

Final Report of the “Task Force to Study Ways to Reduce the Price of Electricity”

**Task Force Findings and Recommendations
Consolidated by the Academe Subgroup**

Submitted to the Department of Energy

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List of Acronyms

AIM	Asian Institute of Management
ASEAN	Association of Southeast Asian Nation
BIR	Bureau of Internal Revenue
CAPEX	Capital Expenditure
DENR	Department of Environment and Natural Resources
DO	Department Order
DOE	Department of Energy
DOF	Department of Finance
DOLE	Department of Labor and Employment
DTI	Department of Trade and Industry
DTI-BOI	Department of Trade and Industry-Board of Investment
DU	Distribution Utility
EC	Electric Cooperative
ECOP	Employers' Confederation of the Philippines
EPIRA	Electric Power Industry Act
ERC	Energy Regulatory Commission
FDI	Foreign Direct Investment
FFCCCII	Federation of Filipino Chinese Chambers of Commerce and Industry, Inc.
FIT	Feed-In-Tariff
FPI	Federation of Philippine Industry
ILP	Interruptible Load Program
IPP	Independent Power Producers
IPPA	Independent Power Producer Administrator
JFC	Joint Foreign Chambers of the Philippines
KWh	Kilowatt-hour
LFT	Local Franchise Tax
LGU	Local Government Unit
LNG	Liquefied Natural Gas
MAP	Management Association of the Philippines
MBC	Makati Business Club
MERALCO	Manila Electric Company
MSK	Matuwid na Singil sa Kuryente Consumer Alliance Inc.
MW	Megawatt
NACI	Nationwide Association of Consumers, Inc.
NASECORE	National Association of Electricity Consumers for Reforms
NCAC	National Consumer Affairs Council
NEA	National Electrification Administration
NEDA	National Economic Development Authority
NFWC	National Federation of Women's Clubs of the Philippines
NGCP	National Grid Corporation of the Philippines
NPC	National Power Corporation
PBR	Performance Based Rate Setting
PCCI	Philippine Chamber of Commerce and Industry
PDM	Price Determination Methodology

PEMC	Philippine Electricity Market Corporation
PEPOA	Private Electric Power Plants Association
PHILFECO	Philippine Federation of Electric Cooperatives
PHILRECA	Philippine Rural Electric Cooperatives Association, Inc.
PIDS	Philippine Institute for Development Studies
PIPPA	Philippine Independent Power Producers Association
PNOC	Philippine National Oil Company
PSA	Power Supply Agreement
RE	Renewable Energy
RESA	Retail Electricity Suppliers Association of the Philippines
RORB	Return on Rate Base
SPP	Sister Power Producer
TransCo	National Transmission Corporation
UA&P	University of Asia and the Pacific
UPLB	University of the Philippines Los Baños
USAID	United State Agency for International Development
VAT	Value Added Tax
WESM	Wholesale Electricity Spot Market

Executive Summary

The Department of Energy (DOE) created the “Task Force to Study Ways to Reduce the Price of Electricity” (hereafter, Task Force) via Department Order No. 2014-05-009 and tasked it to do the following:

- a) Evaluate current breakdown/components of electricity price and identify factors affecting them
- b) Conduct multi-sectoral public consultation nationwide to present their findings and identified ways and measures to help reduce the price of electricity
- c) (For each member) Represent its sector and ensure complete dissemination of all discussions and agreements during the conduct of dialogues
- d) Submit a report of the results of its study to the DOE
- e) Perform such other responsibilities as the DOE may direct

This report is in compliance with task (d) and presents the results of carrying out tasks (a) to (c) and (e) above.

Given Meralco data on its franchise area and National Electrification Administration (NEA) data on electric cooperatives, the examination of the breakdown of electricity rates shows that in 2014, the generation charge component accounts for the highest share in the electricity price (i.e., 50.5% of Meralco's Php11.15/kWh residential rate and 49.9% of electric cooperatives' average Php9.83/kWh residential rate), followed by the distribution charge component (i.e., 25% of Meralco's rate and 17% of electric cooperatives' rate). Time series data for the period 2004-2014 in the case of Meralco and 2008-2013 in the case of electric cooperatives show that among the components of the electricity price, government charges (i.e., universal charges and taxes) exhibited the fastest increases, followed by generation charge increases. Among administrative regions, Region IV-B has the highest electricity price (Php10.1/kWh) and Region X has the lowest electricity price (Php6.4/kWh).

Short-term recommendations by the Task Force can be taken to mean as actions that can be done and completed within the term of this administration, whereas medium-term recommendations are those which can be started during the current administration but may be realistically completed only during the next administration. The recommendations are as follows.

Generation

Short-term recommendations

- Streamline the approval process for new generating plants and address permitting issues and other bureaucratic impediments, so as to encourage the construction of new power plants
- Declare power projects as projects of national significance
- Maximize the Ilijan power plant's capacity using straight diesel during the Malampaya maintenance shutdown in the summer months of 2015
- Fast-track the tender of banked gas
- Ensure power supply reliability since power plant outages reduce the available capacity; drive for more effective coordination / synchronization of maintenance to minimize supply interruptions

- Review the must-offer rule in the wholesale electricity spot market (WESM) as violations of this lead to lower available capacity
- Fast-track the rehabilitation of Malaya-1
- Auction long-term power supply agreements (PSAs)
- Undertake generation mapping, as a policy and regular practice, and implement optimal decision-making on genco location
- Implement the 10% income tax (instead of the 30% income tax) for renewable energy (RE) plants in accordance with the RE Law

Medium-term recommendations

- Develop a sustainable and optimal energy mix policy
- Continue the implementation of BOI incentives for power generation and extend the Board of Investment (BOI) fiscal incentives for required new plants
- Review the WESM design and transform the WESM into a more competitive market

Transmission and System Operation

Short-term recommendations

- Individually identify the components of the transmission cost in order to determine which components can be reduced
- Resolve transmission congestion
- Fast-track the NGCP studies for new power plants and fast-track the transmission projects for new power plants or expansion projects; fast-track the completion of NGCP transmission projects that are already in the pipeline
- Pursue longer term contracting of ancillary services including prospective plants
- Upgrade or add transmission lines in the areas affected by the NGCP's N-1 contingency requirement and congestion. The location of the additional lines should be subject to further analysis and simulation in order to determine its impact.

Medium-term recommendations

- Undertake capital expenditures (CAPEX) to further strengthen transmission (and this also applies to distribution) systems, resolve transmission congestions and modernize the infrastructure

Distribution

Short-term recommendations

- Improve the generation mix at the DU level
- Streamline and fast-track the approval of power supply agreements (PSAs)
- Truly encourage the connection of renewable energy like roof solar and distributed generation
- Pursue efficiency improvements in the retail supply sector in order to reduce charges

- Review the Performance-Based Rate (PBR) setting for DUs with the aim of reducing the price burden to consumers while balancing the viability objectives of DUs

Medium-term recommendations

- Review the cross-ownership rules and the current market dominance status of players

System Losses (in transmitting and distributing power)

Short- to medium-term recommendations

- Carefully examine the components of the systems loss in order to identify ways of reducing this
- Review the ERC-set cap on systems losses
- Strictly enforce RA 7832 (the law on system losses) and aim for a long-term goal of single-digit losses

Universal Charges

Short- to medium-term recommendations

- Ensure judicious action on any new universal charges, e.g., Stranded Debt recovery, Feed-In Tariff Allowance (FIT-All)
- Improve the missionary electrification implementation so as to reduce the universal charges
- Look into the prospect of the national government absorbing universal charges

Taxes

Short- to medium-term recommendations

- Review whether or not the government is “overtaxing” the energy sector
- Review the legislations on taxes on electric power and whether or not these can be gradually reduced or phased out

Demand Management

Short- to medium-term recommendations

- Contain the consumers’ spending on power through intensive campaigns
- Mobilize the self-generating capacity of large end-users to address the foreseen shortfall in Luzon (and possible high impact on electricity price)
- Adopt flexible work arrangement to help alleviate the tightness of energy supply

