon-Tongonan Geothermal Power Plants	305	Negros Oriental, Leyte	2-Sep-09	Green Core Geothermal Inc.	220
Naga LGBT*	61.9	Panay	16-Oct-09	SPC Power Corporation	1.01
Angat Hydro**	218	Norzagaray, Bulacan	28-Apr-10	Korean Water Resources Dev. Corp.	440.88
BacMan	150	Albay/Sorsogon	5-May-10	Bac-Man Geothermal Inc.	28.25
Bohol-Panay	166.50				
TOTAL Privatized - PHILIPPINES			4,362.23 MW		US\$3,422.15
Total Privatized in Luzon and Visayas			4,157.13 MW		US\$3,419.25
TOTAL MW to be privatized in Luzon and Visayas			4,807.13 MW		
Level of Privatization in Luzon and Visayas			86.5%		

* Turned-over IPPs

** Supreme Court declared the sale of Angat to KWDC as valid and legal

Source: PSALM

Contracted Capacities Sold³⁶

Power Plant	Contracted Capacity	Location	Winning Bidder	Winning Bid Price (USD)
Pagbilao Coal-Fired Power Plant	700MW	Quezon Province	Therma Luzon Inc.	US\$691 million
Sual Coal-Fired Power Plant	1,000MW	Pangasinan	San Miguel Energy Corporation	US\$1.07 million
San Roque Multipurpose Hydro	345MW	Pangasinan	Strategic Development Corporation	US\$450 million
Bakun-Benguet Hydro Plants	100.75MW	Benguet, Ilocos Sur	Amlan Power Holding Corporation	US\$145 million
Ilijan Combined Cycle Power Plant	1,200MW	Batangas	San Miguel Corporation	US\$870 million

³⁵ As of October 2012. [Source; DOE 21st EPIRA Status Report] The report indicates that Malaya Thermal, Cebu Thermal 1 & 2, Cebu Diesel, Bataan Thermal, and Sucat

³⁶ Source: Various

³⁷ DOE 21st EPIRA Status Report.

³⁸ Id.

³⁹ Source; DOE 21st EPIRA Status Report.

⁴⁰ The ERC is an independent, quasi-judicial regulatory body tasked to ensure the implementation of the EPIRA under Section 38 of the EPIRA.

⁴¹ Per "Joint Statement of DOE and ERC" (Undated; issued in 2012). The original commencement date for Luzon and Visayas was scheduled on December 26, 2011 under ERC Resolution No. 10, Series of 2011, dated June 6, 2011. This date was subsequently deferred under ERC Resolution No. 2011-009 dated October 24, 2011.

⁴² See related Article on Retail Competition and Open Access.

These privatization efforts have yielded approximately US\$10.21 billion in revenues for the government,³⁷ the collections from which were used principally for debt payments.

The Wholesale Electricity Spot Market (WESM), on the other hand, which commenced its initial operations in Luzon in 2006 (or five years from the EPIRA's effectivity) was integrated with the Visayas WESM in early 2011. By October 2012, the integrated WESM had a total of "124 participants comprised of 54 generating companies and 47 customer trading participants comprised of six Private Distribution Utilities (PDUs), 26 Electric Cooperatives (ECs), 13 bulk end-users and seven wholesale aggregators."³⁸ Approximately 2,636GWH, translating to 9.2 percent of the total energy consumed in the Luzon and Visayas regions, were traded in the WESM from October 2011 to April 2012, while the remaining 90.8 percent of the total volume was transacted and settled outside the market.³⁹

Finally, following the success of the government's privatization efforts, the Energy Regulatory Commission (ERC)⁴⁰ was prompted to declare on 24 September 2012, that the preconditions to retail competition and open access (RCOA) would commence on 26 December 2012.⁴¹ On 17 December 2012, the ERC issued Resolution No. 16, Series of 2012, adopting the "Transitory Rules for the Initial Implementation of Open Access and Retail Competition" (RCOA Transitory Rules),⁴² making 2013 the year of RCOA.



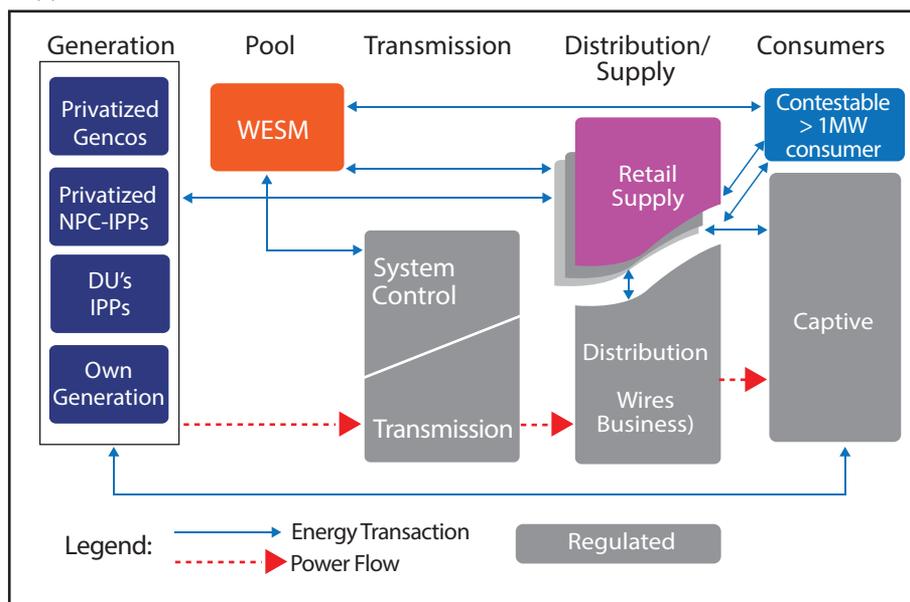
Quick Guide: The Transitory Rules on Retail Competition and Open Access

What is Retail Competition and Open Access?

One of the most significant changes introduced by the Electric Power Industry Reform Act of 2001 (EPIRA) is the introduction of retail competition and open access (RCOA). Consistent with the EPIRA's objective "to ensure transparent and reasonable prices of electricity in a regime of free and fair competition"¹, RCOA is intended to make the unregulated components of electricity tariffs more transparent and reflective of market forces. This, in turn, is meant to enhance the competitive industry landscape sought to be established by EPIRA. To successfully implement RCOA, however, certain conditions meant to ensure that a level playing field among various electricity suppliers exists must be met.



Maria Pia A. Urgello
 Internal Legal Counsel
 Office of the Internal
 Legal Counsel
 T: +63 2 885 7000 ext. 512
 E: maltea-urgello@kpmg.com



With Retail Competition and Open Access, Contestable Customers can procure their own supply of electricity from authorized suppliers rather than relying on the DU to procure it for them.

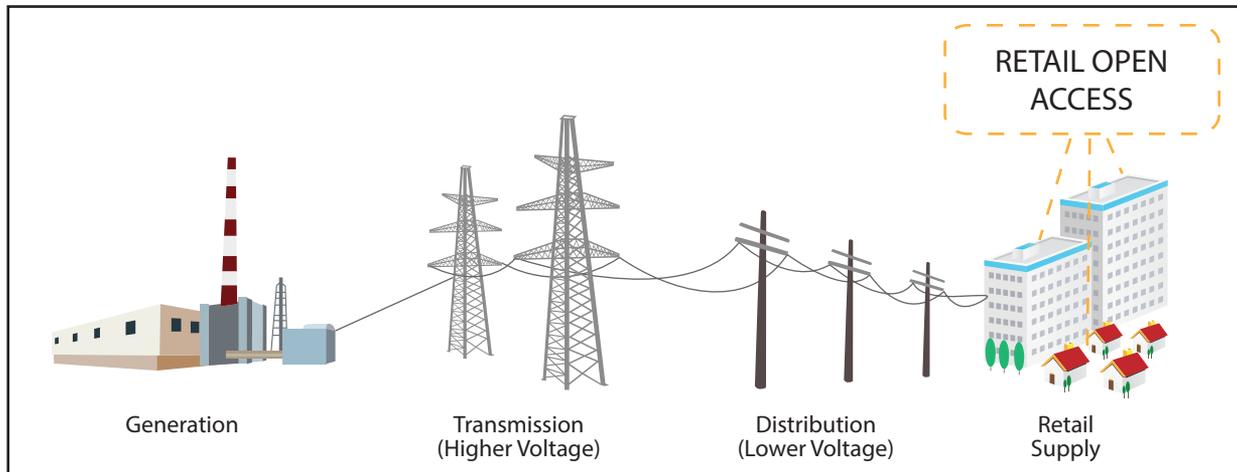
¹ Section 2(c), Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001 or "EPIRA"

Is there a difference between the terms “Retail Competition” and “Open Access”?

Though oftentimes (mistakenly) used interchangeably, the terms “Retail Competition” and “Open Access” are not synonymous.

“Retail Competition” means that eligible electricity customers (or retail customers) may themselves contract for the supply of electricity with authorized suppliers, rather than through the franchised distribution utility.²

“Open Access”, on the other hand, means that retail electricity customers and suppliers of electricity may also contract with the transmission company and the distribution company for the “wheeling” or delivery of energy/electricity through the transmission or distribution wires.³ Open Access is thus a means by which Retail Competition is achieved.



How do we ensure that true competition exists before RCOA is implemented?

The EPIRA set five pre-conditions to the implementation of RCOA in order to ensure that prior to its implementation, a level playing field exists among suppliers. These are the following:⁴

1. Establishment of the Wholesale Electricity Spot Market (WESM), which ensures that consumers (especially bulk users at the outset) have access to energy, the price of which is market-determined;
2. Approval of unbundled transmission and distribution wheeling charges, which ensures that consumers will be able to identify components of the retail rate as either non-bypassable or subject to competition. This will assist the consumer in deciding which among competitive suppliers to contract with;
3. Initial implementation of the cross-subsidy removal scheme, which ensures that no component of the retail rate which is subject to competition enjoys any subsidy, allowing for true competition to exist;
4. Privatization of at least 70 percent of the total capacity of generating assets of the National Power Corporation (NPC) in Luzon and Visayas, which is consistent with EPIRA’s requirement⁵ that no generation company may own, operate or control more than 30 percent of the installed generating capacity of a grid and/or 25 percent of the national installed capacity. Privatization up to the stated threshold ensures that NPC or the Power Sector Assets and Liabilities Management Corporation (PSALM) would not enjoy a dominant position in the market vis-à-vis private market players (or to ensure that true competition in the market would exist) upon implementation of retail competition; and

² “Retail Competition” is defined in the EPIRA’s implementing rules and regulations as “refers to the provision of electricity to a Contestable Market by Suppliers through Open Access”. This definition is virtually mirrored in Article I, Section 3, of ERC Case No. 2007-004 RM, or the Rules for Contestability, issued by the ERC on January 23, 2008. Previous to the introduction of retail competition, consumers or end-users could only be supplied through the franchised distribution utility, which, in turn, was the entity responsible for contracting for energy supply from power generators.

