Competition in Electricity Markets: The Case of the Philippines

Submitted by: University of the Philippines
I. Introduction

A major policy reform was introduced in the Philippine electricity industry (PEI) in 2001. Republic Act RA) 9136 or the Electric Power Industry Reform Act (EPIRA) was signed into law on 8 June 2001 to restructure the PEI from a vertically integrated nationalized generation and transmission, with a handful of inefficient distribution sub-sectors, into an unbundled industry where competition, efficiency, innovation and end-user choice would be introduced purportedly to bring down electricity rates and improve the delivery of power to end-users.

More specifically, EPIRA aims to, among others,
1) Ensure transparent and reasonable prices of electricity in a regime of free and fair competition and full accountability
2) Provide for an orderly and transparent privatization of the assets and liabilities of the NPC; and
3) Establish a strong and purely independent regulatory body and system and enhance the competitive operation of the electricity market (Section 2 of RA 9136).

It was generally designed to address the following problems in the PEI:
1) Absence of consumer choice (i.e., customers, particularly those in residential areas, are captive markets of electric distribution utilities (DUs), which have franchises over specific areas)
2) Relatively high electricity end-use (retail) rates\(^3\) (second to Japan)\(^4\), which was cited as one of the ten most critical disincentives affecting inflow of foreign investments\(^5\)
3) Highly fragmented distribution sector (with Meralco, a privately owned DU monopolizing most of the franchise areas in mainland Luzon)
4) Uncertainty of funding source for long-term investment requirements and

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\(^1\) Paper presented at the Asia-Pacific Economic Cooperation (APEC)-International Development Research Centre (IDRC) Conference on Competition Policy Issues on Services Sector held in Lima, Peru on August 17, 2008.

\(^2\) Associate Professor, National College of Public Administration and Governance, University of the Philippines (UP) Diliman and Dean, Faculty of Management and Development Studies, UP Open University.

\(^3\) On the average, electricity rate is US 6-12cents/kWh (AIM, 2008).

\(^4\) Sicat (2002) opines that the high cost of electricity in the country could be a function of the following: (1) high generation costs; (2) monopoly power at (a) generating level; and (b) retail level; (3) power losses; and (4) management inefficiency and high leverage of power companies, including the NPC.

5) Lack of incentives to drive the industry stakeholders to operate more efficiently (where systems losses as high as 9.5-14% were allowed and sanctions against erring utilities coming from regulators were few and far between).6

In addition, the industry was plagued with over-contracted capacity supported by take-or-pay commitments from the state-owned National Power Corporation (NPC) and some private utilities or independent power producers (IPPs); consistent financial losses and heavy indebtedness of NPC, which enjoyed sovereign guarantees from the National Government, being a government corporation7; widespread allegations of corruption and fraudulent debt; generation-transmission mismatch; and the non-universal access to electricity at the household level, especially among lower income rural families.8

Seven years after this legislated change, has the PEI changed for the better? Have these problems been corrected? Has competition flourished and brought about the envisioned effects to consumers? Has public interest been served?

This paper thus attempts to answer some of these concerns and review the progress in electricity reforms in the Philippines, particularly in promoting competition and open access, with the end in view of drawing lessons and implications for better electricity market governance.

II. The Legislated Change: EPIRA

A. Features

Consistent with the ‘basic’ model for electricity reform9 which comprises of, among others, a) the separation of generation from transmission and distribution; b) competing generating companies bidding into a power pool; c) transmission

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7 The NPC incurred a heavy debt burden, large debt service obligations, and continuing financial losses since 1998. The failure to effectively address these problems has had negative impact on the economy and created a large financial burden on the National Government. The ongoing financial problems of NPC are attributable to operating inefficiencies, under-capitalization, inadequate tariff adjustments, depreciation of the peso, the high cost of foreign borrowings and debt servicing, rising global fuel prices, and unresolved conflicts with DUs (Geoffrey Brown, Jose Victor Emmanuel De Dios and Helena Villarama, “Philippines: Power Sector Profile and Roadmap”, ADB Staff Consultant’s Report, Asian development Bank, 2005.)
and distribution companies providing access to all network users on non-discriminatory terms; d) establishment of an independent regulatory body; and e) all or part of the retail market open to competition, the EPIRA envisioned to transform the industry into a competitive, market-driven environment, by restructuring, deregulating and privatizing the PEI into as follows (see Table 1):

Table 1. Features of the Reform Changes in the EPIRA

<table>
<thead>
<tr>
<th>Features</th>
<th>Before EPIRA</th>
<th>With EPIRA</th>
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<tbody>
<tr>
<td>Sectors or Components</td>
<td>Two sectors: 1) a vertically integrated generation/transmission sub-sector consisting of a) the state-owned generation and transmission company (e.g., the NPC) and b) a number of independent private generation companies or independent power producers (IPPs); 2) a fragmented and inefficient distribution/supply sub-sector consisting of some 17 investor-owned utilities (IOUs), 119 rural electric cooperatives (RECs), and 10 municipal, city and provincial distribution systems</td>
<td>The PEI is segregated or unbundled into four sectors: generation, transmission, distribution and supply/retail: 1) The generation and supply/retail which are businesses affected with public interest, shall be competitive and open to competition to both domestic and foreign companies; 2) The transmission and distribution, which are natural monopolies(^{10}) and public utilities or common carrier business for public service, shall remain monopolies and subject to the regulation of the Energy Regulatory Commission (ERC)</td>
</tr>
<tr>
<td>Privatization of Generation and Transmission Assets</td>
<td>State-owned; nationalized; not privatized</td>
<td>There shall be privatization(^{11}) of the debt-laden NPC’s generation and transmission assets, i.e., sold to the private sector; about P200B (or approximately $4-5B) of NPC debts will be assumed by the National Government. Some P18B debts of electric cooperatives will be assumed by the Power Sector Assets and Liabilities Management Corporation (PSALM), a new</td>
</tr>
</tbody>
</table>

\(^{10}\)Natural monopolies are characterized by the following: a) capital intensive and minimum economies of scale; b) non-storability with fluctuating demand; c) location specificity; d) a necessity of the community; and e) involving direct connections to consumers (Berg and Tschirhart, 1988).

\(^{11}\)Privatization here refers to “the sale, disposition, change and transfer of ownership and control of assets and IPP contracts of NPC from the government to a private person or entity (Sec. 4 (pp), EPIRA),”
A state corporation to be formed to privatize these assets as well as administer, conserve and manage the contracted energy output of the NPC’s Independent Power Producer (IPP) contracts, including selling the energy output offering ancillary services. The Act also requires that the privatization of the IPP contracts be done by Independent Power Producer Administrators. These Administrators are the qualified independent entities appointed by PSALM.

<table>
<thead>
<tr>
<th>Competition</th>
<th>Nil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Competition</strong></td>
<td><strong>Nil</strong></td>
</tr>
<tr>
<td>Competition in the generation and supply sub-sectors shall be introduced.</td>
<td></td>
</tr>
<tr>
<td>The <em>wholesale electricity spot market</em> (WESM) shall be created, where generation companies bid in an open market; moreover, the existence of <em>aggregators</em> and <em>suppliers</em> shall be promoted.</td>
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<table>
<thead>
<tr>
<th>Open Access</th>
<th>Non-existent</th>
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</thead>
<tbody>
<tr>
<td><strong>Open Access</strong></td>
<td><strong>Non-existent</strong></td>
</tr>
<tr>
<td>Open access** in both transmission and distribution wires will also be introduced.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Tariffs</th>
<th>Bundled, with cross subsidies allowed</th>
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<td><strong>Tariffs</strong></td>
<td><strong>Bundled, with cross subsidies allowed</strong></td>
</tr>
<tr>
<td>Electricity tariffs shall be unbundled or segregated to reflect the respective costs in generating, transmitting, distributing and supply electricity; Cross subsidies shall be eliminated, except for lifeline rates.**</td>
<td></td>
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</tbody>
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12 *Open access* is defined in RA 9136 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 ERC (Sec. 4, (ll)).” The *transmission charge* refers to “the regulated cost or charges for the use of transmission system, which may include the availment of ancillary services (Sec. 4(aaa)).” The *distribution wheeling charge* refers to the cost or charge regulated by ERC for use of the distribution system and/or the availment of related services. (Sec. 4 (p))."