Various cross-cutting recommendations

Short- to medium-term recommendations

- Help create an environment that encourages investors to do business in the power sector
- Apply part of the government's natural gas royalty take to reduce power rates
- Strengthen the planning units of the DOE
- Establish a public-private steering committee to guide initiatives
- The ERC must exercise its mandate strictly and efficiently given the pending cases (e.g., interim bid cap, secondary price cap)

1 Introduction

The Department of Energy (DOE) created a multi-sectoral “Task Force to Study Ways to Reduce the Price of Electricity” (hereafter, Task Force) via Department Order (DO) No. 2014-05-009. The Task Force has the following scope of work, according to DO 2014-05-009:

- a) Evaluate current breakdown/components of electricity price and identify factors affecting them
- b) Conduct multi-sectoral public consultation nationwide to present their findings and identified ways and measures to help reduce the price of electricity
- c) (For each member) Represent its sector and ensure complete dissemination of all discussions and agreements during the conduct of dialogues
- d) Submit a report of the results of its study to the DOE
- e) Perform such other responsibilities as the DOE may direct

DOE Secretary Carlos Jericho L. Petilla called on energy sector stakeholders to participate as members of the Task Force. On the June 18, 2014 inaugural meeting of the Task Force, more than a hundred stakeholder representatives attended and, thus, Secretary Petilla grouped them into stakeholder subgroups, namely: business/private sector, academe, generation industry, retail supply industry, electric cooperatives sector and NEA, private distribution utilities, Meralco, consumer group A (NCAC/NACI, NFWC), consumer group B (Government Watch, NASECORE), consumer group C (MSK, Citizen Watch), government oversight and other agencies (DOF, BIR, DTI, NEDA), and labor group (NAGKAISA).¹ The DOE invited the Philippine Institute for Development Studies (PIDS) to chair the Task Force. Each stakeholder group was requested to designate their the principal and alternative representatives, with the understanding that only such representatives would be required to attend Task Force meetings. Although such had been the agreement, not all subgroups designated principals and alternates and the size of the Task Force continued to be large in the succeeding meetings.

To help the Task Force members understand the intricacies of the electric power market, the DOE and the Philippine Electricity Market Corporation (PEMC) organized a seminar called WESM 101 and this was held on July 3, 2014. Further, in response to the request of some Task Force members for information on the impending supply shortage in Luzon, the DOE presented the Luzon Power Supply-Demand Outlook during the second Task Force meeting on August 1. The Task Force agreed to meet monthly and aimed to present its findings in December 2014. In total, there had been six meetings prior to the presentation of this Final Report.² On the third meeting of the Task Force, the chairpersonship of the Task Force was turned over to the PIDS, with the understanding that Dr. Gilberto Llanto, PIDS president, will be the principal, and Dr. Adoracion Navarro, PIDS senior research fellow specializing on energy and

¹ According to DOE officials, the creation of the Task Force was also in response to the clamor of the labor sector to have it set up. However, no labor sector representative attended the Task Force meetings and brainstorming sessions despite repeated invitations by the DOE Secretariat.

² The Task Force meetings were held on the following dates: June 18 (inaugural meeting), August 1 (as a replacement for the July meeting that was postponed), August 28, October 8 (as a replacement for the September meeting that was postponed), October 30, and November 26, 2014.

other infrastructure sectors, will be the alternate.³ Brainstorming on the initial recommendations (i.e., recommendations during the second and third meetings) and subsequent recommendations were held on the fourth to the sixth meetings of the Task Force, with Dr. Navarro acting as chairperson. To help the Task Force consolidate the various recommendations and balance the interests of the different stakeholders, the Academe Subgroup⁴ held separate roundtable discussions on July 7 and September 22, 2014 at the PIDS and the members exchanged insights online during the run-up to the presentation of this Final Report. The Academe Subgroup through the leadership of PIDS did its best efforts to balance the interests of the stakeholders reflected in the recommendations, while at the same time maintained transparency in divulging all recommendations (including those which elicited major differences in opinion).

Overall, having numerous stakeholder representatives significantly contributed to the diversity and richness of ideas generated during the discussions, but it led to challenging time management and relationship management tasks. The persuasive power of the DOE in binding some stakeholders to the social obligation of attending multi-stakeholder consultations was also put to test as there were crucial stakeholders which were unable to regularly send representatives (e.g., grid concessionaire).

Note that the recommendations herein are not necessarily supported by quantitative simulations as these are a collection of insights gathered during the brainstorming sessions or from the submitted position papers. Supporting quantitative simulations (e.g., counterfactual simulations of the impacts on the electricity price of the suggested policy adjustments) may, however, be conducted by DOE technical staff or through dedicated experts hired for the job.

The succeeding discussions in this report are organized as follows: section 2 presents the analysis of the components of the electricity price; section 3 discusses the short-term and medium-term recommendations; and section 4 outlines the suggested next steps. Annex 1 summarizes other recommendations wherein major differences of opinion occurred or no explanations were provided by the source of the recommendations. Annex 2 lists the Task Force members who attended the meetings and the invited organizations which were unable to send representatives.

³ During the turnover of chairpersonship, PIDS also suggested to the DOE that the transmission sector be represented in the Task Force. The DOE subsequently invited representatives from the Transco and the National Grid Corporation of the Philippines (NGCP). Transco sent representatives but the NGCP was unable to send representatives.

⁴ As representatives from academe had been unable to attend the initial Task Force meetings, PIDS organized the DOE's original invitees from different academic institutions into an Academe Subgroup and invited them to separate roundtable discussions. This Subgroup is instrumental in organizing and clarifying the recommendations of the Task Force. Based on either attendance to the Academe Subgroup roundtable discussions or submission of comments online, the following institutions were represented in the Academe Subgroup: PIDS, University of Asia and the Pacific-School of Economics, University of the Philippines (UP) Los Banos-College of Economics and Management, UP Diliman-School of Economics, UP Diliman-College of Engineering, and Ateneo de Manila University-School of Government. The names of the representatives are in Annex 2. One academic institution (Asian Institute of Management), which was originally invited by the DOE to join the Task Force, was unable to send representatives.

2 Electricity Price Components and Trends

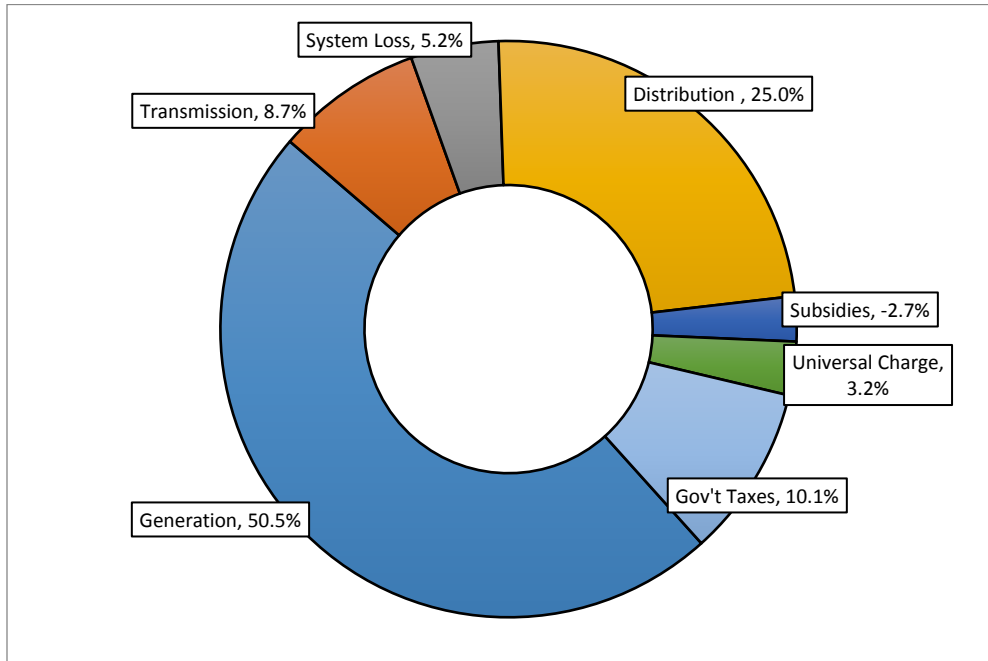
Republic Act (RA) 9136 or the Electric Power Industry Reform Act (EPIRA) of 2001 mandated the unbundling of the electricity rates in the country. Given available data on the unbundled rates, this report examines the price components that are charged to the consumers as a background to understanding possible ways to reduce the price of electricity. Understanding the composition of the electricity bill and the trends in the movement of the price per component may help policymakers in specifically targeting reforms that can immediately reduce the cost of electricity, and in planning for improvements that can make electricity affordable in the long term. In this report, the percentage share of each bill component and the average annual growth rates of the unbundled rates are examined. In addition, regional and per island group data on the average electricity rates show the geographical areas where electricity prices are the highest.