³ Section 4(la) of EPIRA defines “Open Access” as “the system of allowing any qualified person the use of transmission, and/or distribution system, and associated facilities subject to the payment of transmission and/or distribution retail wheeling rates duly approved by the ERC.”

⁴ Section 31, EPIRA.

⁵ Section 45, EPIRA.

5. Transfer of the management and control of at least 70 percent of the total energy output of power plants under contract with NPC to the Independent Power Producers (IPPs), which, like the previous condition, ensures true competition among generation companies in the industry.

When is the start date for RCOA?

The Energy Regulatory Commission (ERC)⁶ declared the preconditions to RCOA established by EPIRA to have been met when, on 24 September 2012,⁷ it declared that the initial implementation of RCOA would commence on 26 December 2012.

What rules govern the implementation of RCOA?

Soon after this declaration on 17 December 2012, the ERC issued Resolution No. 16, Series of 2012, adopting the “Transitory Rules for the Initial Implementation of Open Access and Retail Competition” (the “Transitory Rules”).

The Transitory Rules are meant to govern the shift to the new competitive order, which shift is anticipated to occur within six months following its issuance. This period, defined as the “Transition Period”, began on 26 December 2012 and ended on 25 June 2013.

What are the Transitory Rules about?

Principally, the Transitory Rules mandate Contestable Customers, who are currently served by distribution utilities (DUs), to “exhaust all means”⁸ to secure their supply of power by contract from a Retail Electricity Supplier (RES) or Local RES. This supply contract is called a Retail Supply Contract (RSC)⁹ and must have entered into on or before 20 May 2013.¹⁰ The Transitory Rules also provide for what happens if a Contestable Customer is unable to secure a RSC during the Transition Period and until 25 December 2013.

What is a Contestable Customer? Do I qualify?

If you are an end-user whose monthly average peak demand is equal to or greater than 1MW for the 12-month period immediately preceding 26 December 2012, then you are a Contestable Customer.¹¹ As such, you can directly contract for the supply of electricity to you by an authorized supplier.

Who are authorized to supply electricity to Contestable Customers?

An RES or Local RES authorized by the ERC.

- An RES is an entity that is licensed by the ERC to sell, broker, market or aggregate electricity to Contestable Customers.¹² It is an entirely separate legal entity from the DU.
- A Local RES, on the other hand, is the DU itself but is the non-regulated business segment of such DU.¹³ Under the EPIRA, DUs were mandated to “unbundle” their regulated (wires) and unregulated (supply) businesses. It is this latter business of the DU that can contract and perform electricity supply service to Contestable Customers. Unlike the RES, a Local RES is not required to secure a separate license from the ERC to perform supply services.

⁶ The ERC is an independent, quasi-judicial regulatory body tasked to ensure the implementation of the EPIRA under Section 38 of the EPIRA.

⁷ Per “Joint Statement of DOE and ERC” (Undated; issued in 2012). The original commencement date for Luzon and Visayas was scheduled on December 26, 2011 under ERC Resolution No. 10, Series of 2011, dated June 6, 2011. This date was subsequently deferred under ERC Resolution No. 2011-009 dated October 24, 2011.

⁸ Section 4.1, Transitory Rules.

⁹ Defined in the Transitory Rules as “The contract for the sale of electricity entered into by and between the RES/Local RES and the Contestable Customer.”

¹⁰ Section 6.2, Transitory Rules. The relevant RES/Local RES is mandated to inform the PEMC of the execution of the RSC within the period May 27-31, 2013. As of this writing, information on RSCs was not available.

¹¹ The EPIRA defines “Contestable Market” as “electricity end-users who have a choice of a supplier of electricity”. The EPIRA mandates that contestable customers are those “with a monthly average peak demand of at least one megawatt (1MW) for the preceding twelve (12) months.” Two (2) years after implementation of RCOA, the threshold level for the contestable market shall be reduced to seven hundred fifty kilowatts (750kW). At this level, aggregators shall be allowed to supply electricity to end-users whose aggregate demand within a contiguous area is at least seven hundred fifty kilowatts (750kW). Subsequently and every year thereafter, the ERC shall evaluate the performance of the market. On the basis of such evaluation, it shall gradually reduce threshold level until it reaches the household demand level. Detailed rules on contestability are provided in ERC Case No. 2007-004 RM, the “Rules for Contestability”, dated January 23, 2008.

¹² Section 3, Transitory Rules. The rules for the licensing of RES are ERC Case No. 2005-002 or The Guidelines for the Issuance of Licenses to Retail Electricity Suppliers (RES).

¹³ “Local Retail Electricity Supplier (Local RES)” is defined in the Transitory Rules as “The non-regulated business segment of the DU authorized by the ERC to supply electricity to the Contestable Customers within the DU’s franchise area only, or Persons authorized by appropriate entities to supply electricity within their respective economic zones xxx”

What happens when a Contestable Customer secures an RSC with an RES/Local RES?

A Contestable Customer that is successful in securing an RSC gets “switched” following notice to the WESM, i.e., it is “commercially transferred” from the relevant distribution utility previously serving it to the RES/Local RES. This “switching” was effected on 26 June 2013.¹⁴ This means that from this date, the terms of the RSC (including in respect of power pricing) will apply to the Contestable Customer.

What happens when a Contestable Customer is unable to secure an RSC?

A Contestable Customer that is not successful in securing an RSC or is unwilling to secure an RSC within the Transition Period has two options:

1. It may opt to source its supply of power directly through the WESM);¹⁵ or
2. It may signify its intention to remain with the distribution utility.

To opt to purchase supply from the WESM, however, the Contestable Customer must register as a Direct WESM Member. On the other hand, if the latter option is chosen, the customer shall enjoy the terms of service applicable to the Captive Market.¹⁶

What is the rate that would apply if a Contestable Customer chooses to source directly from WESM?

The rate would be the relevant clearing price from time to time in WESM.

What is the rate that would apply if a Contestable Customer chooses to stay with the DU?

The rate would be the relevant rate applicable to the DU’s Captive Market. This rate is the “blended” or average generation rate from the DU’s existing or future power supply contracts with electric power generators.

Can a Contestable Customer opt to source its supply directly from WESM or from the DU forever?

No. These options may only be exercised and may only apply until 25 December 2013. After this date, a Contestable Customer is required to source its power supply from an RES/Local RES. Failing this, a Contestable Customer shall be served by the Supplier of Last Resort (SOLR).

What happens if a Contestable Customer is unable to get a RSC but does not want to contract through WESM or stay with the DU?

Where the Contestable Customers does not signify its intent to exercise either of the options described above, its supply will be served by the SOLR.

What is SOLR?

SOLR can signify one of two things:

1. The SOLR is the entity designated by the ERC to serve Contestable Customers by “default”, i.e., in the event such customer is unable or unwilling to avail of other modes of securing its supply of power from the market. This entity is regulated by the ERC.¹⁷

During the initial phase of implementation of RCOA, the DU shall serve as the SOLR for the Contestable Market in its franchise area.¹⁸

¹⁴ Or the subsequent billing period of the Contestable Customer immediately following June 26, 2013.

¹⁵ To do this, however, the Contestable Customer must register as a Direct WESM Member. Under the WESM Rules, a Direct WESM Member registered as such is permitted to participate in the spot market for each category in which that Trading Participant is registered.

¹⁶ The “Captive Market” is defined under Section 3(c) of EPIRA as “electricity end-users who do not have the choice of a supplier of electricity.” The Transitory Rules provide a virtually identical definition. A DU is obligated to supply the Captive Market with power under the law. The terms and conditions for such supply are regulated by the ERC.

¹⁷ Section 3, Transitory Rules.

¹⁸ Article I, Section 2, SOLR Rules.

2. The SOLR could also signify the service itself of default or “back-up” supply of power to the Contestable Market where such a customer does not have a contract with the RES/Local RES or otherwise does not want to source its power from the WESM or the DU.¹⁹

This service is considered a “regulated” service and is governed by the ERC’s Resolution No. 35, Series of 2006, ERC Case No. 2006-008 RM, or the “Rules for the Supplier of Last Resort for the Contestable Market” (the “SOLR Rules”).

What is the rate that would apply to SOLR service?

The terms and conditions applicable to the supply of power through SOLR are proforma and are regulated by the ERC.²⁰ The initial SOLR rate is the higher of: (a) the applicable WESM ex-ante nodal energy price, and (b) the bilateral contract price entered into by the SOLR, plus a 10 percent premium.²¹

Under what other circumstances would a customer be supplied by the SOLR?

One other circumstance is when the RES/Local RES is unable or unwilling to continue providing service or a “last resort supply event” occurs.

What is a Last Resort Supply Event?

A Last Resort Supply Event is triggered by any of the following:

1. The RES or Local RES has ceased to operate;
2. The RES’ license has been revoked by the ERC;
3. The contract between the RES and the DU for the “wheeling” or conveyance of power through the DU’s wires is terminated;
4. The RES or Local RES is no longer permitted to trade through the WESM;
5. The RES or Local RES notifies the ERC that it will no longer provide supply services; or
6. Any other event that is analogous to the above.

How does the power that is contracted by a Contestable Customer from an RES/Local RES get delivered to it from the grid?

The RES will contract with the DU for the provision of “wheeling” services under a Distribution Wheeling Services (DWS) contract. This is part of the service that the RES provides.



¹⁹ Ibid.

²⁰ Article VII, Section 1, SOLR Rules; Section 7.1, Transitory Rules.

²¹ Article VII, Section 1, SOLR Rules.