13 Lifeline rate refers to the subsidized rate given to low-income captive market end-users who cannot afford to pay at full cost (Sec. 4, EPIRA).
The regulator ERB shall become the ERC, the Energy Regulatory Commission and shall be strengthened.

The roles of DOE, NEA and other government agencies involved in the supervision and administration of the PEI shall be redefined.

A Joint Congressional Power Commission (PowerCom) shall be created to oversee the implementation of the EPIRA.

Electricity providers shall be required to comply with technical and financial standards for providing quality service to consumers, implying reduced system losses passed on to consumers.

Source: RA 9136, 2001; Mendoza, 2003

The Act envisions four distinct sub-sectors of the electricity industry: generation, transmission, distribution and supply. Generation and supply would be open and competitive and classified as businesses affected by public interest only. It would consist of privatized generating companies (GENCOs) of NPC, its residual GENCO/ Small Power Utilities Group (SPUG), the IPPs and generation plants owned by authorized industries. Unlike in past, this sub-sector shall not be considered a public utility/service operation and shall not be required to secure a national franchise. It, however, shall be required to secure a license from the ERC and be subject to the rules and regulations on abuse of market power, cartelization, and other anti-competitive behavior, which the ERC shall promulgate.

The transmission and distribution would remain natural monopolies and public service organizations or public utilities, subject to the regulation of the ERC. The transmission shall be the sole responsibility of the National Transmission Company (TRANSCO), which would provide to all electricity users open and non-discriminatory access to its transmission system.

NPC would be privatized, but a SPUG within NPC would be created to perform missionary electrification function and provide power generation and its

14 Sec. 6, Chapter II, RA 9136
15 Sec. 29, Chapter II, RA 9136
associated power delivery systems in areas that are not connected to the
transmission system. NPC-SPUG would remain a state corporation or a
government owned and/or controlled corporation (GOCC) (Section 2, IRR of RA
9136).

A wholesale electricity spot market (WESM) would be created. WESM is an
open wholesale market for sellers and buyers of electricity. Subject to the
compliance with membership criteria, all GENCOS, distribution utilities, suppliers,
bulk consumers/end-users and other similar entities authorized by the ERC are
eligible to become members of the spot market.

The WESM should be open to all industry participants, including aggregators
and suppliers. It will be like an exchange where generators and distributors not
covered by existing contracts (e.g., PPA) may openly buy and sell electricity.

Open access to transmission wires would be allowed. The industry regulator,
the ERC would be strengthened. Stranded debts of utilities (NPC, eligible
distribution utilities, and electric cooperatives) and stranded contract costs,
estimated to be around P200B or $4-5B, would be assumed by the national
government, and in the end, expected to reduce electricity costs.

Despite deregulation in some sectors, the PEI shall still be subject to the
regulation, oversight and supervision by a number of agencies, among them, the
ERC, DOE, NEA, the Power Sector Assets and Liabilities Management
Corporation (PSALM), and the Joint Congressional Power Commission (JPC).

In schematic form, the PEI envisioned in RA 9136 looks like Fig. 1 below:

These features theoretically reflect the intentions of the State to disengage in
the ownership and financing of power generation and transmission, and of the
market’s greater determination of outcomes under a supposedly fair and
transparent (unbundled or segregated) regulatory framework.

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16 Aggregators are persons or entities engaged in consolidating electric demand of end-users in
the contestable market, for the purpose of purchasing and reselling electricity on a group basis. Suppliers
are persons or entities authorized by ERC to sell, broker, market or aggregate
electricity to end-users. Contestable market refers to the electricity end-users who have a choice
of a supplier of electricity, as may be determined by ERC (Sec. 4, RA 9136).
17 DOE Presentation, 2001
18 Stranded debts are any unpaid financial obligations of NPC which have not been liquidated by
the proceeds from the sales and privatization of NPC assets. Stranded contract costs of NPC or
distribution utility refer to excess of the contracted cost of electricity under eligible contracts over
the actual selling price of the contracted energy output of such contracts in the market. Such
contracts shall have been approved by the ERB as of December 2000 (Sec. 4, EPIRA).
To reiterate, the EPIRA provides for the creation of a
1) National Transmission Company (TransCo), which shall assume the electrical transmission functions of the NPC, be a regulated common electricity carrier, and be subject to privatization by concession and other efficient modes, later;
2) Power Sector Asset and Liabilities Management Corporation (PSALM), which shall take ownership, management and privatization of all existing NPC generation assets, liabilities, IPP contracts, real estate and other disposable assets.
3) ‘new’ Energy Regulatory Commission, which shall be the independent industry regulator mandated to promote consumer interest and market competition
4) Wholesale Electricity Spot Market (WESM), to be managed by the Philippine Electricity Market Corporation (PEMC), which shall provide a venue for free and fair trade of and investment in the electricity market for/by generators, distributors and suppliers alike
5) Small Power Utilities Group (SPUG), which is a functional unit of the NPC created to pursue missionary electrification function.

In general, the idea behind EPIRA is to stimulate competition by allowing various mechanisms for the exercise of independent production of electricity. It also theoretically empowers the users by creating points of competition in the purchase of power. It also creates clear-cut regulatory mandates, and was touted to address the ills of the industry and bring about potential benefits as:

a) Rationalized electricity prices for industrial consumers and lowered electricity prices for residential consumers resulting from better capital structures
b) Immediate 5% rate rebate as mandated by the law
c) Estimated welfare benefits amounting to P1,000 per household As much as new jobs brought about by additional investments due to lower electricity costs.

It was also believed to have enough safeguards to protect consumers through the following salient points of the reform process:

1) More safeguards for competition such as caps on the amount of electricity a private distributor can buy from its affiliates, mandates on amounts of electricity that must be sourced from the spot market, caps on the market shares of generators to 30% per grid and 25% nationwide, and mandated structural and accounting separation of regulated and non-regulated sub-sectors
2) Non-automatic recovery of stranded costs of private distribution utilities
3) Lower levels for open access from 2 MW to 1 MW
4) Stronger powers for the regulator to prevent and redress market abuse
5) Benefits for electric cooperatives such as a 5-year grace period before open access, concessional financing terms for acquiring NPC’s sub-transmission assets, and a program for condoning existing liabilities.

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In fact, among the mandated market safeguards of the Act include the following:

1. **Cross-ownership Prohibition.** “No generation company, distribution utility or stockholder or official thereof shall be allowed to hold ownership in the Transmission Company or its concessionaire and vice versa” (Rule 11, Section 3, IRR of RA 9136)

2. **Concentration of Ownership Limits.** “No company...can own or control more than thirty percent (30%) of the installed generating capacity of a Grid and/or twenty-five percent (25%) of the national installed generating capacity...” (Rule 11, Section 4)

3. **Bilateral Supply Contracts.** “No distribution utility shall be allowed to source from bilateral power supply contracts more than 50% of its total demand from its affiliate engaged in generation...” (Rule 11, Section 5)

These mean that cross-ownership between generation and distribution is allowed although transactions between affiliates are limited. Transmission, however, is insulated from cross-ownership. The ownership and affiliate contract limitation is to inhibit market power abuse, discriminatory access, transfer pricing and cross-subsidization.\(^{22}\)

**B. Plans: The Road to Restructuring, Privatization and Deregulation**

The road to restructuring, competition and open access is not paved and short. It is often long and winding, with twists and turns in between. Pursuant to the provisions of the EPIRA, the Department of Energy (DOE), the lead agency for development policy planning in the energy sector in general and the electricity sector in particular, in consultation with appropriate government agencies such as the ERC, NEA, NPC, PSALM, the Departments of Finance (DOF), Justice (DOJ), Budget and Management (DBM) and Trade and Industry (DTI), the PowerCom, the PEI stakeholders, end users and participants, prepared an Implementing Rules and Regulations (IRR) on EPIRA. It was approved by the Joint Congressional PowerCom in 2002.\(^{23}\)

In addition to the IRR, several legal instruments shall have been developed and promulgated by 2001 and 2002. Among them are the Distribution Code, Grid Code and WESM Rules. Rates are also expected to be unbundled by 2002.\(^{24}\) Moreover, the generating company (GenCo) assets of NPC shall have been privatized to at most 70% by 2003; and all GenCo assets shall have been sold, except for Agus and Pulangui hydro projects by 2009 (see Table 2 below).