This undertaking intended to examine the details of the rates of private distribution utilities (DU) and electric cooperatives (EC) in the country. However, in the private DU group, only Meralco provided private data. The findings nevertheless reveal useful information on the significant contributors to private DU rate changes. For the EC group, the NEA provided data. The time periods for Meralco and EC data also differ, with the EC data showing a shorter time period. Nevertheless, the trends show some similarities in the movements of the components of the Meralco rates and EC rates.

2.1 Breakdown of electricity rates

As of August 2014, Meralco's residential rate is at Php 11.15 per kWh. Figure 1 details the components of this price. It can be noted that the generation charge accounts for the highest share (50.5%) in the electricity price. It is followed by the distribution charge (25%) and by government taxes (10.1%).

Figure 1. Breakdown of Meralco's Residential Rate, August 2014

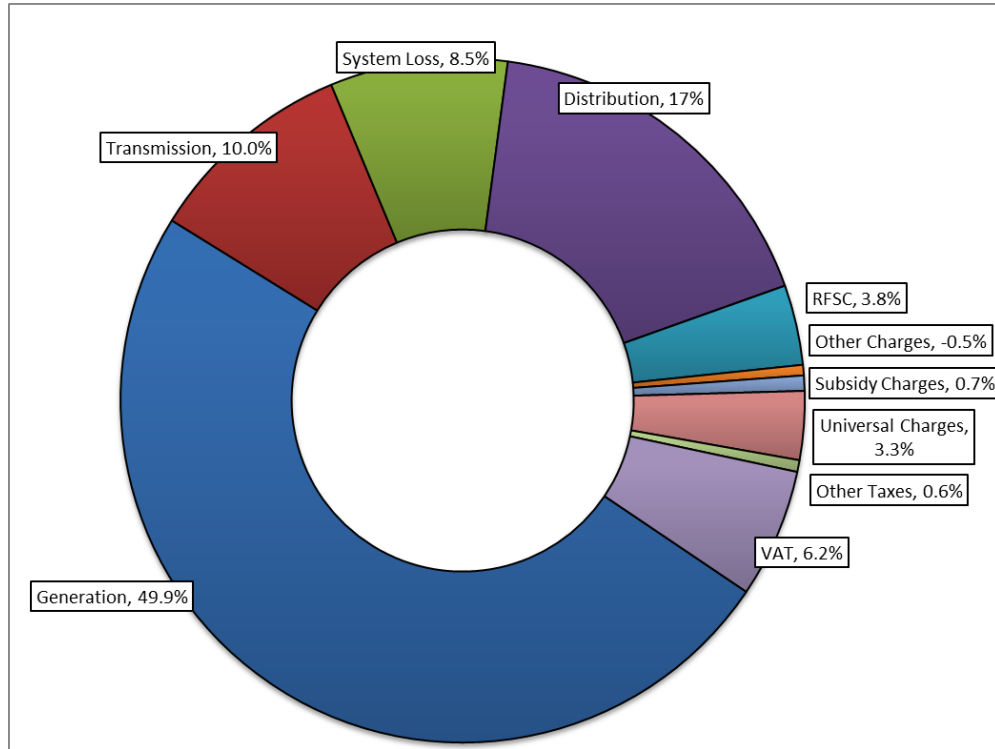


Note: For lack of time, the negative figure for subsidies (-2.7%) had not been examined. But refunds to customers as a consequence of regulatory decisions is one possible explanation.

Source: MERALCO

The same pattern wherein generation and distribution charges are the first two largest components can be observed from the unbundled residential rates of electric cooperatives. However, in the case of ECs, government taxes are not the third largest component but the transmission charge. Moreover, ECs on the average have lower residential rate relative to Meralco. As of June 2014, ECs' average residential rate is Php 9.83 per kWh. Figure 2 below shows the breakdown of the components for EC residential rates.

Figure 2. Breakdown of Electric Cooperatives' Average Residential Rate, June 2014



Notes: For lack of time, the negative figure for other charges (-0.5%) had not been examined. But refunds to customers as a consequence of regulatory decisions is one possible explanation. RSFC stands for Reinvestment Fund for Sustainable Capital Expenditure.

Source: National Electrification Administration

Among the components of the residential rates of ECs, the generation charge is the largest component (49.9%), accounting for approximately half of the total electricity price. The distribution charge (17%) and the transmission charge (10%) are the other components that account for the next large shares in the price. Value added tax (VAT) and other taxes take up around 6.8% of the total bill.

2.2 Trends in Price Movements

The trends in the movement of the components of the electricity price show that government charges (i.e., universal charges and taxes) and the generation charge exhibited the fastest increases over the period covered by the data. Government charge increases are the fastest and generation charge increases come in second.

Meralco provided historical data of annual average rates for all customer groups for the period 2004-2014. For the Meralco franchise area, universal charges have the highest growth rate, that is, an average annual rate of 23.5% over the past decade. The next fastest growing component is government taxes, which grew by 19.2% on the average annually over the same period. The third fastest growth rate is that

of generation charges, with an estimated average annual growth rate of 4.6% growth rate. It is important to note, however, that on average, the universal charges and the government taxes combined represent only about 13.3% of the total bill, whereas the generation charges represent approximately 50% of the total price.

It can also be observed that for the same period, the system loss charges for the Meralco-franchise area has decreased. The decrease can be summed up as an average annual decline of 0.3%.

Table 1. Growth Rates of MERALCO Rate Components (All Customer Groups), 2004-2014

	2004	2014*	Average Annual Growth Rate
Generation	3.458	5.425	4.6%
Transmission	0.863	0.942	0.9%
System Loss	0.467	0.451	-0.3%
Distribution	1.111	1.628	3.9%
Subsidies	-0.025	0.001	-
Universal Charge	0.040	0.328	23.5%
Gov't Taxes	0.138	0.794	19.2%
TOTAL	6.050	9.568	4.7%

Note: Annual average rates for all customer group.

*2014 is year-to-date annual average, as of October 2014.

Source: Meralco

Data for the electric cooperatives sector consist of end-year 2008 to end-2013 data on residential rates. Among the rate components, government charges exhibited the fastest increase, followed by the generation charge. Government charges include the universal charges, VAT and other taxes. This component grew by an annual average of 12% during the period considered. The generation charge component has the second largest average annual growth rate at 11% from 2008 to 2013. Table 2 details the unbundled residential rates for ECs.

Table 2. Growth Rate of ECs' Rate Components (Residential only), 2008-2013

	2008	2013	AAGR
Generation	2.92	4.88	11%
Transmission	1.12	1.18	1%
System Loss	0.62	0.86	7%
Distribution*	1.73	1.73	0%
RSFC	-	0.37	-

	2008	2013	AAGR
Subsidies and other charges**	0.02	-0.09	-240%
Government Charges***	0.53	0.96	12%
Total	6.94	9.89	7%

Notes: * includes distribution, metering and dupply

** includes lifeline and inter-class cross subsidies

*** includes universal charges, VAT, and other taxes

The large negative figure for subsidies and other charges may have been due to the EPIRA-mandated removal of cross-subsidies.

Although universal charges are not a tax, the NEA lump these together with government taxes.

No separate EC figures distinguishing universal charges from government taxes are found from the NEA data.

RSFC stands for Reinvestment Fund for Sustainable Capital Expenditure.