Power Pricing in the Philippines

Generation Tariffs in the Philippines

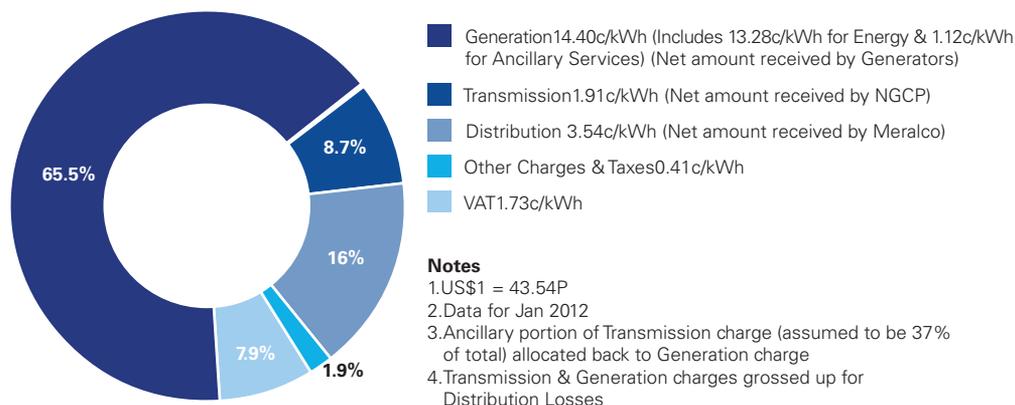
The Philippines' electricity tariffs are said to be among the highest in the world. In a study prepared by International Energy Consultants (IEC) in June 2012 and commissioned by the Manila Electric Company (Meralco),¹ Meralco's average retail tariffs,² pegged at US\$0.2026 per kilowatt-hour (kwh)³ or PhP8.82,⁴ are ranked ninth highest in the world and the second highest in Asia (next only to Japan).⁵ The biggest component of this tariff is the generation component, at 65 percent⁶ of the overall retail tariff.⁷



John Molina
 Partner
 Audit Services
 T: +63 2 894 1435
 E: johnmolina@kpmg.com

At 16% of the total and tightly controlled by the Regulator, the Distribution Charge is not a major component of Meralco's average tariff.

Weighted Average 21.99c/kWh (9.57P/kWh)



Meralco Retail Tariff Breakdown
 [Illustration source: IEC Study, 2012]

Notes

1. US\$1 = 43.54P
2. Data for Jan 2012
3. Ancillary portion of Transmission charge (assumed to be 37% of total) allocated back to Generation charge
4. Transmission & Generation charges grossed up for Distribution Losses

¹ Meralco is the largest distribution utility in the Philippines and distributes power throughout Metro Manila and neighboring provinces.

² As of January 2012.

³ Average retail tariff of residential, commercial and industrial customers. Residential tariff pegged at US\$0.2485; commercial at US\$0.2043; and industrial at US\$0.1728.

⁴ US\$1=Php43.54 as at January 2012.

⁵ International Energy Consultants, "Regional Comparison of Retail Electricity Tariffs Executive Summary," June 2012 (the "IEC Study").

⁶ Transmission charge is 9%, Distribution 16%, and VAT and other taxes and statutory charges, 10%.

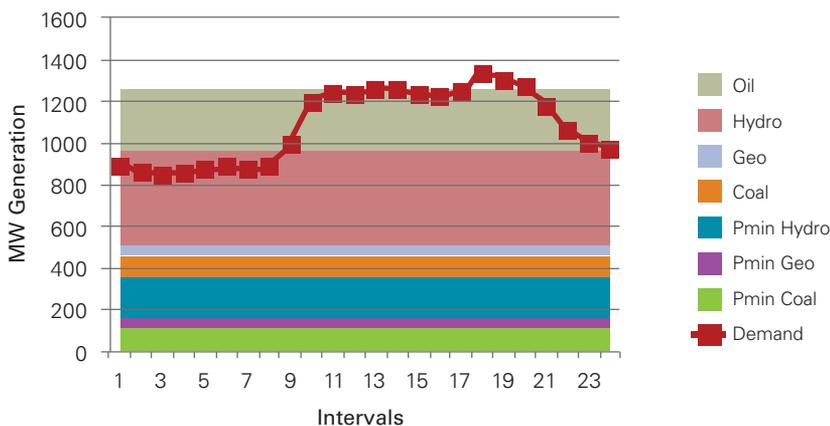
⁷ Embedded fuel costs comprise 50% of the generation component of the tariff.

Meralco’s cost of generation supply was US\$0.1440/kwh or PhP6.2697/kwh in January 2012. This reflects the blended costs of supply from its independent power producers (IPPs), its transition supply contracts (TSCs) with the National Power Corporation (NPC), and the Wholesale Electricity Spot Market (WESM), and its costs for ancillary services.

The NPC component of Meralco’s total cost of supply has averaged PhP5.6885/kwh.⁸ The WESM component of Meralco’s total costs of supply has averaged US\$0.1082/kwh or PhP4.715/kwh in 2012.⁹ At peak, however, average WESM tariffs increased to as high as US\$0.2014 or PhP8.77/kwh (the average clearing price in the second quarter of 2012).¹⁰ Meralco’s total costs (excluding ancillary services) are approximately US\$0.1328/kwh.

Many bemoan this ostensibly higher cost of supply compared to our Asian neighbors. The IEC points out, however, that this means that in the Philippines, our power supply tariffs reflect actual costs of supply. Our Asian neighbors, Thailand, Indonesia, Malaysia, Korea and Taiwan, on the other hand, enjoy government subsidies that reduce their average tariffs.¹¹ These subsidies take the form of government-imposed tariff and fuel cost caps and direct government subsidies for utility losses, including forex losses, which the IEC considers “bad economic practice and ultimately unsustainable.”¹²

Another significant contributing factor to the high supply cost is the intrinsically high cost of producing and delivering electricity in Luzon, and the Philippines generally, because of the country’s dependence on imported fossil fuels. As of end-2011, imported oil and coal plants comprised 49 percent of the energy mix.¹³ Fuel for these plants is paid at full international market prices. In addition, domestic gas plants (which comprise approximately 18 percent of the energy mix as of end-2011) are supplied indigenous natural gas at prices which are pegged to international prices.¹⁴ The IEC states that this state of affairs is unlikely to change in the near future, absent the discovery of cheap domestic fossil fuel alternatives.¹⁵



Illustrative dispatch graph showing dispatch of coal and oil-fired power plants in Luzon.

According to the IEC, however, the Philippines’ tariffs which are driven by supply costs is “sound economic policy”. Indeed, a fully cost-reflective tariff structure insulates consumers from price shocks and protects investors and developers from cost recovery risks.

⁸ From May to October 2012. [Source: “21st EPIRA Implementation Status Report” of the Department of Energy, on <http://www.doe.gov.ph/power-and-electrification/power-industry-reforms/369-status-report-on-epira-implementation>.]

⁹ In the Visayas, average clearing prices in each quarter of 2012 were Php3.83, Php5.66, Php4.37, and Php4.92/kwh and as high as Php8.74/kwh at peak (2Q 2012). [Source: WESM]

¹⁰ The highest clearing price over the last 3 years (or since 2010) was recorded in the first quarter of 2010, when the peak price rose to an average high of Php11.12 per kwh. [Source: WESM]

¹¹ IEC Study.

¹² Id.

¹³ DOE Power Statistics 2011.

¹⁴ IEC Study.

¹⁵ The effects of our dependence on imported fuels are exacerbated by, among others, the relatively small grid sizes in the Philippines, the fact that the Philippines is an archipelago (which translates to higher transmission costs and other transmission-related challenges), and higher financing costs. [Source: IEC Study]



2013: The Year of Renewable Energy in the Philippines

Renewable energy maintains its attractive market position amidst challenges. What does it take to succeed in this developing sector?



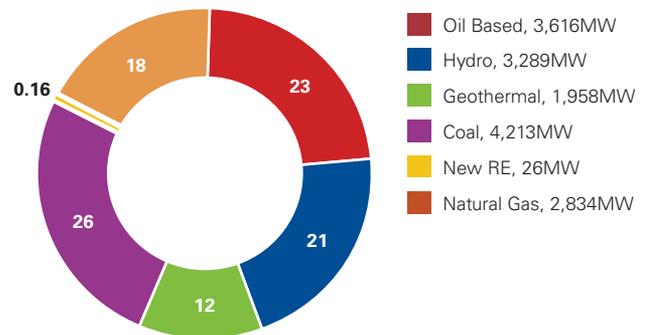
Michael Arcatomy H. Guarin
 Head of Transactions & Restructuring,
 Advisory Services
 T: +63 2 894-1779
 E: mguarin@kpmg.com

Republic Act No. 9513, or the Renewable Energy Act of 2008, was passed into law on 28 July 2008 (RE Law).¹ Perhaps among the most significant policies of the law, is to “accelerate the exploration and development of renewable energy resources ... to achieve energy self-reliance ... to reduce the country’s dependence on fossil fuels and thereby minimize the country’s exposure to price fluctuations in the international markets²...”, particularly in electricity generation.³

This landmark legislation did not come too soon. In the year prior to the RE Law’s passage, 49 percent of

the Philippines’ total installed generating capacity was fueled by imported coal and oil⁴; only 0.16 percent of the mix was fueled by new and emerging renewable energy (i.e., wind and solar). This dependence on imported sources of energy makes the country vulnerable to price shocks in the international markets.⁵ Figure 1 shows installed capacity by fuel type in 2007.

Figure 1:⁶
 Philippines Installed Generation Capacity by Fuel Type (2007)



¹ DOE Department Circular No. DC2009-05-0008, or the Rules and Regulations Implementing Republic Act No. 9513, was issued in 2009.

² Section 2, RE Law [Underscoring supplied].

³ The law, though it does not say so explicitly in its statement of policy, is meant principally to encourage the exploitation of RE resources for electricity generation and virtually all its provisions (including in respect of RE-use incentives) refer and relate to electric power generation.

⁴ In Luzon, the capacity mix in 2007 was 31% coal, 19% MW oil-based (diesel, oil-thermal, gas turbine), 23% natural gas, 7% geothermal, 19% hydro, and 0.2% wind. In Visayas as of the same year: 11% coal, 36% oil-based (diesel, oil-thermal, gas turbine), 53% geothermal, and 1% hydro. In Mindanao: 12% coal, 31% oil-based (diesel, oil-thermal, gas turbine), 6% geothermal, 52% hydro, and 0.1% solar. Source: DOE Power Statistics 2011.

⁵ Among others, this discourages capital formation or investments in energy intensive sectors such as manufacturing, as volatility in the cost of the sector’s main input makes operations difficult.

⁶ DOE Power Statistics 2011.

This energy mix does not reflect the country’s untapped renewable energy potential for electric power generation, which has been pegged by the Department of Energy (DOE) at no less than 250,000MW.⁷ Table 1 shows RE potential by RE resource.

Table 1:
RE Potential by Fuel Type⁸

Fuel Type	Potential Capacity, Grid Use (in MW)
Hydro Power	10,000
Ocean Energy	170,000
Geothermal	4,000
Wind	76,600
Solar	5kWh/m ² /day
Sugar cogen, rice husk, and coconut revenues	500

There are suggestions that this capacity can “save government money, create wealth, generate thousands of jobs, make electricity available and more affordable to all Filipinos, and promote national energy independence.”⁹ However, despite its widely acknowledged potential economic – and not to mention, ecological – benefit, there has been a scarcity of investments in renewable energy. This is attributed largely to the fact that building renewable power plants can be cost prohibitive versus, say, building a coal or oil-fired plant. This is compounded by the absence of a ready and guaranteed market for the output of RE power plants. Another underlying concern is that, in an environment where electricity rates have historically been a highly political issue, the recovery of these costs through electricity tariffs and the contracts that underpin them can be prone to public scrutiny, criticism, and governmental interference.