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\(^{23}\) As stipulated in Sections 37 and 77 of EPIRA.

\(^{24}\) Vincent Perez, Secretary of the DOE, “The Philippine Electricity Sector”, A presentation, 24 June 2002.
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<tbody>
<tr>
<td>Legislation passed.</td>
<td>Privatization plan sent to President.</td>
<td>Wholesale spot market rules are promulgated and come into effect.</td>
<td>70% of genco assets (other than Mindanao) sold.</td>
<td>Sub-transmission facilities sold to distributors.</td>
<td>All genco assets sold except for (Agus and Pulangui) hydro projects.</td>
</tr>
<tr>
<td>PPAs with IPPs assumed by PSALM Corp.</td>
<td>NTC or TransCo set up.</td>
<td>EIR charge levied.</td>
<td>TransCo privatized.</td>
<td></td>
<td>Acute power shortage nationwide if no new capacity is built.</td>
</tr>
<tr>
<td>Transmission assets to be transferred to PSALM Corp.</td>
<td>Transmission and generation rates unbundled.</td>
<td>Unbundled transmission and distribution retail rates.</td>
<td></td>
<td>Full open access.</td>
<td></td>
</tr>
<tr>
<td>ERC set up as the principal regulatory body.</td>
<td></td>
<td>Distribution functions fully privatized.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementing Rules and regulations for the Act passed.</td>
<td>Distribution and Grid codes and market rules promulgated.</td>
<td>Cross-subsidies between, within grids and/or classes of customers will cease.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Source: DOE, PowerCom, 2002
All these boil down to five major components of the restructuring process, which are all preconditions to open access and electricity market competition, to wit 25:

1) Privatization of at least 70% of the total capacity of generating assets of NPC in Luzon and Visayas
2) Review of NPC-IPP contracts and the transfer of the management and control of at least 70% of the total energy output of power plants under contract with NPC to the IPP Administrators
3) Removal of cross subsidies between/within grids and/or classes of customers, upon the establishment of a universal charge 26
4) Unbundling of transmission and distribution wheeling charges 27
5) Establishment of WESM to provide competition in the wholesale electricity market.

The privatization of NPC assets and liabilities (generation and transmission) and review of NPC-IPP contracts are the responsibilities of the PSALM. Removal of cross subsidies and unbundling of charges is supposed to be supervised by the ERC. The establishment of the WESM is the responsibility of the DOE with rate regulation by the ERC.

Additional preconditions to the commencement of open access and retail competition were included by ERC in 2007, namely: 1) the adequacy and establishment of all necessary infrastructures, including but not limited to, transmission networks, generation supply and the customer switching system, and 2) the promulgation by ERC of all pertinent rules and regulations governing Retail Competition and Open Access, including among others, Rules for Customer Switching and Rules for Contestability. 28

III. Progress in Implementing the EPIRA

Mainly because the PEI has been a vertically integrated nationalized monopoly for too long in the past, with regulators and other industry participants with very little experience in anti-trust and competition regulation, on the whole, the EPIRA has not yet led to (full) open access and competition. Nevertheless, strides have been taken and little gains have been achieved. Among the major accomplishments include the establishment of the WESM, the start of the

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25 Section 3 of Rule 12. Retail Competition and Open Access, IRR of EPIRA, 2002.
26 Universal charge refers to the charge, if any, imposed for the recovery of stranded costs and for other purposes. Stranded costs of NPC or distribution utility refers to the excess of the contracted cost of electricity under eligible contracts over the actual selling price of the contracted energy output of such contract in the market. Stranded debts of NPC refer to any unpaid financial obligations of NPC, which have not been liquidated by the proceeds from the sales and privatization of NPC assets (Sec. 4 of EPIRA).
27 See footnote 9.
removal of cross-subsidies, the unbundling of rates, and the establishment of wheeling charges.

Moreover, the regulator, the ERC, has been capacitating itself for competition regulation by ensuring effective implementation of performance-based regulation, WESM monitoring, implementation of competition rules and guidelines, and continued competence building of staff and officials.\(^{29}\)

However, the privatization of NPC genCos is only at the level of 43% with some 1,750MW of rated capacity sold at $2,682M. TransCo has only been recently privatized through a 25-year concession contract with a consortium of local and Chinese power transmission utilities. In addition, the review of NPC-IPP contracts is still underway.

Table 3 summarizes the progress in implementing electricity reforms as of 2007.

Table 3. Progress in Implementing the EPIRA

<table>
<thead>
<tr>
<th>Target</th>
<th>Progress</th>
<th>Problems and Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementing Rules and Regulations for the Act passed</td>
<td>IRR was developed by DOE-led team of PEI stakeholders and was approved by the PowerCom in 2002</td>
<td></td>
</tr>
<tr>
<td>PSALM to have assumed all the assets (gencos, IPP contracts, etc.) and liabilities, etc. of NPC)</td>
<td>Done in 2003</td>
<td></td>
</tr>
<tr>
<td>Privatization of at least 70% of the total capacity of generating assets of NPC in Luzon and Visayas</td>
<td>Some 10 of 23 hydro and coal-fired thermal plants were privatized amounting to some 43% of the privatization target as of end of 2007. This profited some $2,682M bid price</td>
<td>At least 2,485MW of hydro and coal thermal plants have yet to be sold to achieve full privatization of NPC genCos by 2009; some 1,162MW of generating plants have to be sold to achieve at least 70% privatization by end of 2008. Most of the winning bidders were in</td>
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<p>| <strong>TransCo set up and later privatized by concession;</strong> | <strong>On December 12, 2007, after four failed bidding/rebidding, the consortium of Monte Oro Grid, Calaca Power Corp., and State Grid Corp of China emerged as the highest bidder for a 25-year concession of TransCo.</strong> |
| <strong>Sub-transmission facilities sold to distributors.</strong> | <strong>The plan involved a total of 7,500 circuits of mostly 69kV transmission lines and 1,600 MVA of substation capacity, amounting to an estimated P9B or $2M. For May-October 2007, three sales contracts were signed amounting to P329.63M. These were sold to Davao Electric Cooperative (DORECO), Lima Utilities Corp (LUC) and Manila Electric Company (MERALCO). As of 15 October 2007, TransCo was able to sell P2.354B worth of sub transmission lines including 320 MVA transformers to DUs. It has also signed P1.37B-worth of Lease Purchase Agreements totaling to 23. It is currently negotiating for the sale of 1,582 Ckm of sub transmission lines amounting to about</strong> |</p>
<table>
<thead>
<tr>
<th>Event</th>
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<tbody>
<tr>
<td>Review of NPC-IPP contracts and the transfer of the management and control of at least 70% of the total energy output of power plants under contract with NPC to the IPP Administrators</td>
</tr>
<tr>
<td>ERC set up as the principal regulatory body.</td>
</tr>
<tr>
<td>Distribution and Grid Codes and market rules promulgated</td>
</tr>
<tr>
<td>Distribution functions fully privatized.</td>
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<tr>
<td>Unbundling of transmission and distribution wheeling charges</td>
</tr>
<tr>
<td>Establishment of WESM to provide competition in the wholesale electricity market</td>
</tr>
<tr>
<td>Others</td>
</tr>
</tbody>
</table>

P1.912B, to some 30 interested DUs.