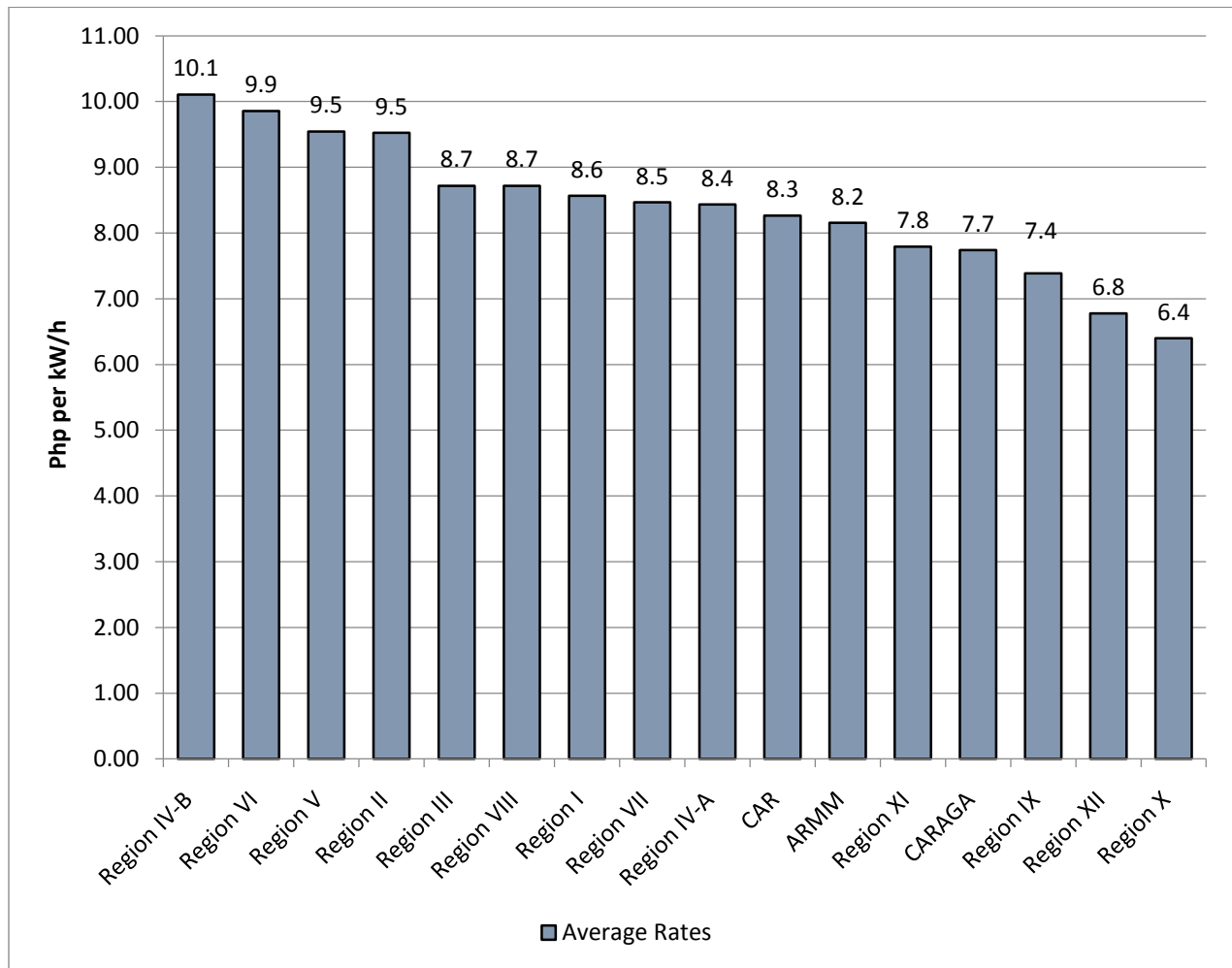
Source: National Electrification Administration

It can also be observed that the system loss charges in the electric cooperatives sector have increased. The increase can be summed up as an average annual growth of 7%.

2.3 Comparison of Electricity Prices across Geographic Areas

Among administrative regions, Region IV-B has the highest electricity price and Region X has the lowest electricity price. In December 2013, Region IV-B or MIMAROPA (Occidental Mindoro, Oriental Mindoro, Marinduque, Romblon and Palawan) was recorded as having the highest average system rate for the period at Php 10.1 per kWh. On the other hand, Region X or Northern Mindanao (Cagayan de Oro City, Iligan City, Bukidnon, Camiguin, Lanao del Norte, Misamis Occidental and Misamis Oriental) was recorded as having the lowest average system rate at Php 6.4 per kWh. Figure 3 below ranks the average system rates of cooperatives from highest to smallest for the month of December 2013.

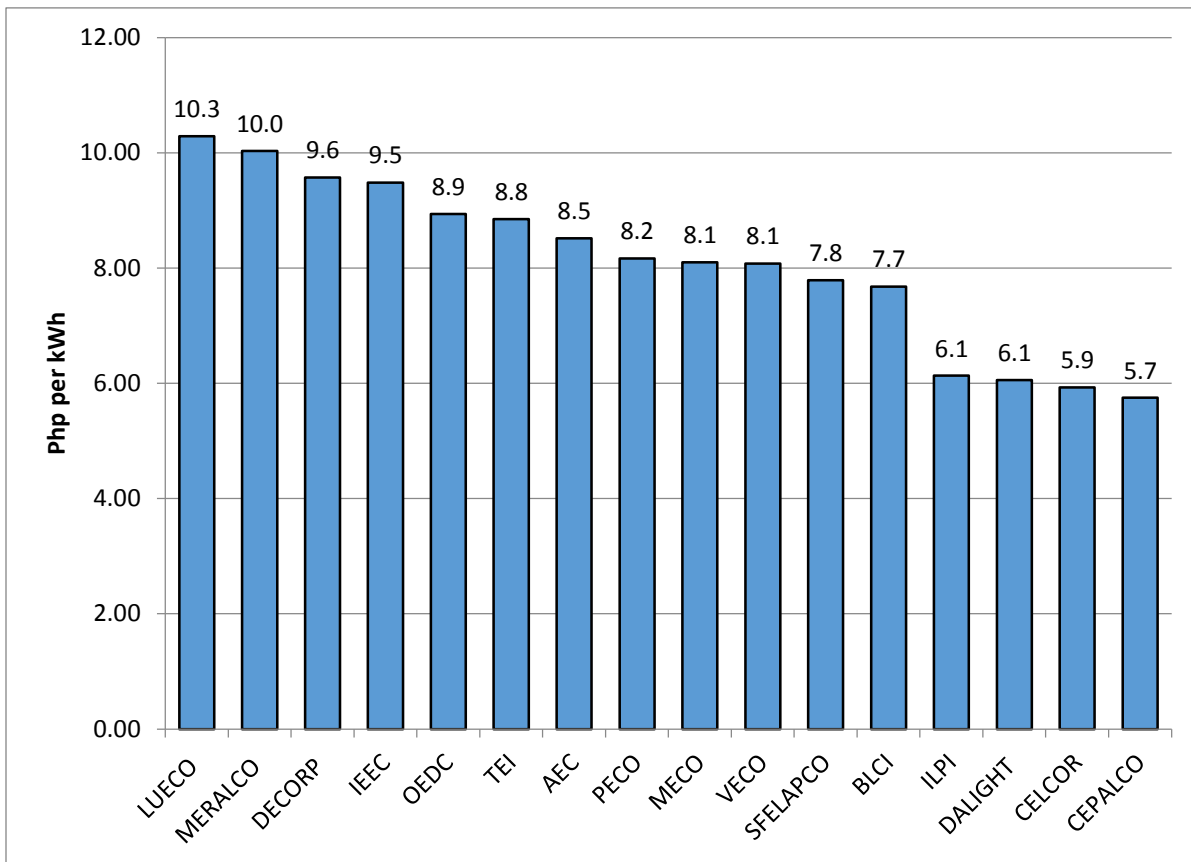
Figure 3. ECs' Average System Rates per Region, December 2013



Source: National Electrification Administration

The data for the private distribution utilities are not broken down by region but by individual private distribution utilities (PDUs). La Union Electric Company (LUELCO), Manila Electric Company (MERALCO) and Dagupan Electric Corporation (DECORP) are the top three PDUs that recorded the highest rates for December 2013, at Php10.3 per kWh, Php10 per kWh, and Php9.6 per kWh, respectively. On the same month, the Iligan Light and Power, Inc. (ILPI), Davao Light & Power Company, Inc. (DALIGHT), Cabanatuan Electric Corporation (CELCOR) and Cagayan Electric Power & Light Company, Inc. (CEPALCO) had the lowest rates at Php6.1 per kWh (for both ILPI and DALIGHT), Php5.9 per kWh, and Php5.7 per kWh, respectively. Figure 4 below details the electricity rates of PDUs for December 2013.