The RE Law was meant to address the incongruity between installed capacity and RE potential, through measures and policies that make RE power generation more attractive to investors and that help mitigate the significant economic, market, and regulatory risks attendant to building and operating

power plants utilizing renewable energy. Some of these measures are the Feed-In Tariff (FIT) scheme,¹⁰ priority connection to the grid,¹¹ “must dispatch” for intermittent RE plants,¹² and the law’s many fiscal and non-fiscal incentives to RE developers.¹³

DOE’s RE targets are ambitious.

Under the state’s National Renewable Energy Program (NREP),¹⁴ the DOE seeks to increase the RE-power based capacity of the country to 15,304MW by year 2030, or three times the 2010 capacity-level. On a per technology basis, the NREP seeks a 75 percent increase in geothermal capacity, 160 percent increase in hydropower capacity, 277MW additional capacity in biomass power, wind power “grid parity” with the commissioning of 2,345MW additional wind capacity, an additional 248MW of solar power capacity (plus an “aspirational” solar target of 1,528MW of additional capacity), and to developing the first ocean energy facility for the country.¹⁵ As a critical milestone to meeting these targets, 2,155MW of additional capacity must be installed by 2015, or two years from now, according to the NREP.¹⁶

⁷ Source: Department of Energy. According to Greenpeace, in its 2013 report, “Green is Gold: How Renewable Energy can save us money and generate jobs,” the Philippines’ untapped renewable energy potential stands at 261,000MW.

⁸ Renewable Energy Management Bureau, DOE, NREB Presentation on RA 9513 to the ENERCOM.

⁹ “Philippines is a green goldmine, says Greenpeace,” January 26, 2013, <http://philippines.ucanews.com/2013/01/26/philippines-is-a-green-goldmine-says-greenpeace/> (Citing Greenpeace report, “Green is Gold: How Renewable Energy can save us money and generate jobs”)

¹⁰ Section 7, RE Law. See discussion later on the FIT.

¹¹ Id. This means that the grid operator is mandated to connect (and allot connection points in substations) a RE plant to the grid to enable the plant to inject energy into the grid.

¹² Section 20, RE Law. This means that energy from intermittent RE plants get priority in dispatch of its energy to the grid over non-intermittent and fossil-fueled plants.

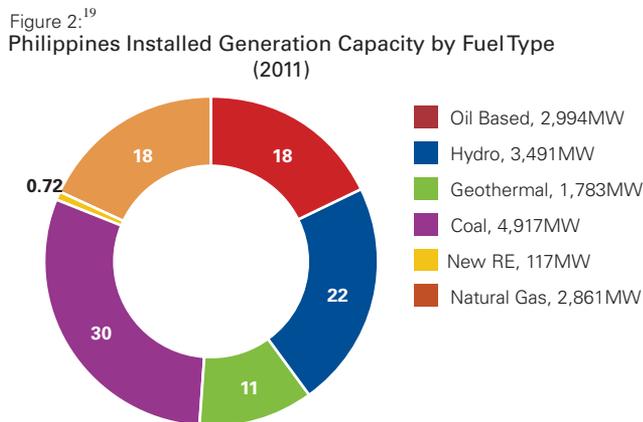
¹³ Chapter VII, RE Law.

¹⁴ “Renewable Energy Plans and Programs, 2011-2030,” <http://www.doe.gov.ph/nrep/index.asp?opt=nrepbook>

¹⁵ Based on MW capacities under service contracts issued by the DOE as of 2010. “Renewable Energy Plans and Programs, 2011-2030,” <http://www.doe.gov.ph/nrep/index.asp?opt=nrepbook>

¹⁶ Id.

On the whole, achievements in increasing renewable energy capacity have been modest. As of end-2011, the share of new and emergent renewable energy plants in the country¹⁷ increased by only 0.60 percent from 2007 (to 0.72 percent), even as imported oil and coal plants maintained their share in the energy mix (at 49 percent) over the same period.¹⁸ Figure 2 shows installed capacity by fuel type in 2011.



Source: <http://www.doe.gov.ph/electric-power-statistics/philippine-power-statistics/1989-2011-philippine-power-statistics>

The obstacle to the country’s fully realizing the benefits of renewable energy through the installation of RE generation capacity is not the lack of investor interest in the sector. On the contrary, from 2008 (the year of the RE Law’s passage) to end-2012, a total of 300 service contracts for projects totaling more than 5,600MW of capacity were applied for and awarded by the DOE.²⁰ A further 193 were pending approval as of the end of 2012.²¹ Table 2 shows the number of awarded service contracts by fuel type and Table 3 shows the number of pending service contract applications, both as of end-2012.²²

Table 2:

Awarded Projects Under Renewable Energy (RE) Law

RESOURCES	AWARDED PROJECTS		POTENTIAL CAPACITY MW		INSTALLED CAPACITY MW	
	Grid-Use	Own-Use	Grid-Use	Own-Use	Grid-Use	Own-Use
Hydro Power	165		2,606.70		123.22	
Ocean Energy	3		5.00			
Geothermal	33		785.00		1,902.69	
Wind	39	1	1,569.00	0.006		
Solar	33	2	497.715	0.62		
Biomass	27	22	186.30	32.70	199.35	182.78
Sub-Total	300	25	5,649.715	33.326	2,145.26	182.78
TOTAL	325		5,683.041		2,328.04	

Source: <http://www.doe.gov.ph/summary-of-projects/1879-summary-projects-december-2012>

¹⁷ In Luzon, the capacity mix in 2011 was 33% coal, 15% oil-based (diesel, oil-thermal, gas turbine), 24% natural gas, 6% geothermal, 21% hydro, 0% wind, and 0% biomass. In Visayas as of the same year: 34% coal, 26% oil-based (diesel, oil-thermal, gas turbine), 38% geothermal, 1% hydro, and 2% biomass. In Mindanao: 11% coal, 31% oil-based (diesel, oil-thermal, gas turbine), 5% geothermal, 51% hydro, and 1% biomass. Source: DOE Power Statistics 2011.

¹⁸ DOE Power Statistics 2011.

¹⁹ Id.

²⁰ Source: Department of Energy. Covers only plants to supply the grid. Another 25 contracts for approximately 33MW were issued for own-use plants.

²¹ Source: Department of Energy.

²² Id.

Table 3:

Awarded Projects Under Renewable Energy (RE) Law

RESOURCES	AWARDED PROJECTS		POTENTIAL CAPACITY MW		INSTALLED CAPACITY MW	
	Grid-Use	Own-Use	Grid-Use	Own-Use	Grid-Use	Own-Use
Hydro Power	137		1,917.41			
Ocean Energy	2					
Geothermal	5		60.00		-	
Wind	23		442.00		33.00	
Solar	15	1	57.83	0.02		
Biomass	7	2	88.40	1.05	15.70	-
Sub-Total	190	3	2,565.64	1.07	49.70	-
TOTAL	193		2,566.71		49.70	

Source: <http://www.doe.gov.ph/summary-of-projects/1879-summary-projects-december-2012>

One of the key problems has been regulatory delay and the accompanying uncertainty in respect to the nature and extent of the economic and other risks developers will have to assume in building and operating their power plants.²³

A case in point is the delay in implementation of the FIT scheme, a groundbreaking renewable energy policy under which an eligible RE plant shall be entitled to a guaranteed payment of a fixed rate called the feed-in tariff (which varies only among types of resource) for each kilowatt-hour of energy it supplies to the relevant grid.²⁴ Payment of the FIT is funded from collections of a uniform charge called the FIT Allowance or FIT-All that shall be payable by all electricity consumers.²⁵ As a guaranteed rate, the FIT is an effective measure to mitigate market and price volatility risks for investors and thus make RE power plant development economically feasible (even attractive) and financeable. However, implementing regulations on the FIT were issued by the Energy Regulatory Commission (ERC) only on 12 July 2010, or almost two years²⁶ after the passage of its enabling law. It took another two years for the ERC to establish in July 2012 the FIT rates applicable to each type of renewable energy resource covered by the RE Law. In addition, some of these ERC-established rates, for wind and solar, for example, were significantly lower than those applied

for by the National Renewable Energy Board (NREB).²⁷ The ERC has yet to commence the consultative process for approval of the FIT-All rate, which is essential to the full implementation of the FIT scheme.

2013 promises, however, to be the banner year for renewable energy.

After a series of public consultations held beginning in 2012, the ERC is expected to issue the FIT payment and collection guidelines by late 2013. These guidelines will provide the procedural framework for the payment of the applicable FIT to RE developers, and the collection from end-users of the FIT-All that will fund such payments.

The undertaking to issue these guidelines is crucial to the success of the RE Law and the FIT. The guidelines must address not only the fundamental procedural questions of who pays and collects, when, how much, and how (and the difference in the processes among the different grids), but must also address some significant risks for developers, including, among others, the risk that FIT-All collections may not be sufficient to pay the FIT to all RE developers. This could arise out of, among others, failure in collection and errors in forecasting. Another risk that the guidelines must address is the regulatory “lag” in the setting of the FIT-All rates for the years following the

²³ This, despite the NREP's avowed objective to “[promulgate] remaining policy mechanisms, rules under the RE Law ... by end-2011.”

²⁴ ERC Resolution No. 16, Series of 2010, “Resolution Adopting the Feed-in Tariff Rules” (the “FIT Rules”).

²⁵ Id.

²⁶ The FIT Rates were established on 27 July 2012 through ERC Resolution No. 10, Series of 2012.

²⁷ The ERC approved rates are P5.90 per kilowatt hour (kWh) for run-of-river hydro, P6.63 per kWh for biomass, P8.53 for wind and P9.68 for solar. The rates are lower than the rates proposed by the National Renewable Energy Board in its filing on May 16, 2011 of P6.15 per kWh for run-of-river hydro, P7 for biomass, P10.37 for wind, and P17.95 per kWh for solar.