**ERC became ERC in 2001**

**ERB became ERC in 2001**

**Done by ERC in 2001**

**In addition, the ERC has promulgated two pertinent rules on retail competition and open access, namely: the Rules for Customer Switching and Rules for Contestability**

**ERC promulgated Rules on Rate Filing by the**

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30 The Rules for Customer Switching aims to establish standards and procedures governing the commercial transfer of customers from one competitive electricity supplier to another, and at the same time, ensure the efficient and timely exchange of information between and among competitive retail participants. The Rules for Contestability clarifies and establishes the conditions and eligibility requirements for end users to be part of the contestable market (DOE, 2008).
A. Major Accomplishments

1. Establishment of WESM

The DOE is mandated to establish the WESM that would facilitate a transparent, competitive and reliable market for electricity. WESM was formally launched on June 26, 2006 in the Luzon grid and later in the Visayan grid\(^{32}\), after a year or so of trial (operations) period to test the rules, procedures and systems of WESM and the readiness of market participants\(^{33}\). The trial operations period (TOP) was also to test the Market Management System (MMS) of WESM in an actual trading environment before it is actually put to use in the actual commercial operations of the market. It consisted of interface components among participants, systems operations, metering, settlements interface and final tests, which included market dry run and live dispatch, as in an actual (trading) floor. \(^{34}\)

Moreover, a number of governance and regulatory structures have been put in place to fulfill the principle of self-governance among the PEI participants. Included here are the following (Fig. 2):

The Philippine Electricity Market (PEM) Board is the policy making body of the WESM. The PEM Corporation (PEMC) is in charge of the operations of the WESM. PEMC was incorporated as a non-stock, non-profit corporation registered with the Securities and Exchange Commission in 2003. It is beefed up with the following groups and committees:

1) Rules Change Committee (RCC) is tasked to keep pace with the evolving electricity market through the timely and appropriate creation or revision of the governing rules of the WESM. All amendments or new rules are subject to approval by the PEM Board and the DOE.

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\(^{31}\) This provides for a uniform filing system for applications on approval of Supplier of Last Resort (SOLR) rate/changes to the affected contestable market to ensure recovery of the allowable premium and reasonable return and other costs associated with the SOLR service (DOE 2008).

\(^{32}\) The Philippines has three main grids in the three main islands of the archipelago, e.g., Luzon, Visayas and Mindanao.


\(^{34}\) Ibid., p. 9
2) Market Surveillance Committee (MSC) monitors and surveys participant activity in the WESM for apparent or suspected incidents of anti-competitive behavior. The MSC also changes to preserve the institutional integrity of the market and curb abuse.

3) Dispute Resolution Administrator/Group (DRG) is chaired by the DR Administrator in order to facilitate and ensure timely, efficient and cost effective resolution of any WESM related dispute that may arise between participants or stakeholders.

4) Technical Committee (TC) provides expertise to the market in relation to information technology, metering data, and other technical matters. In the exercise of its functions, the TC may propose rule changes to improve the efficiency of the market and attain WESM objectives.

5) PEM Auditor (PEMA) conducts annual audit of the Market Operator, settlement system, and any other procedures relevant to the spot market. The PEMA checks any new item or version of software and reviews any new procedures and practices under the WESM Rules. The PEMA may also recommend changes in the WESM Rules and
manuals to the RCC if the Auditor detects deficiencies in the rules, market manuals and protocols of WESM based on its evaluation.\textsuperscript{35}

To date, the WESM has a total of 28 members, 22 of which are generation companies (Table 4). The rest (6) are distribution utilities, reflecting a low DU demand-side participation. In addition, of the 119 direct member-electric cooperatives/DUs, only 3 participated. To encourage more participation, WESM’s PEMC has entered into memorandum of understanding with organizations of electric cooperatives and other industry players.

Table 4. WESM Registration Status in Luzon, 2007

<table>
<thead>
<tr>
<th>Participant Classification</th>
<th>Number</th>
<th>Registered</th>
<th>MW</th>
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</thead>
<tbody>
<tr>
<td>Generators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. NPC-Owned (Trading Teams)</td>
<td>7</td>
<td>7</td>
<td>2,546</td>
</tr>
<tr>
<td>2. ALM (NPC-IPPs) (Trading Teams)</td>
<td>3</td>
<td>3</td>
<td>6,231</td>
</tr>
<tr>
<td>3. First Gas Power Corporation</td>
<td>1</td>
<td>1</td>
<td>1,038</td>
</tr>
<tr>
<td>4. FGP Corp</td>
<td>1</td>
<td>1</td>
<td>504</td>
</tr>
<tr>
<td>5. Quezon Power Philippines (Limited) Company</td>
<td>1</td>
<td>1</td>
<td>460</td>
</tr>
<tr>
<td>6. First Gen Hydro Power Corporation</td>
<td>1</td>
<td>1</td>
<td>112</td>
</tr>
<tr>
<td>7. SN Aboitiz Power Corp. Inc</td>
<td>1</td>
<td>1</td>
<td>360</td>
</tr>
<tr>
<td>8. Other IPPs</td>
<td>7</td>
<td>7</td>
<td>295</td>
</tr>
<tr>
<td>Customers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Private Distribution Utilities</td>
<td>11</td>
<td>3</td>
<td>4684.9</td>
</tr>
<tr>
<td>2. Rural Electric Cooperatives - direct members</td>
<td>45</td>
<td>3</td>
<td>136.64</td>
</tr>
<tr>
<td>3. Other Utilities</td>
<td>108</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: PEMC

Its players are graphically represented in Fig. 3 below:

As of August 2008, WESM has reported its “two years of transparency, two years of competition, and two years of empowering consumers through the fair trade of electricity.” Highlights of its first two years of operations (June 2006-June 2008) included:

- Low prices of electricity were experienced in its operations but which were increased occasionally because of shutdowns (of Malampaya power plant, for example) and tight supply condition (due to extensive damages in transmission wires caused by typhoons and other natural

calamities, continued coal supply limitation, extended summer condition)

- Occasional market suspension was declared by ERC due to extensive transmission damages caused by typhoons (“Milenyo” in September-October 2006; “Frank” on June 2008)
- Lines were congested due to plant upgrades and compliance activities to Grid and other Code provisions
- Demand for electricity (new high of 6590MW in 2007 and 6681MW in 2008) has been increasing, translating to a 3 to 1.4% increase, respectively, from 2006 and 2007 peak
- Monsoon rains for long periods in 2007, fortunately improved the hydro contribution\(^{36}\) but depressed the demand for electricity, resulting in an Effective Settlement Price (ESP) of P1.805/MWh, the lowest since the market launch\(^{37}\)

Fig. 3. The WESM Players

Source: DOE 2005

It may seem that because of weather disturbances, power rates are hiked or depressed. Through the lowest ESP in WESM has been recorded in 2007, the highest ESP, if not recalculated or corrected by ERC, could be imposed in July 2008 (at P18/kWh) because of a transformer outage in TransCo’s sub transmission line in Bulacan, a province in Luzon, caused by the recent typhoon

\(^{36}\) For the mix of power plants or installed generating capacity in the country, see Fig. 6.

“Frank”. ³⁸ The transformer outage prevented power generated in Luzon (Masinloc and Sual coal-fired power plants) to be delivered to Luzon load centers. As a result, more power from oil-based plants had to be dispatched, jacking up the July price.