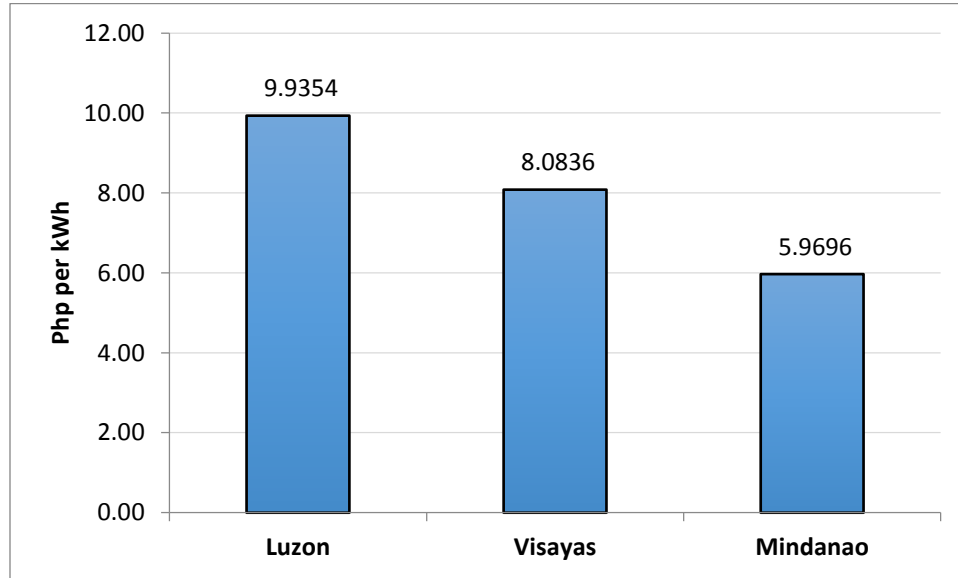
Figure 4. PDUs' Average Electricity Rates, December 2013



Source: Department of Energy

Among the island groups, Luzon has the highest private DU electricity price. For private distribution utilities in December 2013, the average electricity rates in Luzon was Php 9.94 per kWh. Mindanao has the lowest price at Php 5.97 per kWh. The national average for PDUs in December 2013 is Php 9.48 per kWh.

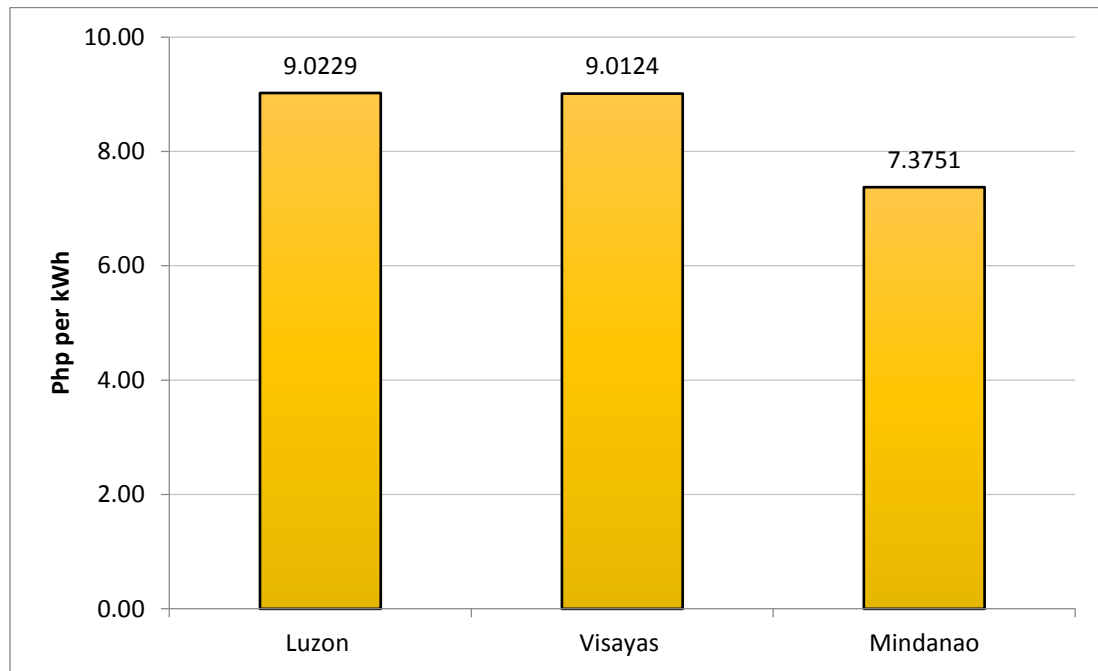
Figure 5. Electricity Rates of Private Distribution Utilities, December 2013



Source: Department of Energy

The average price of electricity cooperatives by major island groups is also highest in Luzon at Php9.02 per kWh in December 2013. Visayas average price followed at an average of Php9.01 per kWh. Despite the power crisis in the past year, Mindano ECs still have the lowest rates in the country, which can be averaged Php7.38 per kWh (Figure 6).

Figure 6. ECs Average System Rates per Island Group, December 2013



Source: National Electrification Administration

3 Recommendations of the Task Force

The recommendations are organized by topic—first by electricity price components, then demand management concerns, and lastly, various cross-cutting concerns. Short-term recommendations can be taken to mean as actions that can be done and completed within the term of this administration, whereas medium-term recommendations can be started during the term of this administration but may be realistically completed only during the next administration. Many of these short-term and medium-term recommendations may have to be sustained for a longer term in order to have reasonable and affordable electricity prices in a restructured electric power industry.

3.1 Generation

The major problem in the generation sector that is contributing to the high price of electricity is the thin supply margin. This is a result of the delays in the construction of new power plants and unreliability of some existing power plants. Most of the recommendations below, therefore, focus on the addition of new capacity and improving the reliability of existing plants.

Short-term recommendations

- Streamline the approval process for new generating plants and address permitting issues and other bureaucratic impediments in order to encourage the construction of new power plants

Based on statements by the Makati Business Club (MBC), Employers' Confederation of the Philippines, and European Chamber of Commerce of the Philippines (hereafter, MBC et al.), a minimum of three years is required to put up a power plant in other countries, whereas in the Philippines, with about 162 environmental and other clearances, the entire process stretches to more than five years. To reduce the number of permits and signatures, a cabinet-level investment facilitator may be needed to spearhead the streamlining of the permitting process. It is also necessary to organize the required permits from the following agencies, whose clearances will already be sufficient for the purpose of building new power plants: DOE, ERC, DENR, DTI-BOI, and LGU concerned.

- Declare power projects as projects of national significance

The government must give priority to projects seeking to augment existing capacity and declare these as projects of national significance.⁵ The government must then ensure that these will be built as soon as possible with very minimal unnecessary hindrances. To pursue this, the DOE and private firms in the generation sector must sit together as soon as possible and identify the “unnecessary hindrances” that can be removed in the permitting process.

- Maximize the Ilijan power plant's capacity using straight diesel during the Malampaya maintenance shutdown in the summer months of 2015

MBC et al. claimed that during the maintenance shutdown of Malampaya in 2015, Ilijan-1's and 2's installed capacity of 1,200 MW will be reduced to only 450 MW due to a shift towards liquid fuel and/or biodiesel. During the shortage period, Ilijan's capacity must be maximized by allowing it to use straight diesel instead of biodiesel. DOE clarified, however, that only one plant will be affected. DOE has pronounced before the media that it will explore the suspension of the law mandating the use of biofuel in order to allow the shift of Ilijan from biodiesel to straight liquid diesel. At present, a Congressional resolution regarding this has already been submitted.