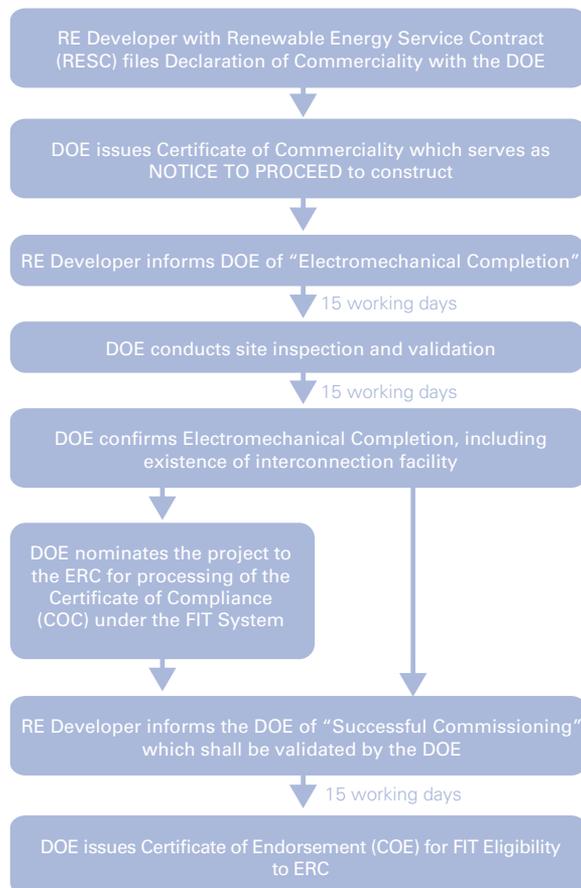
initial year of FIT-All implementation. It remains to be seen how the ERC will tackle these issues in the final guidelines. However, the expectation at least is that the ERC is intent on issuing these final guidelines before year-end 2013 – a positive development that many believe may finally jumpstart the much-delayed implementation of the RE Law.²⁸

Another significant development in 2013 concerns the issue of FIT “eligibility”. FIT eligibility is critical as only a limited number of projects for each RE resource can and will be entitled to the benefits of the FIT rates established for the first three years of implementation – i.e., the DOE approved installation “targets” (or capacity “caps”) of only 250MW for run-of-river hydro, 250MW for biomass, 200MW for wind, 50MW for solar PV and 10MW for ocean technology in 2011.²⁹

In early February 2013, the DOE announced a “first come-first served” policy in respect of entitlement to the FIT that is hoped would weed out the speculators from the more serious energy players. Secretary of Energy Carlos Jericho Petilla explained that, “Feed-in tariff allocation will be given to the first developers who first commence commercial operation.”³⁰ Following the announcement of the “first come-first served” policy in February, this policy was subsequently confirmed through the issuance on 28 May 2013 of DOE Department Circular No. DC 2013-05-0009, or the Guidelines for the Selection Process of Renewable Energy Projects under Feed-In Tariff System and the Award of Certificate for Feed-In Tariff Eligibility (the “Eligibility Guidelines”). The Eligibility Guidelines lay down the

criteria and process by which RE developers holding RE service contracts shall qualify to avail of the FIT. The process is illustrated in Figure 3 below.

Figure 3: ³¹



²⁸ Following the issuance of the FIT payment and collection guidelines, the ERC will commence the process for the approval of the template renewable energy payment agreement or “REPA”.

The REPA is the contract to be executed between the RE developer and the designated FIT Administrator (presently designated as the National Transmission Corporation or “TRANSCO”) that shall establish the commitment of the FIT Administrator in respect of the payment of the applicable FIT. The REPA will include, as a party, in the case of embedded generators, the relevant distribution utility / electric cooperative, retail electricity suppliers, and, in the case of directly-connected customers, the National Grid Corporation of the Philippines.

The ERC is also expected to commence the process for approval of the FIT-All.

²⁹ “Resolution Approving Final Installation Targets” issued by the DOE on June 28, 2011.

³⁰ “1st renewable projects to get tariff allocation,” February 13, 2013, Manila Standard Today, <http://manilastandardtoday.com/2013/02/13/1st-renewable-projects-to-get-tariff-allocation/>

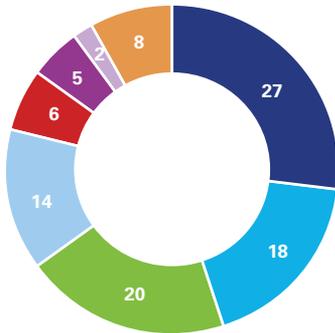
³¹ “Electromechanical Completion” is defined as that state of construction of the RE plant when “the whole plant including all substation and other facilities for grid or distribution system connection is in place but not yet connected and the RE project is ready for commissioning.” This is deemed attained when at least 80% of the plant is completed pursuant to the relevant construction contract. “Successful Commissioning”, on the other hand, is defined as the state at which the RE Plant is “physically connected to the Grid ... or to the Distribution Network ... and delivering power to the transmission system.” [See Eligibility Guidelines]

The Players: Philippine Power Industry

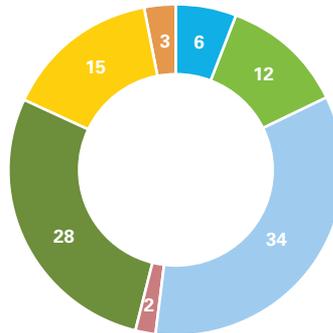


Paul Patrick R. Afable
 Senior Manager
 Transactions & Restructuring
 Advisory Services
 T: +63 2 885 7000 ext. 767
 E: pafable@kpmg.com

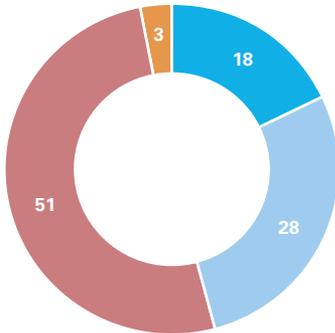
Luzon Market Share



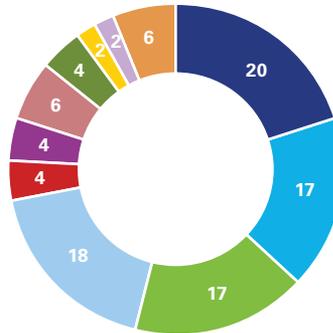
Visayas Market Share



Mindanao Market Share



Philippine Market Share



- San Miguel Energy Corp.
- Aboitiz Power Corp.
- First Gas/First Gen.
- PSALM
- AES Transpower
- SEM Calaca
- NPC
- Global Business Power Corp.
- Salcon Phils./Atlas
- K-Water
- Others

Player Market Share per Grid ¹

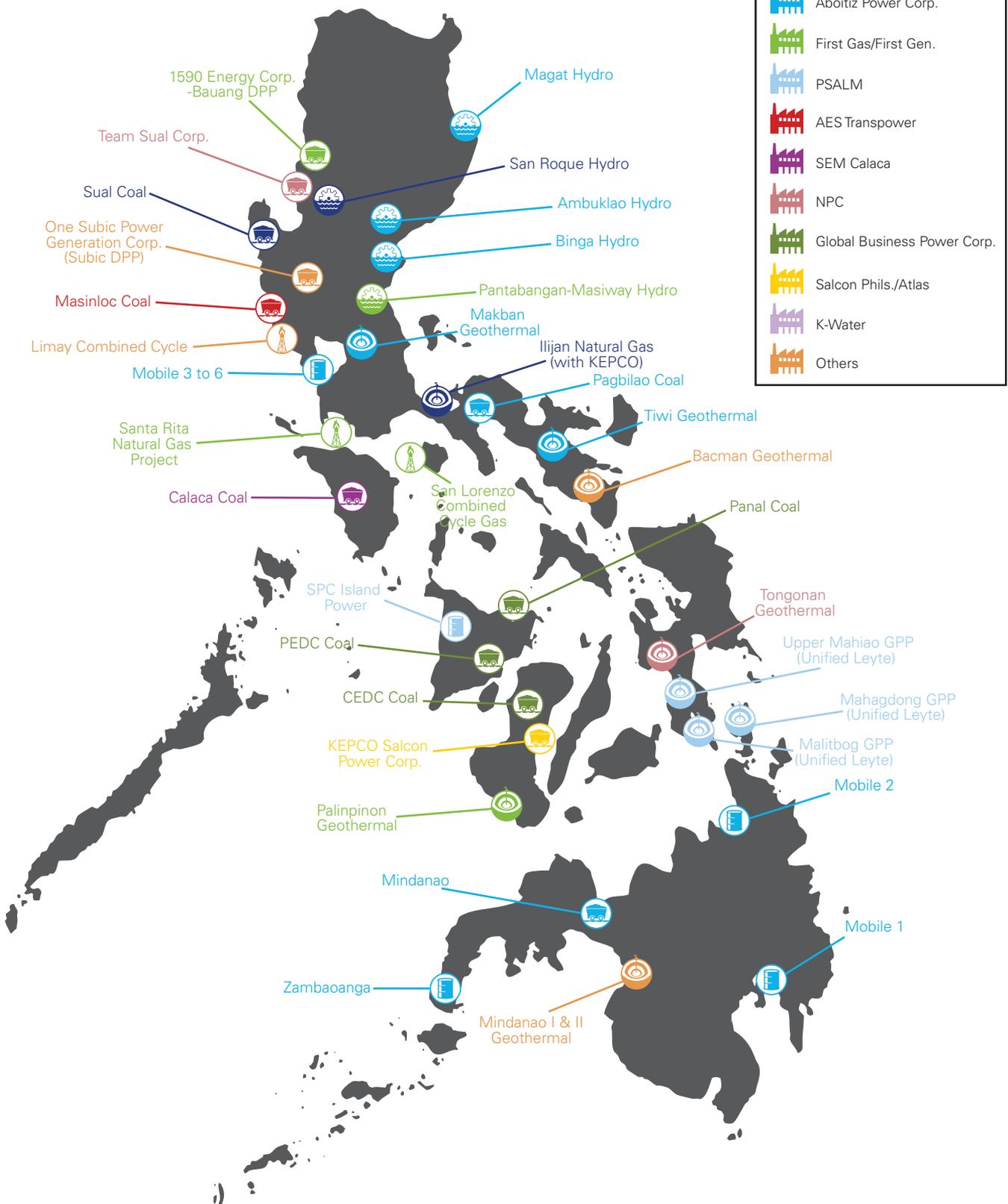
Source: Department of Energy - Energy Forum Presentation October – November 2012

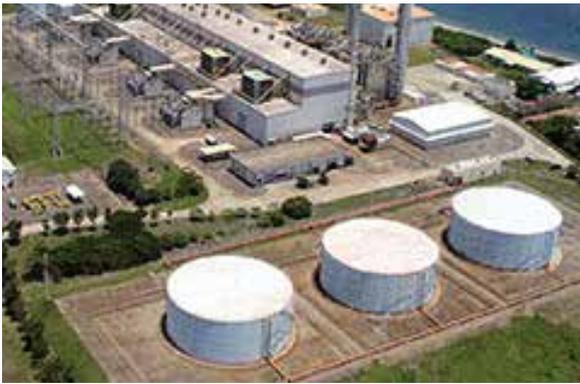
The national installed generating capacity is dominated by San Miguel Energy Corporation (SMEC). The energy vehicle of beverage and food giant, San Miguel Corporation (SMC), SMEC controls an aggregate of 2,545MW of capacity. In its portfolio are the 1,200MW natural-gas fired Ilijan power plant owned by KEPCO Ilijan Corporation, the 1,000MW Sual coal-fired power plant owned by TeaM Energy (a joint venture between Tokyo Electric and Marubeni), and the 345MW San Roque hydropower plant owned by Strategic Power Development Corporation, all in Luzon. These make SMEC the biggest player likewise in the Luzon grid.