If this will be corrected through price intervention (on affected billing period only, which is July 11-25) or recalculation by ERC, the ESP for July should amount to only around P5-6/kWh.³⁹ For the period July 2006 to June 2007, average retail electricity rates in the country ranged from P7.77/kWh to P7.74/kWh. Average electricity rates in Luzon went down slightly by 0.3% while those in the Visayas remained at around P5.70/kWh. Mindanao, on the other hand, experienced a 0.7% increase in the average electricity rates (see Fig. 4).⁴⁰

Fig. 4. Electricity Rates, WESM ESP and Retail Rates in Luzon and Visayas

2. Unbundling of Rates and Removal of cross subsidies between/within grids and/or classes of customers, upon the establishment of a universal charge

Electricity rates should reflect the true cost of generation, transmission, distribution and supply. EPIRA mandates that all DUs file unbundled rates for the cost of service for each of these phases, subject to ERC approval. As of 2006,

³⁸ Abigail Ho, “Power rate hike seen in Luzon”, Philippine Daily Inquirer, August 9, 2008, A3.
³⁹ As estimated by PEMC president, Lasse Holopainen, and cited in Ho, 2008.
ERC has approved 138 of 141 rate unbundling applications of a) NPC; b) NPC-SPUG; c) 17 private DUs; and d) 119 electric cooperatives.41

Based on the ERC-approved overall tariff adjustment (OATA), the rate unbundling resulted in rate reductions ranging from P0.35/kWh to P0.007/kWh for DUs.42

EPIRA also mandates that all types of cross subsidies43 be phased out within three years from the establishment of a universal charge. As of 2006, 119 of 120 electric cooperatives (ECs) and 14 of 18 private utilities (PUs) have implemented the removal of cross subsidy in various phases, e.g., 50-50% removal, 40-60%, complete, 2/3, ½, ¼ removal).44

As of 2007, universal charge (UC), a non by-passable charge collected from all electricity end users by PSALM, has amounted to P7.4B collection. UC is not a new cost to the end users but has been an integral part of the bundled rate of NPC, but is now unbundled or segregated to reflect the true cost of its components. According to the law, UC has the following purposes/components:

1) Payment for the stranded debts in excess of the amount assumed by the national government (P200B), as well as qualified stranded contract costs of distribution utilities resulting from the restructuring of the industry
2) Missionary electrification
3) The equalization of the taxes and royalties applied to indigenous or renewable sources of energy vis-à-vis imported energy fuels;
4) An environmental charge equivalent to one-fourth of one centavo per kilowatt-hour; and
5) A charge to account for all forms of cross-subsidies for a period not exceeding three years (Section 34, RA 9136).

However, only two of these 5 components have been reflected as separate bills for transparency purposes: missionary electrification (ME) and environmental charge (EC). The ME is a compulsory charge to fund the electrification program for remote rural villages; the EC is for the preservation and conservation of watersheds.45

As of 2007, the collections for universal charge were from the a) special trust fund/missionary electrification: P6.9B; b) environmental charge: P0.49B; and c) main trust account/universal charge: P0.003B.46

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43 Commercial and industrial users subsidize to some extent, the small residential users and social service users such as hospitals, street lamps, etc. Luzon grid users subsidize the Visayan grid users (ERC, 2004).
44 Ibid., p.4
46 Op cit, p. 8.
3. Strengthening the ERC

There is not much experience in performance-based and competition regulation in the Philippines. However, with the EPIRA, the ERC has been reconfiguring itself to be a competent, “strong, independent and professional regulator working as a team to transform the electric industry and balance the interests of all stakeholders.” Its mission is committed to be the driving force in transforming the PEI and promoting consumer interest and market competition by a) setting transparent and reasonable prices of electricity; and b) ensuring that the PEI participants provide and maintain safe, adequate, reliable and efficient electric service.”47

In preparing the electricity market for open access and competition, the ERC has been preparing, developing and promulgating a number of pertinent rules and regulations. To wit, it has identified and promulgated seven pillars for building a vibrant electricity market:

a) Business Separation Guidelines directs DUs to have a clear separation of accounts for their regulated and non-regulated activities and ensures no cross-subsidies exist within their respective business activities;

b) Competition Rules guards against abuse of market power and anti-competitive agreements resulting from mergers and acquisitions between market participants;

c) Distribution Services and Open Access Rules prescribes the rules pertaining to interface between the DUs and all users of the distribution system, including retail electricity suppliers (RES);

d) Guidelines for the Issuance of Licenses to RES prescribes the criteria, qualification, procedures for securing a license, as well as the general obligations of a RES;

e) Code of Conduct for Competitive Market Participants establishes standards of behavior for marketing electricity to contestable customers and ensures full competition;

f) Guidelines for the Supplier of Last Resort (SOLR) prescribes the conditions and procedures for reverting to SOLR service, the rates, the terms of service, etc.;

g) Uniform Business Practices (UBP) prescribes the standardized business rules relating to customer enrollment, switching and exchange of information between retail market participants.48

The ERC has also, among many, promulgated the Magna Carta for Residential Consumers; has required officials of DUs to undergo mandatory regulatory education program; and has established a consumer help desk. It has

also promulgated the Rules for Customer Switching and Rules for Contestability to govern the operations in the WESM.

B. Major Hurdles

1. Privatization of at least 70% of the total capacity of generating assets of NPC in Luzon and Visayas

*Privatization* refers to the sale, disposition, change and transfer of entire ownership and control of all assets and IPP contracts from the government or GOCC to a private person or entity. In privatizing government corporations, assets and the like, the (national) government sells them in a “clean slate,” such that it assumes all the liabilities of corporations and assets for sale or disposition. This makes them more attractive to prospective buyers. However, this inflates the debts of the national government, offsetting or eroding whatever financial profits which might have been gained from the sale.

In 2006, PSALM prepared a privatization plan as follows (Fig. 5):

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**Fig. 5. PSALM’s Privatization Plan/GenCo Sale Sequence**

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Government forecast that proceeds from NPC privatization would be some $9.5B-short of all its debts. The Freedom from Debt Coalition (FDC), a non-government organization (NGO) think tank, and others opposing the EPIRA predicted that the proceeds would fetch only around $4.5 billion to $5.2 billion, an amount that would not be enough to pay for NPC’s huge debt. The NPC shortfall ($9.5 billion) will leave the government with a net “stranded costs” of P352 billion.
Secretary Jose Camacho, then of the DOE, said the government had committed to absorb up to P200B only,\textsuperscript{49} slashing the stranded cost to P152 billion (Doronila, 2001, A6).

True enough, after seven years of packaging and promoting the NPC genCos for privatization, as of 2007, only 10 of 23 hydro and coal-fired thermal plants have been privatized amounting to some 43\% of the privatization target. This earned for the government some $2.682B, much lower than FDC and government targets. Sold plants have a total rated capacity of some 1,850MW (see Table 5).

### Table 5. NPC Generating Assets Privatized/Sold

<table>
<thead>
<tr>
<th>Power Plant</th>
<th>Rated Capacity (MW)</th>
<th>Date of Bidding</th>
<th>Winning Bid Price (US$ thousand)</th>
<th>Winning Bidder</th>
<th>Contribution to Privatization (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talomo Hydro</td>
<td>3.5</td>
<td>March 25, 2004</td>
<td>1,370</td>
<td>HEDCOR</td>
<td></td>
</tr>
<tr>
<td>Agusan Hydro</td>
<td>1.6</td>
<td>June 4, 2004</td>
<td>1,530</td>
<td>First Gen Holdings</td>
<td></td>
</tr>
<tr>
<td>Barit Hydro</td>
<td>1.8</td>
<td>June 25, 2004</td>
<td>480</td>
<td>Atty. Ramon I. Constancio</td>
<td></td>
</tr>
<tr>
<td>Cawayan Hydro</td>
<td>0.4</td>
<td>September 30, 2004</td>
<td>410</td>
<td>SORECO II</td>
<td></td>
</tr>
<tr>
<td>Loboc Hydro</td>
<td>1.2</td>
<td>November 10, 2004</td>
<td>1,420</td>
<td>Sta. Clara Intl</td>
<td></td>
</tr>
<tr>
<td>Sub-total</td>
<td>8.5</td>
<td></td>
<td>5,210</td>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>Pantabangan-Masiway</td>
<td>112</td>
<td>September 7, 2006</td>
<td>129,000</td>
<td>First Gas Hydropower Corp</td>
<td></td>
</tr>
<tr>
<td>Magat</td>
<td>360</td>
<td>December 14, 2006</td>
<td>530,000</td>
<td>SN Aboitiz Power Corp</td>
<td></td>
</tr>
<tr>
<td>Sub-total</td>
<td>472</td>
<td></td>
<td>659,000</td>
<td></td>
<td>11%</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>475.4</td>
<td></td>
<td>US$664,210</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masinloc Coal</td>
<td>600</td>
<td>July 26, 1999</td>
<td>930,000</td>
<td>Masinloc</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{49} Section 32 of RA 9136 specifically states that “the national government shall directly assume a portion of the financial obligations of NPC in an amount not to exceed two hundred billion pesos (P200 billion).
<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>Power Partners, Inc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calaca Coal</td>
<td>October 16, 2007</td>
<td>Calaca Holdco, Inc. (Suez-Tractebel; Belelectric Finance B.V.)</td>
</tr>
<tr>
<td></td>
<td>763,530</td>
<td></td>
</tr>
<tr>
<td>Ambuklao-Binga Hydo</td>
<td>November 27, 2007</td>
<td>SN Aboitiz Power Hydro, Inc.</td>
</tr>
<tr>
<td></td>
<td>325,000</td>
<td></td>
</tr>
<tr>
<td>Sub-total</td>
<td>1,375</td>
<td>2,018,530</td>
</tr>
<tr>
<td>Total to Date</td>
<td>1,850.4</td>
<td>2,682,740</td>
</tr>
<tr>
<td>Balance to Reach</td>
<td>1,161.9</td>
<td>2008</td>
</tr>
<tr>
<td></td>
<td>1,323.4</td>
<td>2009</td>
</tr>
<tr>
<td>Total</td>
<td>4,335.7</td>
<td>100%</td>
</tr>
</tbody>
</table>