⁵ DOE Usec. Ayson and Usec. Monsada noted that this recommendation may be feasible only in the medium term given that declaring projects as “projects of national significance” is the subject of a draft legislation. One of the intentions should be for such power projects to be immune to suspensions via local ordinances.

Based on PIDS research, in the current 16th Congress, the proposal to declare “projects of national significance” is relevant to public-private partnerships (PPP) only (i.e., in Section 20 of House Bill 3951) and the proposal asks for incentives such as exemption of such PPPs from real property tax, exemption from all local taxes, fees and charges, and automatic grant of necessary business permits. The generation business, however, is already a purely private concern and not a PPP (except for the PPP contracts entered into by the government before the enactment of the EPIRA in 2001). PIDS is therefore suggesting that the need for legislative action that the DOE raised be tackled in the strategy paper that the DOE will prepare as part of its next steps (see Section 4 of this paper). Moreover, although the legislative action can be a medium-term one, the drafting of a bill relevant to power projects can be a short-term deliverable.

- Fast-track the tender of banked gas

PNOC currently owns sufficient banked gas to power a 200 MW mid-merit plant. This capacity can augment the additional gas (capable of powering another 200 MW mid-merit plant) that Malampaya will be able to provide by 2016. Business sector representatives recommended that the banked gas and the additional gas from Malampaya be tendered as a single block to enable the construction of a more efficient 400-MW mid-merit plant that will be able to link to the grid by 2016, rather than constructing two 200-MW plants.

It is understood nevertheless that preparations for the tender are already being done by DOE-PNOC and it has been reported that there's a technical constraint: the banked gas can only be extracted by end-2015 after pressure in the Malampaya gas wells have normalized from expansion work (through a new platform installation) in March 2015. The banked gas might be awarded in early 2015 but physically delivered only by 2016.⁶

- Ensure power supply reliability since power plant outages reduce the available capacity; drive for more effective coordination / synchronization of maintenance to minimize supply interruptions

To pursue the above, the stakeholders offered some ideas. Matuwid na Singil sa Kuryente (MSK) recommends better scheduling of maintenance turnaround of power plants and enhancing the reliability of existing power plants. The MBC et al. sees the need to improve the reliability and availability of power plants before the second quarter of 2015, given that supply is expected to be tight by that time. Taking into account the increasing number of forced and extended maintenance outages of certain facilities from the fourth quarter of 2013 to the second quarter of 2014, there should be an aggressive drive to ensure the reliability of these power plants during the summer of 2015. Government Watch calls on the DOE to have a full and accurate auditing of existing power plants, carefully manage the scheduling of maintenance shutdowns so that overlaps are avoided, conduct inspections to see if these plants are being properly maintained, and impose heavy penalties on violators.

MBC et al. stated that in order to allow distribution utilities and even consumers to plan ahead, the system operator of the NGCP, in coordination with power plant owners, should carefully and prudently schedule maintenance shutdowns. Power plants contributing a significant amount of electricity to the grid must not be allowed to go offline at the same time, especially with the foreseen maintenance shutdown of the Malampaya power plant in March 2015 and Pagbilao-1 power plant in May 2015. Accordingly, the schedules must also be disclosed by the DOE to pertinent stakeholders upon valid request.⁷

⁶ The "banked gas" is unused gas from the Malampaya gas exploration project. The government, through the PNOC, owns this and has stored it or banked up in a reservoir for future use. In relation to the use of the banked gas, DOF Usec. Reverente noted that the logistics for supplying the banked gas is limited and to assume that it can be sold at one time may be unrealistic. DOE Usec. Monsada noted that the logistics issue is still being discussed. The feasibility of this short-term recommendation may be expounded by the DOE in its future discussions with stakeholders.

⁷ The disclosure of maintenance schedules, however, is currently an unsettled debate. DOE is saying that the maintenance schedule is confidential as market participants may gain advantage if they know the said schedule.

- Review the must-offer rule in the wholesale electricity spot market (WESM) as violations of this lead to lower available capacity

The must-offer rule (MOR) for generator-traders has been frequently violated, resulting in lower total available capacity. According to the University of Asia and the Pacific (UA&P) representative, the current Market Surveillance Committee (MSC) of the PEMC has made many requests for the investigation of non-compliance with the MOR. Moreover, the PEMC's Enforcement and Compliance Office (ECO) has already found several non-compliance to be breaches of WESM rules and has recommended penalties. In the review of the WESM design, the incentives for complying with the MOR must be thoroughly studied. Based on the literature on gaming behavior in electricity markets, non-compliance with MOR can be a mechanism for implementing a physical withholding behavior. However, there are some nuances in the Philippine market structure that need some consideration. For instance, there is the dilemma faced by high-priced oil-based generating plants. Because they are required to run plants at their registered minimum generation levels (referred to as Pmin), they are reluctant to offer capacity during off peak periods when the market price is likely to be low. Since their marginal costs are high (due to high oil prices), they will likely not be dispatched during off-peak periods when they offer at their marginal cost, and yet they will have incurred costs running their plants at the minimum level. But if they will offer below their marginal cost so that they can be part of the merit order, they will also suffer a loss as they will be compensated at the market clearing price that is lower than their cost. Thus, their natural incentive is not to offer their capacities during off-peak and other periods that the market price is expected to be lower than their cost, which implies an incentive to violate the MOR. Recently, some of these oil-based plants have requested, as part of proposed WESM rule changes, that their registered Pmin be reduced to zero.

- Fast-track the rehabilitation of Malaya-1

The MBC et al. called the Task Force's attention to the importance of Malaya-1 capacity. Malaya-1 has been offline since March 2014 and is depriving the grid of 300 MW of electricity. There had been pronouncements that the facility will resume operations only in July 2015, but this may be too late. Malaya-1's rehabilitation must be fast-tracked such that it can operate on a much sooner date.

- Auction long-term power supply agreements (PSAs)

(This is a recommendation that also affects the distribution sector but it need not be repeated in the next sub-section on distribution.) The Philippine Independent Power Producers Association (PIPPA) believes that the issuance of a policy directive requiring the auction of long-term PSAs is needed. Such policy could require distribution utilities (DUs) to secure PSAs for their 10-year requirements under a competitive auction system administered by the government and stakeholders. The aggregation of long-term demand consequent to such a system is also needed as it creates the scale that attracts competition. The MSK also believes that open competitive bidding will mitigate the harmful effects of cross-ownership and market dominance and help take down a big barrier to market entry by independent power producers, which in turn might be able to bring in more competitive rates and technologies. The MSK asserts that there are many business groups, local and

PIPPA supports the recommendation to disclose and states that it does not see how one generator can gain from the disclosure if all the generators know the schedules.

foreign, which are interested in power investments under stable rules and all they need is market access that an open competitive bidding will enable.

PHILFECO also supports the idea of aggregating the power requirements of the ECs and negotiating in bulk for their power supply in order to secure lower generation rates.

Majority of the stakeholders supported this recommendation, but one private DU (Meralco) pointed out that this could result in stranded volumes.⁸

- Undertake generation mapping, as a policy and a regular practice, and implement optimal decision-making on genco location

The DOE representatives said that generation mapping is being done to prepare for the summer 2015 shortage. Other stakeholders said that this should be part of the policy and be a regular practice.

The UPLB representative mentioned that according to some generating companies (gencos), the criteria that they would consider when locating a potential generation site would definitely include financial and technical considerations as well as land, social concerns, environmental concerns, and particular indigenous people's concerns. Moreover, since location and distance are key factors in determining fuel availability and affect the amount of technical losses from the transmission of electricity from one node to another, gencos will need to have a better idea of where to locate their future facilities. A roadmap that will demonstrate potential sites for generation facilities based on grid capacity and user markets will be helpful in minimizing the costs of feasibility studies for potential projects, as well as the inefficient transmission of generated power which adversely affects the viability of generating facilities.