Second to SMEC in the Luzon grid in installed capacity is First Gen Corporation (First Gen). The energy vehicle of infrastructure, energy, manufacturing, and real estate conglomerate First Philippine Holdings Corporation (FPH) of the prominent Lopez family of Iloilo, First Gen boasts a 1,740MW portfolio comprised of the combined 1,556MW Santa Rita and San Lorenzo natural-gas fired power plants in Batangas City (which are supplied natural gas from the Malampaya natural gas field in offshore Palawan), the 132MW Pantabangan-Masiway hydropower plant complex in the province of Nueva Ecija, and the 52.5MW Bacon-Manito geothermal power plant in Sorsogon.

¹"21st EPIRA Implementation Status Report" of the Department of Energy, on <http://www.doe.gov.ph/power-and-electrification/power-industry-reforms/369-status-report-on-epira-implementation>.

Top Power Producers in the Philippines

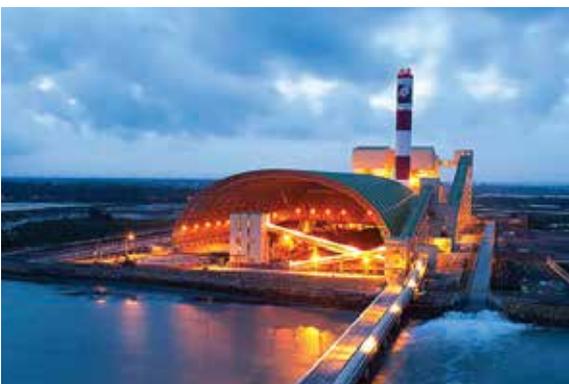




The 1,200MW Ilijan Natural Gas Power Plant under IPPA with SMEC is the largest electricity-generating facility in the Philippines that uses domestic fuel. [Photo courtesy of San Miguel Energy Corporation]



The 360MW Magat HEPP of SN Aboitiz Power – Magat, Inc., a joint venture between Aboitiz Power Corporation and SN Power Invest AS of Norway. [Photo courtesy of Aboitiz Power Corporation]



The 164MW Clean Coal-Fired Power Plant of GBPC, through subsidiary Panay Energy Development Corporation, in Iloilo City. [Photo courtesy of Global Business Power Corporation]

Aboitiz Power Corporation is the holding company for the Aboitiz Group's investments in energy and occupies third place in MW capacity in Luzon. The Aboitiz Group boasts a formidable portfolio with an aggregate capacity of 1,704MW. This includes the Tiwi and Mak-Ban geothermal power plants, with an aggregate capacity of 401MW, and the Ambuklao, Binga and Magat hydroelectric power plants, with aggregate capacity of 603MW. The Aboitiz Group is the industry leader in hydropower. The Aboitizes also control the capacity of the 700MW Pagbilao coal power plant in Quezon province.

Rounding out the Luzon Top 5 are single asset players, AES Masinloc (with 625MW) and SEM Calaca (600MW).

In the Visayas, the NPC/PSALM (the National Power Corporation and the Power Sector Assets and Liabilities Management Corporation created under the EPIRA in 2001) continues to be the biggest player, as it controls the capacity of the 700MW Unified Leyte Geothermal complex owned by Energy Development Corporation (EDC, a subsidiary of First Gen and the second largest geothermal energy producer in the world). The independent power producer administrator (IPPA) contract for the Unified Leyte complex is up for privatization, though, and the winning bidder will find itself in a formidable position in the grid.

Following NPC/PSALM is Global Business Power Corporation (GBPC), Metrobank Group's power generating business venture among GT Capital, First Metro Investment Corporation and Orix Corporation. GBPC owns nine power generation facilities in the Visayas region and Mindoro Island, with a combined installed capacity of 627MW.

In third place in Visayas is First Gen through its EDC-owned 253MW Palinpinon-Tongonan Geothermal power plants. It is followed by the Aboitiz Group with 115MW.

As in the Visayas, NPC continues to control approximately 90 percent of the Mindanao grid. As the privatization process in this grid continues to be contentious, Aboitiz continues to be the leading private player through its power barges and small hydroelectric power plants with an aggregate capacity of 249MW.

However, by 2015, a new leader in Mindanao is expected to emerge. Upon completion of its planned 100MW Iligan Diesel Power plant in 2013 and its 200MW Saranggani Coal Project in 2015, the Alcantara Group will lead the pack.



Value Added Tax in the Energy Sector



Emmanuel P. Bonoan

Chief Operating Officer
Vice Chairman for Tax
T: +63 2 885 0602
E: ebonoan@kpmg.com

The energy sector and the value added tax (VAT) have been, from the time of the sector's inclusion in the VAT system, uncomfortable bedfellows. When, in a sweeping reform of the VAT system in 2004, the Department of Finance (DOF) first proposed to Congress a bill removing electric generation, transmission and distribution services from a long list of exempt and zero-rated services, public backlash to this proposal almost derailed the bill's passage into law. This is not surprising: given the politically-sensitive nature of electricity prices, the VAT was characterized as regressive and anti-poor. Indeed, a few years earlier, the Electric Power Reform Act (EPIRA)¹, which deregulated and privatized government energy assets, specified that generation of electric power was to be VAT zero-rated for the stated purpose of ensuring affordable power. After contentious congressional debates, dire predictions of social unrest by pundits, and a constitutional challenge in the Philippine Supreme Court, the VAT Reform Act was implemented in November 2005. This notwithstanding, proposals to repeal the VAT on energy-related services would intermittently surface in Congress - with two proposals being successful. Moreover, VAT's administrative implementation within the energy sector has been challenging, given the structure of the industry, the physical properties of power (which is instantaneous and not capable of being stored), and the different VAT rates enjoyed by end-users. Nonetheless, the VAT is widely recognized as having significantly improved government finances by widening the tax base, which in turn gained better credit ratings for the Philippines and helped the country weather the international economic crisis of 2008.

Evolution of VAT in the power industry

The evolution of the application of VAT to the electric power industry first began shortly after EPIRA, another major reform initiative of the government involving the power industry. Prior to 2001, the government owned most electric power assets in the generation and transmission sector through the National Power Corporation (NPC), a government-owned corporation that enjoyed

national government incentives, such as financial guarantees and exemptions from all types of taxes, including VAT². As a result of severe power shortages in the latter part of the 1980s until the early 1990s, the government allowed private generation companies (also called independent power producers, or IPPs) to supply power to NPC. Given the urgency of the need for power, many of the contracts that NPC entered into with IPPs

¹ Republic Act No. 9136 (the "EPIRA").

² Distribution was (and still is) handled by public utilities operated by the private sector companies or by electric cooperatives.

provided for take-or-pay arrangements, which mandated NPC to pay for the contracted power at a pre-determined price, whether the power was utilized or not. The ultimate liability for these purchases fell on the national government. EPIRA, in fact, authorized the Philippine government to assume³ the liabilities of NPC arising from these arrangements to the extent of US\$4.65 billion. This subsidy to NPC was seen as a necessary step to ensure the success of the privatization effort.

Initially, the increase in the government's expenditures in the power sector was not offset by its revenues from the sector. One of EPIRA's aims – that of providing “affordable” electricity - was to conflict with government's expenditure and revenue management efforts, since, to cushion the cost of electricity to end-users, EPIRA authorized a VAT rate of zero percent (as opposed to the then regular rate of ten percent) on the sale of generated power.⁴ This was to change in 2005 upon the implementation of the VAT Reform Act, which imposed the regular rate of VAT on the generation, transmission, and distribution of electricity.⁵ The VAT Reform Act also increased the regular VAT rate to 12 percent. Government was later to soften its stance with respect to renewable energy (RE) development and the transmission of electricity. Currently, VAT zero-rating has been restored on the generation of the electricity through RE sources⁶ and applied to the National Grid Corporation of the Philippines (NGCP), which was granted the franchise for the conveyance and transmission of electricity.⁷

Challenges in implementation

Since the application of the VAT to the energy sector in 2005, some administrative challenges remain. As a background, the Philippines adopts the credit invoice method of VAT whereby a taxpayer can credit the VAT on its purchases (input VAT) against the VAT on its sales (output VAT). A resulting

positive difference shall be the VAT payable to government, while a resulting negative difference can be used as a credit against future VAT payables or (in the case of a VAT tax credit certificate), be applied against other internal revenue taxes. In general, there are three different VAT rates:

- twelve percent on the gross selling price in the case of sales of property⁸ or gross receipts in the case of sale of services⁹
- zero percent in the case of sale of goods or services when specified by law (e.g., see note 4; also sales to persons who are VAT exempt such as those entities registered with the Philippine Economic Zone Authority)
- five percent final VAT to be withheld by a government entity in the case of sale of goods or services to it.¹⁰

One recent issue that the electric power industry faced is that of VAT on generation charges that are the obligation of a non-RE generation company to remit to the Bureau of Internal Revenue (BIR), the Philippine tax authority, but whose collection from the end-user is done by a distribution utility (DU) or an electric cooperative (EC). In this situation, the DU or the EC is merely a pass-through entity of the VAT it collects from the end-user.¹¹ Thus, one BIR circular states that the DU or EC had only to remit the VAT to the generator after its collection from the end-user. The risk of its non-remittance (and therefore, underpayment of taxes) fell on the generators as when the end-user: (1) defaults on its electricity bill, (2) is a government entity, sales to which are subject to five percent final VAT, or (3) is registered with the Philippine Export Zone Authority (PEZA), sales to which are subject to a VAT rate of zero. Because of these circumstances, VAT liabilities of generation companies to government continuously accrued without, however, government collecting on their VAT targets from the sector.

³ Section 32 (third paragraph), EPIRA. At the same time, Section 68 of EPIRA mandated the review of IPP contracts found to be “grossly disadvantageous” or “onerous” to the government.

⁴ Section 6 (fifth paragraph) of the EPIRA states: “Pursuant to the objectives of lowering electricity rates to end-users, sales of generated power by generation companies shall be value added tax zero-rated.”