The installed capacity mix by source of electricity of the country, meanwhile, is in Fig. 6.

Fig. 6. Installed Capacity Mix, Philippines as of 2007

![Installed Capacity Mix, Philippines as of 2007](image)

Total Capacity = 15,829 MW

Source: DOE-PPDD

Privatization through sale of assets depends in most part on the plant-specific concerns, including operations and maintenance agreements for multipurpose plants, fuel supply agreements, land related issues, investors’ interest, and other issues. For the privatization of NPC genCos, it really took PSALM more than a while to sell.
With regard to the market power of generation companies per grid, the ERC, consistent with the EPIRA, has issued a resolution (No. 20) in 2007 setting the installed generating capacity and market share per grid and national grid, as follows (Table 6):

On the basis of these limitations, and looking at the market share and installed capacity of generating companies per grid as of 2008, NPC’s market share has shrunk to at least 8% in Luzon but ballooned to as high as 54% in Mindanao. Non-NPC IPPs were generally within the prescribed limits in all grids, except in Luzon; while the NPC-IPPs were all above the limits in all grids (see Table 7).

Table 6. Installed Generating Capacity and Market Share Limitation as of 2007

<table>
<thead>
<tr>
<th>Grid</th>
<th>Installed Generating Capacity (kW)</th>
<th>% Market Share Limitation</th>
<th>Installed Generating Capacity Limit (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luzon</td>
<td>10,867,220</td>
<td>30%</td>
<td>3,260,166</td>
</tr>
<tr>
<td>Visayas</td>
<td>1,506,540</td>
<td>30%</td>
<td>451,962</td>
</tr>
<tr>
<td>Mindanao</td>
<td>1,867,250</td>
<td>30%</td>
<td>560,175</td>
</tr>
<tr>
<td>National</td>
<td>14,241,010</td>
<td>25%</td>
<td>3,560,253</td>
</tr>
</tbody>
</table>

Source: DOE, 2008

Table 7. Installed Generating Capacity and Market Share, Ownership as of 2008

<table>
<thead>
<tr>
<th>Grid &amp; National Share (%)</th>
<th>NPC</th>
<th>NPC-IPP</th>
<th>Non-NPC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installed Capacity (MW)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luzon</td>
<td>832</td>
<td>6,305</td>
<td>3,739</td>
<td>10,867</td>
</tr>
<tr>
<td>Visayas</td>
<td>483</td>
<td>756</td>
<td>268</td>
<td>1,507</td>
</tr>
<tr>
<td>Mindanao</td>
<td>1,104</td>
<td>674</td>
<td>90</td>
<td>1,867</td>
</tr>
<tr>
<td>Philippines</td>
<td>2,410</td>
<td>7,734</td>
<td>1,867</td>
<td>14,241</td>
</tr>
</tbody>
</table>

Source: DOE, 2008
2. Review of NPC-IPP contracts and the transfer of the management and control of at least 70% of the total energy output of power plants under contract with NPC to the IPP Administrators

The PSALM is in charge of reviewing and renegotiating NPC-IPP contracts, with the end in view of seeking reduction in the stranded contracts of NPC. This should be finalized by the end of 2005. As of April 2005, 20 of 35 IPP contracts have been resolved by PSALM, which resulted in savings of $1.03B. Of the 15 remaining, 6 contracts are already expired and 9 contracts are for final agreement with IPP concerned.

With regard to transferring the management and control of NPC-IPP contracts to the IPP Administrators, PSALM has assumed the IPP Administrator role, pending the appointment of one in the future. From Table 7, NPC-IPP plants represent a sizeable 7,734MW of installed generating capacity or 54% of the total national grid share. These also represent substantial market share in all island grids, higher than the mandated market share limit.

3. Privatization of TransCo

The EPIRA also mandates PSALM to privatize the TransCo through outright sale or a concession agreement, whichever is more efficient. The approved TransCo privatization plan was through concession agreement which covers 25 years, subject to renewal of another 25 years, upon satisfactory performance and financial guarantees. The approved concessionaire shall be responsible for the improvement, expansion, operation and maintenance of all assets and related businesses.

The structure and bidding package for the fourth round of bidding for the 25-year concession of TransCo was approved in June 2007. (This was after 3 failed biddings from 2003 to 2006). Thereafter, a series of international road shows was conducted and an invitation to bid was posted on July 2007, generating 21 prospective investor groups. On December 12, 2007, the consortium of the Monte Oro Grid, Calaca High Power Corp. and State Grid Corp. of China emerged as the highest bidder for the 25 year-concession of TransCo.

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51 However, a recent Department of Justice (DOJ) opinion provides that the concession awarded over TransCo may not include the responsibility of operating the transmission assets of TransCo (DOJ Opinion 87 (undated), 10 (18 November 2004) and 7(11 January 2005).
IV. Issues and Challenges Related to Competition

1. (All) Preconditions to Open Access and Competition Have Not yet been Met

EPIRA intended to introduce a range of alternative mechanisms that will enhance the exposure of the PEI to competitive market forces. Such mechanisms include a combination of market actions where competition can be introduced (generation and supply), and effective regulation in segments that remain natural monopoly (transmission and distribution). In the former, mechanisms include open access and the WESM.

With open access, any qualified person may be allowed the use of transmission, and/or distribution system and associated facilities, to service consumers. With the WESM, consumers may buy and sell electricity in the spot market for a fee.

Hypothetically, these may enable consumers to choose their electricity supplier, distributor or generator and lessen those who may be in the captive market. These may also open “contestable markets” or markets where electricity end users have a choice of a supplier of electricity, as may be determined by the ERC.

However, unlike telephones, for example, electricity cannot be held and stored, or considered a unit. The spot market may introduce competition as more players may participate in the buying and selling of electric power. However, ordinary consumers may find it difficult to see how open access and WESM may contribute to their being able to avail themselves of adequate, safe and cheaper electric power. Ordinary mortals do not have the capacity to participate because they do not have the means to buy electricity in bulk or in retail.

In addition, the preconditions for open access and competition set by EPIRA have not all been met. Privatization of NPC generation and transmission assets and liabilities has only slowly progressed. And for the restructuring, unbundling, disaggregating and deregulation, particularly of the PEI sectors, rates, regulators and the WESM, progress has only just started. The regulatory and governance framework, competition rules, mechanisms and organizational structures have been in place and slowly inching their way to institutionalization. However, it will take a while for these reforms to see results.

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2. Changing Market Configuration for the Best?