- Implement the 10% income tax (instead of the 30% income tax) for renewable energy (RE) plants in accordance with the RE Law

This is a fiscal incentive provided in Section 15 of the RE Law. This part of Section 15 has not yet been implemented:

"e) Corporate Tax Rate - After seven (7) years of income tax holiday, all RE Developers shall pay a corporate tax of ten percent (10%) on its net taxable income as defined in the National Internal Revenue Act of 1997, as amended by Republic Act No. 9337 in 2005. Provided, That the RE Developer shall pass on the savings to the end-users in the form of lower power rates."

PIPPA states that the provision will have a direct impact on the rates that an RE plant will be able to offer its customers. What needs to be done is for the Bureau of Internal Revenue (BIR) to provide Implementing Rules and Regulations on the availment of the fiscal incentives under the RE Law.

⁸ In its position statement, Meralco said that it has serious reservations on this proposal as it impacts on the DUs' obligation to supply its captive market at least cost. Accordingly, a mandatory auction process can result in stranded volumes for DUs, remove the flexibility of DUs to source power from the WESM when prices there are very cheap, and overall, result in higher rates to consumers.

- Implement a refund for the November and December 2013 price overcharging

The ERC, in its 03 March 2014 Order, voided the Luzon WESM prices for the November and December 2013 periods, when there had been staggering price spikes, and imposed a regulated price. Affected gencos subsequently filed for a motion for reconsideration. However, the ERC recently denied the motion for reconsideration, as stated in an order dated 15 October 2014 (in Case No. 2014-021 MC, docketed 30 October 2014). In relation to this, the FFCCL suggests an immediate implementation of the refund for the overbilling by gencos in November and December 2013.

According to PIPPA, a refund by its member-gencos through a special payment agreement at the WESM is already ongoing. The refund is on a staggered 24-month basis. However, it has been reported that some gencos would bring the matter to the Court of Appeals. Therefore, although there is already an ongoing refund, it can be considered a partial refund pending the final resolution of the issue.⁹

Medium-term recommendations

- Develop a sustainable and optimal energy mix policy

At the firm level, price signals determine the generation mix that the private sector will build. Reduction in input prices through cheaper capex, operating and maintenance expenses and fuel will point developers to the preferred fuel technology. For longer-term planning purposes at the country level, however, it makes sense to come up with a policy on optimal generation mix given expectations on fuel technology prices and availability as well as anticipation of the impacts of policies related to renewable energy development.

An optimal generation mix policy is currently being contemplated by the DOE. In relation to this, some Task Force members have ideas. The MBC et al. representatives opine that developing such energy mix policy should be accompanied by strengthening the feed-in-tariff implementation. They recommend a more vigorous shift towards utilizing renewable energy (RE) sources and further diversification of the energy mix. To support this shift, the Feed-in-Tariff Allowance (FiT-All) would have to be passed but a judicious study on the level and its impact on the electricity price must first be conducted. PIPPA nevertheless cautions that shifting to a bias for renewable energy in the generation mix will result in higher generation rates, as evidenced by the ERC approval of FIT rates that are higher compared to the rates of conventional power plants.

⁹ In relation to this, the Meralco representative shared that they have a pending application before the ERC for the adjustment in its January 2014 generation component of the electricity rate, which pertains to the December 2013 generation cost. However, no action can be undertaken without the Supreme Court resolution of the November and December 2013 rates. It can be recalled that the Supreme Court issued on December 23, 2013 a 60-day temporary restraining order (TRO) on the implementation of the ERC's approved generation rates for Meralco. As the TRO was about to lapse on February 24, 2014, another 60-day TRO was issued. Then another restraining order was issued on April 22, 2014, this time lasting for an indefinite period.

The MSK representative also recommends that more cost-competitive fuel sources, local and offshore, be explored. (The MSK specified coal, indigenous natural gas and LNG as cost-competitive fuel sources, but without supporting data.)

Note that the type of fuels that would prove to be cost-competitive given a target optimal generation mix would depend on a study on optimizing the long-term generation mix. The aim therefore is for DOE to come up with a study and pronouncement on what the mix should be and this would serve as investment signals to power firms. Coming up with a framework for optimizing the generation mix could also motivate the generating companies to review the fuel cost content of generation.

- Continue the implementation of Board of Investment (BOI) incentives for power generation and extend the BOI fiscal incentives for required new plants¹⁰

PIPPA is recommending this since BOI income tax holidays and related investment incentives could translate to lower generation cost, which end-users would not enjoy if removed. Meralco also recommends that incentives be extended to the required new plants.

While fiscal incentives can redound to some reduction in (financial) cost to the proponents (not real economic cost) through the reduced taxes, it remains to be seen whether they will necessarily pass it on to consumers through lower prices in their power sales agreements/contracts with DUs and ECs. Thus, the call for continuation of incentives should be backed by a demonstration of how these incentives contribute to lowering the electricity rates. In the same manner, if the government would plan to pull these incentives out, the impacts of such action on electricity rates should be examined first.

- Review the WESM design and transform the WESM into a more competitive market

The review should determine if it is worth transforming the WESM into a different type of market (e.g., a market for excess capacity and replacement power) and if doing so would promote greater competition. There is also a need to reconstitute the market operator and make it more independent. The discussion on the extent of independence, however, is a currently unsettled. Consumer groups claim that the market operator should be independent from the generators. The MSK, in particular, contends that the proposed Market Participants Group as a recommending body for rules is a de facto retention of the current generator-dominated setup of PEMC. PIPPA, on the other hand, contends that the market operator should be independent from the government.

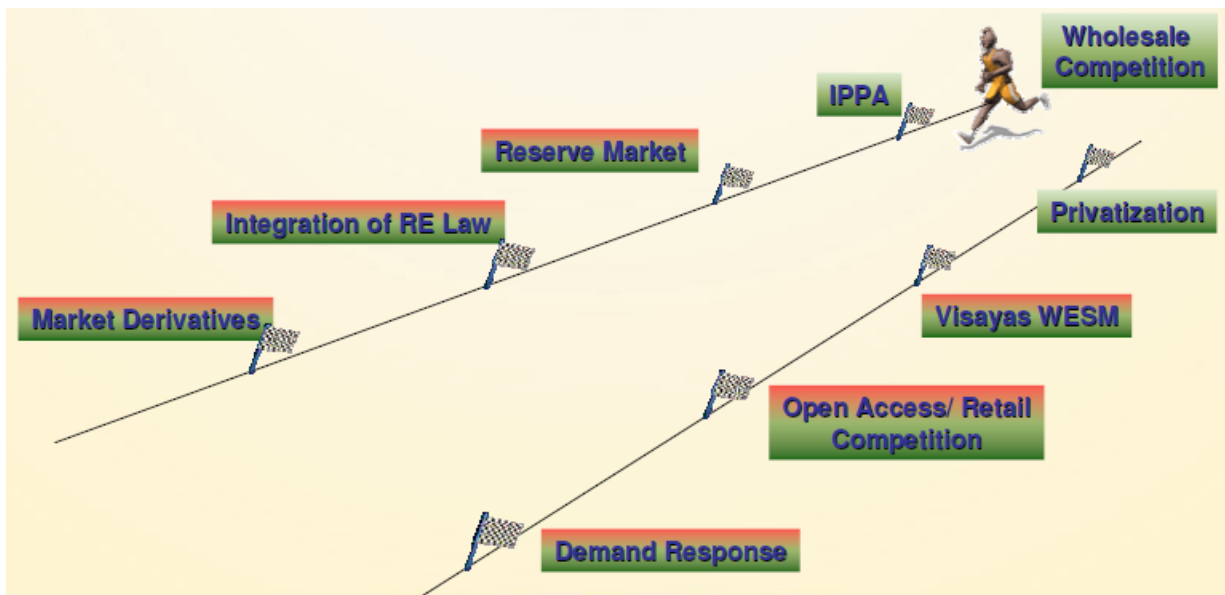
The MSK also recommended that consumers and buyers of electric power be provided with avenues (e.g., through an office of "consumer affairs representative") to provide their ideas on rules to the rule-making body. Other Task Force members also recommended a review of the Price Determination Methodology being used in the WESM.