⁵ Section 108(A), National Internal Revenue Code or Republic Act No. 8424 (the “Tax Code”), as amended by R.A. 9337. It is estimated that the wider VAT base resulted in incremental revenues of 1.3% of GDP, raised the government tax effort to 14.3% by 2006, and brought down the budget deficit to near balanced levels by 2006. (Explaining the Odds: Reform Process of the RVAT, Romeo Bernardo and Christine Tang, *Managing Reforms for Development: Political Economy of Reform and Policy-Based Lending Case Studies*, Asian Development Bank, Manila, 2013. <http://www.adb.org/publications/managing-reforms-development-political-economy-reforms-and-policy-based-lending-case-studies>)

⁶ Section 15(g), The Renewable Energy Act or Republic Act No. 9513.

⁷ Section 9, Franchise of the National Grid Corporation of the Philippines or Republic Act No. 9511

⁸ Section 106, Tax Code.

⁹ Section 108, Tax Code.

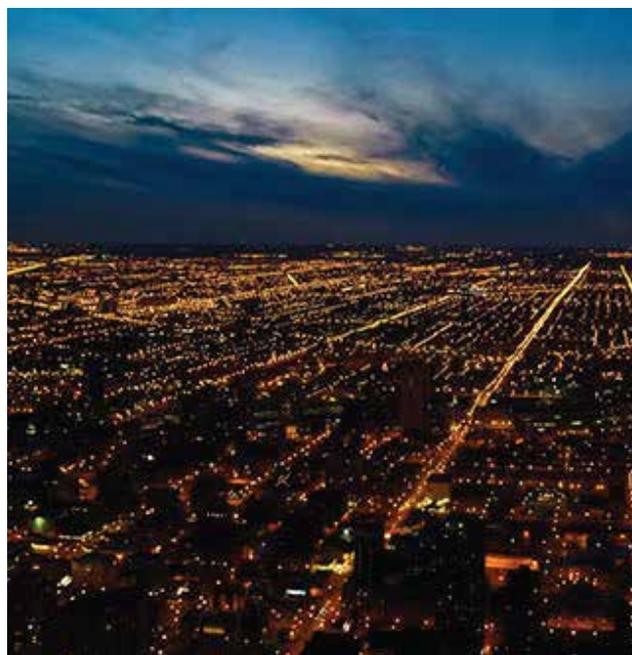
¹⁰ Section 114(C), Tax Code.

¹¹ Revenue Memorandum Circular No. 61-05 (27 October 2005).

A subsequent BIR circular then deemed all remittances by DUs or ECs to the generation companies as inclusive of VAT.¹² Furthermore, it required the DUs and ECs to pay the VAT “upfront”, the implication being whether or not the DU or EC collected the equivalent of the twelve percent VAT from the end-user.¹³ Finally, in response to concerns of the industry, BIR clarified that the DUs and ECs are only required to remit the VAT that they collected from end-users, but that the BIR would audit the DUs and ECs remittances to the generation companies.¹⁴ While this has alleviated some of the concerns of the industry players, a lasting solution will require them to come together to reconcile VAT accounts in a more unified manner.

Moving forward

The balance of providing affordable energy to a dynamic economy and raising revenue to fund increasing public spending is clearly evident in how the VAT has played out. Whereas EPIRA’s policy was to provide tax subsidies to end-users via a zero percent VAT rate, the stark realities of government finances subsequently resulted in the application of the current standard twelve percent VAT rate on all sectors of the industry (though this was tempered by the grant of zero-rating to generation of RE and to the transmission sector). Presently, the VAT is widely recognized as having significantly improved government finances by widening the tax base and contributing to economic growth. Thus, while the VAT’s application on generation charges has not been an easy one, all the industry players, from the generation companies, to the DUs and ECs, and the BIR, recognize the importance of continuous dialogue. As the industry matures under the present competitive environment and the BIR’s understanding of its intricacies deepens, more efforts must be made to improve the VAT’s implementation in the power industry.



¹² Revenue Memorandum Circular No. 62-2012 (25 October 2012).

¹³ Ibid.

¹⁴ Revenue Memorandum Circular No. 71-2012 (15 November 2012).



Glossary

AES	Applied Energy Services	Meralco	Manila Electric Company
Baa3	positive outlook rating	MW	Megawatt
BAT	build-and-transfer	NGCP	National Grid Corporation of the Philippines
BBB-	investment-grade credit rating	NPC	National Power Corporation
BIR	Bureau of Internal Revenue	NREB	National Renewable Energy Board
BLT	build-lease-and-transfer	NREP	National Renewable Energy Program
BNPP	Bataan Nuclear Power Plant	PD	Presidential Decree
BOO	build-own-and-operate	PDU	Private Distribution Utilities
BOT	build-operate-transfer	PEZA	Philippines Economic Zone Authority
CCGT	Combined-Cycle Gas Turbine	PPA	Power Purchase Agreement
DOE	Department of Energy	PPP	Public-Private Partnership
DOF	Department of Finance	PSALM	Power Sector Assets and Liabilities Management Corporation
DU	distribution utility	RCOA	Retail Competition and Open Access
DWS	Distribution Wheeling Services	RE	renewable energy
EC	Electric Cooperative	RE Law	Renewable Energy Act of 2008
EDC	Energy Development Corporation	RES	Retail Electricity Supplier
EO	Executive Order	RESC	Renewable Energy Service Contract
EPIRA	Electric Power Industry Reform Act	ROO	rehabilitate-own-and-operate
ERC	Energy Regulatory Commission	ROT	rehabilitate-operate-and-transfer
First Gen	First Gen Corporation	RSC	Retail Supply Contract
FIT	Feed-in-Tariff	SMC	San Miguel Corporation
FIT-ALL	Feed-in-Tariff Allowance	SMEC	San Miguel Energy Corporation
GBPC	Global Business Power Corporation	SOLR	Supplier of Last Resort
GDP	gross domestic product	TeaM Energy	Tokyo Electric and Marubeni Corporation
GW	Gigawatt	TSC	transition supply contract
IEC	International Energy Consultants	VAT	value added tax
IPP	independent power producer	WESM	Wholesale Electricity Spot Market
IPPA	independent power producer administrator		

About the Philippines

Recent History: Democratization

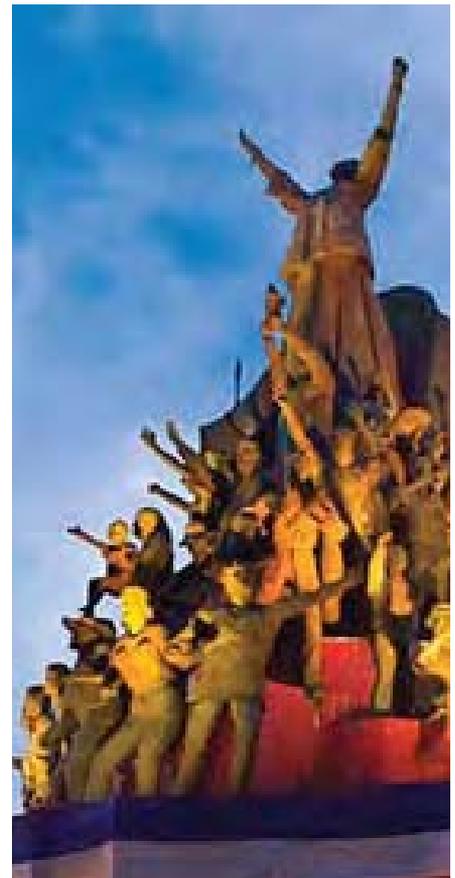
- The Philippines officially became a republic in 1946.
- The year 1986 was a landmark year in the country's efforts to become a self-governing, full-fledged democratic country when President Ferdinand Marcos was ousted from power and President Corazon Aquino assumed the presidency.
- The Aquino Presidency (1986-1992) was marked by a revival of democratic institutions and the restoration of civil liberties.
- National reconciliation was the highlight of the Ramos presidency (1992-1998) as well as continuing political and economic reforms initiated by the previous administration.
- The short-lived Estrada presidency (1998-2001) governed via a platform of populism with poverty alleviation as its centerpiece.
- Former President Gloria Macapagal-Arroyo's presidency (2001-2010) has made the economy the focus of her presidency. Economic growth in terms of GDP averaged 4.6 percent during the Arroyo administration from 2001 up to the end of 2003, to 5.5 percent in 2006. 2007 saw the country's GDP grow by 7.3 percent as continuing fiscal reforms allowed the government to make headway in its development initiatives. The country's economic growth for 2009 is 4.6 percent.
- Benigno Aquino III is the current President of the Republic of the Philippines. His main platform is good governance and the elimination of corrupt practices in the government. Under his administration, the overall financial strength of the government has improved, owing to a more efficient tax administration and responsible government spending.

Languages

- Over 87 languages and dialects belonging to the Malayo-Polynesian linguistic family
- Three principal languages: Cebuano, Tagalog, and Ilocano. Filipino is the official language
- English is the language of business and government
- GlobalEnglish, an independent research group, ranked the Philippines number 1 in the world in terms of proficiency in business English for its 2012 study

Geography

- Located in Southeast Asia
- Area: 300,000 sq. km. (117,187 square miles)
- Three major geographical areas: Luzon, Vizayas, Mindanao
- Major cities (2010 estimate): Capital - Manila (pop. 11.85 million in the metropolitan area)
- Other cities - Cebu City (0.87 million); Davao City (1.45 million)
- Terrain: Archipelago composed of 7,107 Islands, 65 percent mountainous, with narrow coastal lowlands





Climate

- Tropical, sitting astride a typhoon belt
- Three seasons: Rainy (June to October); Cool and Dry (November to February); Hot and Dry (March-May)
- Average Temperature: 27 degrees Celsius (81 degrees Fahrenheit); Average Humidity: 78 percent
- Year-round Average Temperature Range: 23-32 degrees Celsius

Population

- 106.4 million (National Statistics Office, July 2013 estimate)
- Population growth rate of 1.90 percent per year (2013 estimate)
- Literacy Rate: 88.6 percent of total population – the highest in Southeast Asia (Hong Kong and Taiwan included)

Education

- K-12: universal kindergarten, six years of elementary education (Grades 1-6), four years of junior high school with additional two years for senior high school (Grades 11 to 12)
- Public Elementary and High School education subsidized by the government
- English is part of the curriculum and is the medium of instruction for most subjects

Political

- Type: Republic
- Independence: 1946
- Current constitution: Ratified on 11 February 1987
- Branches: Executive; Legislative - Bicameral legislature; Judiciary
- Administrative Subdivisions: 17 regions including Metro Manila (National Capital Region), 80 provinces, 138 cities
- Suffrage: Universal, but not compulsory, at age 18