Nevertheless, as a result of the electricity restructuring reforms, we are seeing the electricity generation market changing from an NPC-dominated to a non-NPC-dominated (with NPC getting only 17% of the national grid market share) system. In the latter, 29% is contributed by private generating companies and 54% by NPC-IPP power plants.

At the surface, this looks good for the industry as the State is not actively competing with the private sector and that competition appears the playing field of market forces. However, this restructuring was done, at the expense of public funds. Recall that to address the inefficiency of the vertically integrated generation and transmission State Corporation called the NPC, the EPIRA mandated

a) the condonation and assumption by the national government through the PSALM, of all debts incurred and other liabilities of electric cooperatives, distribution utilities and the NPC;

b) the privatization of NPC; and

c) the mandated rebates and reduction of electric power cost reflected in the segregated or unbundled electric bills.

Basic to these strategies to restructure the PEI are the questions: “Who would pay for the privatization of NPC?”, “Who would benefit from the privatization of NPC?”, and “Would rates go down and redound to the welfare of the public?”

Related to the first question, Cruz (2001) opines that “the government will absorb some $6.7 billion worth of liabilities of NPC and the sell NPC debt-free. It will in turn use the taxes paid by all taxpayers to pay those debts. Thus, each and every individual taxpayer, whether he/she uses electricity or not, will pay the debts that the rich buyers of NPC should pay.”

With regard to the second question, Banal (2001) surmises that these would be “the rich and the foreigners who could buy NPC generating plants for a song.” With regard to the third question, the Freedom from Debt Coalition believes otherwise, i.e., the restructuring and privatization of NPC “entails a heavy price, which the people will bear, not the greedy IPPs, not the elite family businesses, not even the government.”

The unbundling of rates and the removal of cross-subsidies, and the reflection of the “true costs” of power generation may not also redound to lower power rates. A recent study by Canlas (2008) mentioned taxes on generating electricity from natural gas and other indigenous resources increase the electricity rates

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than lower them. Thus, he recommends “reducing the royalties, returns and taxes on these sources to boost growth in these trying times.”

3. Will Monopoly and other forms of Market Abuse be Abolished?

EPIRA allows cross-ownership between generation and distribution companies. However, it mandates no cross-ownership with the transmission sub-sector and/or its concessionaires, and limits supply contracts from generation affiliate companies to the level of only 49%. Thus, most of the winning buyers of NPC genCos are distribution utilities, e.g., Aboitiz, First Holding, Calaca, etc. (see Table 5).

If DUs have already bought NPC genCos and are, at the same time, also running their own private genCos (remember the 17% market share of private utilities?), what would prevent them from not getting their supply from their own generating plants, even with the 50% bilateral supply contract cap?

The Manila Electric Company (Meralco), the giant distribution company owned by the Lopezes with franchise covering most of the main island of Luzon, has figured in a recent controversy involving high electric rates. Because it was convenient to refer to the unbundled monthly bills of consumers, Meralco put the blame (for the high electric bill) on the generation companies (NPC mainly), TransCo, the taxes and charges by the government, among them the universal charge for missionary electrification and environmental protection, value added tax; except on Meralco’s own distribution charge and systems losses.

Looking at one’s electric bill, one would immediately be convinced because on the average, distribution costs amount to around 20% (generation and transmission to around 62%). But beneath this seeming transparent unbundled bill lies the problem: Meralco would hide from the public the fact that it had been generating power from its own sister generation companies (Quezon Power and FirstGen) and NPC-bought genCos (Pantabangan and Agusan Hydro) to a level that may have breached the 50% cap and had been reneging on its supply contract with NPC. In addition, it has been alleged to have been charging from

58 The Lopezes are also into water provision (Maynilad Water, a concessionaire in the MWSS privatization); managing a giant TV and radio network (ABC-CBN, ANC, DZMM); managing a huge telecommunication network (BayanTel), among other businesses.
59 Neil Cruz, “Power rates’ turn to rise” Philippine Daily Inquirer, April 20, 2008. Although Meralco would explain that it has been hoping to get power supply from NPC but its rate as posted in the WESM have been higher (around P6/kWh) than the rates charged by its sister companies and NPC-bought genCos (around P4.50/kWh). But NPC would counter that Meralco would pick NPC’s price at peak demand and not at normal periods where demand and supply have stabilized. Here NPC’s rate would be around P2/kWh or less.
the systems loss provisions, income taxes and operating expenses of its affiliate companies.

The WESM is also an indication that the major players in the supply sector are also the main (private) players in the generation and distribution sectors, e.g., Aboitiz, Lopez, et al, and their foreign counterparts.

4. How about the Regulators?

The independent regulator, the ERC, has been capacitating itself for its new, strengthened role in competition regulation, a task it was never prepared to do, in the first place. Its predecessor, the ERB for the energy sector (electricity, gas and oil) has been competent in (traditional) rate regulation, mindful of the limited rate on return on base (RORB) parameters it would evaluate. EPIRA has changed all that and bestowed upon the ERC so many tasks it may not be able to do efficiently and effectively all at the same time. Among these are the following:

a) Traditional Rate and Service Regulation60
b) Promote Competition, Encourage Market Development through such rules and regulations as Competition Rules and limitations on recovery of system losses, Grid Code and a Distribution Code, etc. It shall also develop performance targets and the minimum financial capacity standards and other terms and conditions for access to and use of the transmission and distribution facilities; and set the criteria for eligibility for membership in the WESM. It shall also ensure the functional and structural unbundling of the electricity industry participants’ business activities and rates and determine the levels of cross subsidies in the existing retail rates until the same is removed.
c) Promote Consumer Choice and Protection61

60 This include a) review and approve any plan for the expansion or improvement of transmission facilities; b) promote efficiency and non-discrimination, the ERC, after the conduct of public hearings, shall determine, fix and approve transmission and distribution wheeling charges, and retail rates through an established and enforced ERC methodologies setting the same. It shall fix and regulate the rates and charges to be imposed by distribution utilities on their captive market as well as the universal charge to be imposed on all electricity end users including self-generating entities; c) formulate the methodology for determining and fixing wheeling and retail rates; d) any application or petition for rate adjustment or for any relief affecting the consumers must be verified and accompanied with an acknowledgement of receipt of a copy thereof by the LGU Legislative Body of the locality where the petitioner or applicant principally operates. It may approve or disapprove such petitions by an affirmative vote of three members of the Commission; e) amend or revoke, after due notice and hearing, the authority to operate of any person or entity which fails to comply with the provisions of this Act; f) establish performance standards for TRANSCO and its concessionaire, distribution utilities and suppliers; g) act on applications for cost recovery and return on Demand Side Management (DSM).
Not only does the ERC act as chief regulator of the transmission, distribution and supply sectors of the PEI, it shall also act as a competition watchdog. Thus, it is assigned with the following generic regulatory functions:

1) franchising and licensing of entrants or new market participants in generation, transmission and distribution
2) development of grid/distribution codes administration and enforcement
3) use of incentive rate making to encourage efficiency and productivity
4) setting wheeling tariffs for transmission and distribution
5) management of stranded costs or debts
6) regulation of anti-competitive practices, including oversight of mergers and consolidations, and cross-ownership restrictions
7) application of special fees such as missionary electrification, universal levy and others
8) setting technical, performance and service standards
9) careful determination of special fees, subsidies, reliability of power supply and power purchase agreements in the area of rural electrification, and
10) additional responsibilities for monitoring the spot market, model supply contract, cross ownership, cross subsidies and TRANSCO operations. \(^{62}\)

These translate to an ERC with all its hands full.

Other industry regulators and supervisors have redefined tasks, e.g., DOE, NEA, and a legislative Power Commission is in place to oversee the implementation of the EPIRA. New proposals to amend the reform act are being deliberated in Congress addressing the basic question of whether to amend or not to amend the EPIRA.

V. Implications for Electricity Governance and the Next Steps?

Electricity reforms will not translate to competition overnight especially in countries like ours which have been used to monopoly provision and distribution of power supply. But these reforms are slowly inching their way in institutions and stakeholders of the PEI, through regulatory and competition frameworks, processes and systems promulgated and implemented. Their effects, whether favorable or adverse to the consumers and industry players, are 'openly' discussed and debated upon, through various forums and mediums available, electronically or physically. These are good developments in electricity governance and competition reforms.

\(^{61}\) This would include the following functions: a) Determine the electricity end users in the contestable and captive markets; b) Implement the abolition of all subsidies. The ERC shall also set a lifeline rate for marginalized end users or the poor; c) Preside over all cases contesting rates, fees, fines and penalties imposed in the exercise of its powers, and over all cases involving disputes between and among the industry participants (Section 4, Rule 3 of IRR

Generally, the results of these reforms are in laying the groundwork for competition, e.g., an industry that was restructured into four sectors, functions of industry players that were redefined, new institutions were established to shepherd competition like WESM and the ERC, rules for privatization, deregulation and open access developed and promulgated. These, however, also inadvertently resulted in the breaking of one monopoly (NPC in generation and transmission) and replacing it with another (Meralco in the distribution sector and/or generation sector, if we count the genCos it owns or is affiliated with) and/or in privatizing NPC and replacing it with an oligopoly (the private utilities in both the generation and distribution sectors), at the expense of the public taxpayers who would shoulder the stranded debts and contracts of NPC, as mandated by the EPIRA. The latter could be considered collateral ‘damage’ or a bitter pill of privatization efforts, or a sacrifice we all must bear for the sake of competition.

The road to reform, restructuring, privatization and deregulation nevertheless, has been laid. The actors have stepped on their gears. The direction seems the better way to go. Alterations and amendments may still be done and are being done by relevant agencies, ERC, DOE, and Congress. It is only hoped that in all these efforts, competition is achieved not only to favor the industry players as a whole, but more importantly the public, which electricity providers must serve.
Competition in Electricity Markets: Philippines

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University of the Philippines

Outline of Presentation

- Introduction
- The Electric Power Industry Restructuring Act (EPIRA) of 2001
- Progress in Implementing the EPIRA
- Issues and Challenges Related to Competition
- Implications for Electricity Governance and the Next Steps
Introduction

- EPIRA as a major policy reform to restructure, privatize and deregulate the Philippine Electricity Industry (PEI)
- Expected to address the ills and problems of the PEI

Problems of the PEI

- Absence of consumer choice
- Relatively high electricity end-use (retail) rates (second to Japan), averaging from $0.06-0.12/kWh
- Highly fragmented distribution sector
- Uncertainty of funding source for long-term investment requirements and
- Lack of incentives to drive the industry stakeholders to operate more efficiently (where systems losses as high as 9.5-14% were allowed and sanctions against erring utilities coming from regulators were few and far between)
The EPIRA

- Caps the series of policy reforms in the PEI
- Generally aims to unbundle the industry where competition, efficiency, innovation and end-user choice would be introduced purportedly to bring down electricity rates and improve the delivery of power to end-users.

Specific Objectives

- Ensure transparent and reasonable prices of electricity in a regime of free and fair competition and full accountability
- Provide for an orderly and transparent privatization of the assets and liabilities of the NPC; and
- Establish a strong and purely independent regulatory body and system and enhance the competitive operation of the electricity market
Features

- Restructuring and deregulation of the PEI from a vertically integrated generation/transmission with a fragmented and inefficient distribution/supply sub-sector to

- A PEI that is segregated or unbundled into four sectors: generation, transmission, distribution and supply/retail; with the deregulation of the generation and supply/retail (businesses affected with public interest only) sub-sectors which shall be competitive and open to competition to both domestic and foreign companies.

Fig. 1. The PEI as Envisioned in RA 9136

Source: Adapted from EPIRA; Mendoza, 2003
Features

- Privatization of the Generation and Transmission Assets of NPC and the assumption by the National Government of its stranded debts and contracts with the independent power producers (IPPs);
- Introduction of Open access in both transmission and distribution wires;
- Unbundling of electricity tariffs
- Elimination of cross subsidies, except for lifeline rates

Features

- Regulation from tradition rate regulation to competition regulation by a strengthened Energy Regulatory Commission (ERC) and shall be strengthened.
- Redefinition of the roles of DOE, NEA and other government agencies involved in the supervision and administration of the PEI; creation of a Joint Congressional Power Commission (PowerCom) to oversee the implementation of the EPIRA
Features

Electricity providers shall be required to comply with technical and financial standards for providing quality service to consumers, implying reduced system losses passed on to consumers.

Plans/Preconditions to Open Access & Competition

- Privatization of at least 70% of the total capacity of generating assets of NPC in Luzon and Visayas
- Review of NPC-IPP contracts and the transfer of the management and control of at least 70% of the total energy output of power plants under contract with NPC to the IPP Administrators
- Removal of cross subsidies between/within grids and/or classes of customers, upon the establishment of a universal charge
- Unbundling of transmission and distribution wheeling
- Establishment of WESM to provide competition in the wholesale electricity market.
Additional Plans/Preconditions

- The adequacy and establishment of all necessary infrastructures, including but not limited to, transmission networks, generation supply and the customer switching system.
- The promulgation by ERC of all pertinent rules and regulations governing Retail Competition and Open Access, including among others, Rules for Customer Switching and Rules for Contestability.

Progress to Date

- Privatization
  - Some 10 of 23 hydro and coal-fired thermal plants were privatized amounting to some 43% of the privatization target as of end of 2007. This profited some $2,682M bid price.
  - On December 12, 2007, after four failed bidding/rebidding, the consortium of Monte Oro Grid, Calaca Power Corp., and State Grid Corp of China emerged as the highest bidder for a 25-year concession of TransCo.
Progress to Date

- Establishment of WESM
  - Establishment of governance structures
  - Registration of WESM players
  - Establishment of WESM Rules and other legal frameworks

Fig. 3. The WESM Players
Fig. 4. Electricity Rates, WESM ESP and Retail Rates in Luzon and Visayas

Progress to Date

- Unbundling of Rates and Removal of cross subsidies between/within grids and/or classes of customers, upon the establishment of a universal charge
- Strengthening of the ERC
Unmet Hurdles

- Privatization of at least 70% of the total capacity of generating assets of NPC in Luzon and Visayas
- Review of NPC-IPP contracts and the transfer of the management and control of at least 70% of the total energy output of power plants under contract with NPC to the IPP Administrators
- Privatization of TransCo

Fig. 5. PSALM’s Privatization Plan/GenCo Sale Sequence
Fig. 6. Installed Capacity Mix, Philippines as of 2007

Table 7. Installed Generating Capacity and Market Share, Ownership as of 2008

<table>
<thead>
<tr>
<th>Grid &amp; National Share (%)</th>
<th>NPC</th>
<th>NPC-IAPP</th>
<th>Non-NPC</th>
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<tr>
<td>Installed Capacity (MW)</td>
<td>10.987</td>
<td>10.987</td>
<td>10.987</td>
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<tr>
<td>Luzon</td>
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<td>2,410</td>
<td>7,734</td>
<td>1,887</td>
<td>14,241</td>
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</tbody>
</table>

Source: DOE, 2008
Issues and Challenges

(All) Preconditions to Open Access and Competition Have Not yet been Met

Changing Market Configuration for the Best?

Will Monopoly and other forms of Market Abuse be Abolished?

How about the Regulators?

Implications for Electricity Governance

Electricity reforms will not translate to competition overnight especially in countries like ours which have been used to monopoly provision and distribution of power supply. But these reforms are slowly inching their way in institutions and stakeholders of the PEI, through regulatory and competition frameworks, processes and systems promulgated and implemented.
Implications for Electricity Governance

Generally, the results of these reforms are in laying the groundwork for competition, e.g., an industry that was restructured into four sectors, functions of industry players that were redefined, new institutions were established to shepherd competition like WESM and the ERC, rules for privatization, deregulation and open access developed and promulgated.

Next Steps?

Amend the EPIRA or not?

It is only hoped that in all these efforts, competition is achieved not only to favor the industry players as a whole, but more importantly the public, which electricity providers must serve.