Sources: National Statistics Office, CIA World Factbook, www.gov.ph



Directory of Government Agencies

Bangko Sentral ng Pilipinas (BSP)

Central Bank Building, A. Mabini St., Malate, Manila
Tel. No.: +63 2 524 7011
Fax No.: +63 2 523 6210
Website: bsp.gov.ph

Board of Investments (BOI)

Industry and Investments Building, 385 Sen. Gil Puyat Ave., Makati City
Tel. Nos.: +63 2 897 6682, 890 1332 and 895 3641
Fax No.: +63 2 895 3512
Website: boi.gov.ph

Clark Development Corporation

Building 2122 Elpidio Quirino St., Clark Special Economic Zone, Clark Field, Pampanga
Tel. No.: +63 45 599 9000
Website: clark.com.ph

Department of Trade and Industry

DTI International Building, 375 Sen. Gil Puyat Ave., Makati City
Tel. No.: +63 2 751 0384
Fax No.: +63 2 895 6487
Website: dti.gov.ph

Intellectual Property Office (IPO)

IPO Building, 351 Sen. Gil Puyat Ave., Makati City
Tel. Nos.: +63 2 752 5450 to 65
Fax No.: +63 2 897-1724
Website: ipophil.gov.ph

International Tax Affairs Division of the Bureau of Internal Revenue

Room 811, National Office Building, Bureau of Internal Revenue, Diliman, Quezon City
Tel. Nos.: +63 2 927 0022 and 926 5729
Fax No.: +63 2 926 3420
Website: bir.gov.ph

National Economic and Development Authority (NEDA)

NEDA sa Pasig Building, Blessed Maria Escriva Drive, Pasig City
Tel. Nos.: +63 2 631 0945 to 68
Fax No.: +63 2 631 3747
Website: neda.gov.ph

Philippine Economic Zone Authority (PEZA)

6/F Almeda Building III, Roxas Blvd. cor. San Luis St., Pasay City
Tel. Nos.: +63 2 551 3454 or 3455
Fax No.: +63 2 891 6380
Website: peza.gov.ph

Philippine Export-Import Credit Agency (PHILEXIM) and Trade and Investment Development Corporation of the Philippines (TIDCORP)

4/F Citibank Plaza, 8741 Paseo de Roxas Ave., Makati City
Tel. No.: +63 2 893 4204
Fax No.: +63 2 893 4852
Website: philexim.gov.ph

Securities and Exchange Commission (SEC)

SEC Building, EDSA near Ortigas Ave., Greenhills, Mandaluyong City
Tel. Nos.: +63 2 584 7256 and 584 1119
Fax No.: +63 2 725 5239
Website: sec.gov.ph

Subic Bay Metropolitan Authority (SBMA)

Building 229, Waterfront Road, Subic Bay Freeport Zone
Tel. No.: +63 47 252 4895, 252 4381, 252 4382, 252 4000 and 252 4004
Fax No.: +63 47 252 3014
Website: sbma.com

About KPMG



KPMG – Who we are

KPMG International is a global network of professional firms providing Audit, Tax and Advisory services. KPMG has more than 152,000 outstanding professionals working together to deliver value in 156 countries worldwide.

KPMG aims to respond to the complex business challenges facing our clients. KPMG adopts a global approach spanning professional disciplines, industry sectors and national borders.

KPMG is organized around the Audit, Tax and Advisory practices.

Audit

Audit is an independent service that enhances the reliability of information used by investors and other stakeholders.

Tax

Advisory works with the world's leading organizations to create and protect the sustainable value of their business or organization – focusing in the areas of Management Consulting, Risk Consulting and Transactions & Restructuring.

Advisory

Advisory works with the world's leading organizations to create and protect the sustainable value of their business or organization – focusing in the areas of Management Consulting, Risk Consulting and Transactions & Restructuring.

Demonstrating the KPMG difference

KPMG professionals understand what clients need to navigate through today's business, regulatory, social and economic complexity. That is because – every day – people from KPMG focus on the needs of member firm clients. KPMG carefully assesses exactly what clients require to achieve their objectives and then work across the globe to deploy the right skills and the right experience to help meet their unique requirements.

KPMG recognizes that clients are looking for the best solutions and advice, locally implemented with a global mindset. KPMG helps client-facing teams coalesce around the issues that matter most with support from KPMG Centers of Excellence and our global methodologies and approaches. KPMG Centers of Excellence are small groups of mobile, global specialists who support our member firms in bringing high quality industry and technical expertise to our clients.

KPMG in the Philippines

Manabat Sanagustin & Co., CPAs is the Philippine member firm of KPMG International. It is one of the country's leading professional services providers and one of the fastest growing practices in the Asia Pacific region. It has also been recognized as a Tier 1 tax practice in the Philippines by the International Tax Review.



cutting through complexity

Manabat Sanagustin & Co.

Directory of Partners and Principals

Roberto G. Manabat
Chairman & Chief Executive Officer
rgmanabat@kpmg.com

Emmanuel P. Bonoan
Vice Chairman for Tax &
Chief Operating Officer
ebonoan@kpmg.com

Henry D. Antonio
Head of Advisory
hantonio@kpmg.com

Sharon G. Dayoan
Head of Audit
sdayoan@kpmg.com

Emerald Anne C. Bagnes
ebagnes@kpmg.com

Arthur Z. Machacon
amachacon@kpmg.com

Carmel Lynne M. Balde
cbalde@kpmg.com

Tomas G. Mahinay
tmahinay@kpmg.com

Enrico E. Baluyut
ebaluyut@kpmg.com

Ricardo G. Manabat
rmanabat@kpmg.com

Oliver C. Bucao
obucao@kpmg.com

Virgilio L. Manguilimotan
vmanguilimotan@kpmg.com

Joan C. Cariño
jcarino@kpmg.com

Maria Myla S. Maralit
mmaralit@kpmg.com

Pacifico M. Castañeda
pcastaneda@kpmg.com

Ador C. Mejia
acmejia@kpmg.com

Alicia S. Columbres
acolumbres@kpmg.com

John Molina
johnmolina@kpmg.com

Imelda H. Corros
icorros@kpmg.com

Herminigildo G. Murakami
hmurakami@kpmg.com

Dindo Marco Dioso
ddioso@kpmg.com

Wilfredo Z. Palad
wpalad@kpmg.com

Yoshiaki Endo
yendo1@kpmg.com

Ma. Carmela M. Peralta
mperalta@kpmg.com

Jerome Andrew H. Garcia
jharcia@kpmg.com

Jimmy S. Quiñones
jquinones@kpmg.com

Michael Arcatomy H. Guarin
mguarin@kpmg.com

Manuel P. Salvador III
msalvadoriii@kpmg.com

Dennis I. Ilan
dilan@kpmg.com

Ma. Georgina J. Soberano
gsoberano@kpmg.com

Kristine S. Imperial
kimperial@kpmg.com

Roberto L. Tan
rltan@kpmg.com

Jose P. Javier Jr.
jpvjavier@kpmg.com

Darwin P. Virocel
dvirocel@kpmg.com



Manabat Sanagustin & Co.

Our Values

We lead by example

We work together

We respect the individual

We seek the facts and provide insight

We are open and honest in our communication

We are committed to our communities

Above all, we act with integrity



Launched in 2007, the KPMG Global Energy Institute is a worldwide knowledge-sharing platform detailing insights into current issues and emerging trends within the Power & Utilities and Oil & Gas sectors. Energy professionals have access to valuable thought leadership, studies, events and webcasts about key industry topics. A regional focus to the Global Energy Institute (GEI) provides decision makers tailored insight within the Americas, Asia Pacific and the EMEA regions. For information about becoming a member of the KPMG Global Energy Institute, please visit kpmgglobalenergyinstitute.com or kpmg.com/energyaspac.

The Energy Report Philippines

Growth and Opportunities in the
Philippine Electric Power Sector

2013-2014 Edition

Sharad Somani
Henry D. Antonio
Ma. Pia A. Urgello
John Molina
Michael Arcatomy H. Guarin
Paul Patrick R. Afable
Emmanuel P. Bonoan
Writers

Emmanuel P. Bonoan
Editor-in-Chief

Sharon Smith
Associate Editor

Sachin Gohel
Editorial Consultant

Mariel D. Javier
Ma. Cristina Isabel L. Roxas
Editorial Coordinators

Allan George S. Senga
Art Direction and Layout

kpmg.com.ph

For more information, please contact:

Manabat Sanagustin & Co., CPAs

Roberto G. Manabat
Chairman & Chief Executive Officer

Emmanuel P. Bonoan
Vice Chairman for Tax & Chief Operating Officer

Sharon G. Dayoan
Head of Audit

Henry D. Antonio
Head of Advisory

Manila - Head Office
9/F KPMG Center
6787 Ayala Ave.
Makati City 1226, Metro Manila

Telephone +63 (2) 885 7000
Fax +63 (2) 894 1985
E-mail manila@kpmg.com.ph

Subic Office
GT Solar Building B
Unit 204, 2/F Sub 14-A
Sta. Rita cor. Canal Road CBD area
Subic Bay Freeport Zone 2222

Telephone +63 (47) 252 2825
Telefax +63 (47) 252 2826
E-mail subic@kpmg.com.ph

Iloilo Office
3/F, ATM Business Center
Cor. Jalandoni - Ledesma St.
Iloilo City 5000

Telephone +63 (33) 338 0849
Telefax +63 (33) 321 3823
E-mail iloilo@kpmg.com.ph

Cebu Office
Unit 502, 5/F Keppel Center
Samar Loop cor. Cardinal Rosales Ave.
Cebu Business Park
Cebu City 6000

Telephone +63 (32) 233 9339
Telefax +63 (32) 233 9327
E-mail cebu@kpmg.com.ph

Bacolod Office
Room 203, Doll Building
6th Lacson Street, Bacolod City 6100

Telephone +63 (34) 434 9225
Telefax +63 (34) 434 8015
E-mail bacolod@kpmg.com.ph

kpmg.com/energyaspac

© 2013 Manabat Sanagustin & Co., CPAs, a Philippine partnership and a member firm of the KPMG network of independent firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. KPMG International provides no client services. No member firm has any authority to obligate or bind KPMG International or any other member firm vis-à-vis third parties, nor does KPMG International have any such authority to obligate or bind any member firm. All rights reserved.

The KPMG name, logo and "cutting through complexity" are registered trademarks or trademarks of KPMG International.

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act upon such information without appropriate professional advice and after thoroughly considering the circumstances of a particular situation. The views and opinions expressed herein are those of the authors and interviewees and do not necessarily represent the views and opinions of Manabat Sanagustin & Co., CPAs, KPMG International or KPMG member firms.