If such review would be pursued, it should be noted that the Philippines is still far from the attainment of the WESM goals which are meant to enhance competition. Note from Figure 7 the

¹⁰ The DTI-BOI representative, however, disagrees with the part of the recommendation which aims to extend the BOI fiscal incentives for required new power plants this. Perhaps this can be settled in future talks between the BOI and gencos.

objectives for establishing a truly competitive WESM. The Philippines has implemented substantial privatization (including IPP administration contracts), integrated the Visayas spot market with that in Luzon, and established open access and retail competition for large consumers. However, about half of the WESM goals have not yet been implemented, and this is partly contributing to failures in the market.

Figure 7. WESM Goals



Note: Goals are to be read from the upper right corner and going diagonally down to the lower left corner.

Source: Philippine WESM (a powerpoint presentation). APEx Regional Meeting, Perth, Western Australia, March 2010 [http://www.imowa.com.au/docs/default-source/default-document-library/2-_philippines_-_mario_pangilinan.pdf?sfvrsn=2] accessed on 29 November 2014

3.2 Transmission and System Operation

Short term

- Individually identify the components of the transmission cost in order to determine which components can be reduced

This should have been done as part of item (a) in the scope of work of the Task Force. However, the transmission sector was not adequately represented in the Task Force and the required information on transmission cost components and how these can be reduced was not submitted to the Task Force Secretariat. Transco representatives attended a couple of meetings but did not submit recommendations. The National Grid Corporation of the Philippines (NGCP) was able to send a

representative in only one of the Task Force meetings. This recommendation can form part of the way forward for the DOE.

Nevertheless, it should also be noted that the NGCP will have its regulatory reset hearings next year since its five-year regulatory reset will end in December 2015. Consumers may participate in those hearings in order to better understand transmission cost charging.

- Resolve transmission congestion

The University of the Philippines-Los Banos (UPLB) representative noted that the existence of transmission congestion is a big obstacle that has to be confronted in the transmission sector. The effect of transmission congestion should be quite obvious. Congestion in transmission lines will give rise to higher electricity prices by way of the congestion charge that is incorporated in the pricing schedules of electricity distributors. Since these congestion charges are merely passed on to electricity consumers, there seems to be no incentive to relieve the congestion in the system, neither from the side of the generating companies nor from the transmission system operator. Thus, the mechanism for congestion charges should be reviewed, in line with the objective of providing a more appropriate incentive for efficient dispatch and system maintenance.

PIPPA noted that resolving transmission congestion will require additional transmission capital expenditure (CAPEX) and will result in higher transmission charges. However, it will result in lower WESM prices as the congestion cost is reduced.

PHILFECO also asserts that the country needs to have an improved transmission capability to eliminate congestion, as well as transparency in and rationalization of charges, such as in the congestion fee being charged by the transmission operator to power suppliers.

- Fast-track the NGCP studies for new power plants and fast-track the transmission projects for new power plants or expansion projects; fast-track the completion of NGCP transmission projects that are already in the pipeline

PIPPA states that the release of studies from NGCP has impacts on the project cycle of newly built plants. Moreover, fast-tracking the transmission upgrades will help in the commissioning of new power projects.

It is also necessary to complete NGCP transmission projects in the pipeline as early as possible to ensure that there is enough transmission capacity for new power plants. These projects include the Reinforcement of the Dasmarinas and Zapote Substations, among others. Note that this will lessen congestion.

The FFCCI also supports the construction of additional high voltage direct current (HVDC) lines in order to facilitate the transmission of electricity from Luzon to Visayas and vice versa.

- Pursue longer-term contracting of ancillary services including prospective plants

The establishment of reserve capacity is a concern of the transmission sector. To avoid thin reserves, the NGCP should contract enough ancillary services. It should pursue longer-term contracting of ancillary service capacity including prospective plants. Moreover, for prospective plants, having an

ancillary contract will fast-track the financial closure for such plants and, consequently, their commercial operations.

- Upgrade or add transmission lines in the areas affected by the NGCP's N-1 contingency requirement and congestion. The location of the additional lines should be subject to further analysis and simulation in order to determine its impact.

One operating reliability criteria in electrical power transmission is the ability to withstand an "N-1" event, that is, given some part of the interconnection with "N" elements, the system must reliably operate following the failure of any one of them. "N-1" can refer to the failure of a single element, like a transformer or generator. It can also refer to the failure of multiple elements that are physically or electrically linked and could therefore fail together as one. For example, two transmission lines (separate elements) sharing the same towers could both short-circuit if the towers collapse or if lightning strikes the towers (i.e., a single contingency involved multiple transmission elements that are physically related). One way of expressing the reliability criteria, or requiring contingency mechanism, is therefore expressed in terms of withstanding an "N-1" event.¹¹ The Philippine Grid Code requires the single-outage contingency, or N-1 contingency, requirement as a minimum criterion that should be complied with by the elements in the power grid. By requiring this, the grid could withstand the loss of a major system component and with minimal disruptions.

The NGCP's N-1 contingency requirement and management of congestion, as can be gleaned from the powerpoint material provided to the Task Force by PIPPA,¹² influences the occurrences of high prices. For instance, in the 13 May 2014 market event, lowering the output of the Mariveles Power Plant in order to comply with the N-1 contingency requirement resulted in higher congestion cost in the Dasmariñas transformer and higher settlement price due to not scheduling a cheaper 204 MW capacity (which then triggered the application of the Price Substitution Methodology or PSM¹³). As another example, in the 25 May 2014 market event, the lowering of output of the Masinloc Power Plant (which underwent maintenance shutdown) and application of the N-1 contingency requirement given the congestion on Dasmariñas, Barotac-Viejo and Toledo Calung-Calung transmission substations resulted in higher settlement price. Another example is the updating of the N-1 contingency requirement on 11 August 2014: congestion manifested in the market run, resulting in price separation¹⁴ and, thus, triggering the application of the PSM.

¹¹ North American Reliability Council (NERC). 2007. Reliability Concepts [http://www.nerc.com/files/concepts_v1.0.2.pdf] accessed on 29 November 2014.

¹² "Simulations on the Imposition of Security Limit," 02 September 2014 powerpoint material with WESM logo and with a title page which implies that it was presented to the Grid Management Committee.

¹³ The PEMC's conduct of market re-run or recalculation of WESM transactions and dispatches to determine prices that would substitute for the resulting very high settlement prices.

¹⁴ Price separation occurs when the locational marginal price in a zone significantly diverges from the price in other zones. The separation is due to wide differences in the congestion and loss components of the locational marginal price. For instance, in the 11 August 2014 market operation affected by the Calaca substation congestion, price separation occurred in the region where the following generators are located: Calaca, Sta. Rita/San Lorenzo, and La Farge.

Medium term

- Undertake capital expenditures (CAPEX) to further strengthen transmission (and this also applies to distribution) systems, resolve transmission congestions and modernize the infrastructure

Although new CAPEX will result in requests for increases in the transmission and distribution wheeling charges, solving the congestion problem could result in making electricity more affordable in the long run. Note that at present, even if a cheap electricity source is in the merit order, it could not be dispatched if the transmission line where it will pass through is severely congested. This happens in the Batangas area where transmission capacity is lacking.

Meralco also notes that a significant portion of new CAPEX is to serve demand expansions or new loads. Increased reliability in both transmission and distribution networks is critical in attracting new loads and retaining existing ones, particularly those that are sensitive to power quality. An expanding market supported by transmission and distribution capability might dampen upward pressures on network prices, and possibly even result in lower wheeling charges.

3.3 Distribution

Short term

- Improve the generation mix at the DU level

DUs must increase the market share of cheaper independent power producers (IPP)'s capacity in their mix. For instance, MSK claims that Meralco could include hydro power among contracted IPPs at a lower price instead of buying the hydro-generated capacity from the WESM at higher prices. This recommendation could apply to contracts that are yet to be entered into by the DUs.

- Streamline and fast-track the approval of power supply agreements (PSAs)

PHILRECA noted that there is a lot of backlog at the ERC when it comes to approving PSAs. It recommends therefore that PSA review and approval be streamlined and fast-tracked.

- Truly encourage the connection of renewable energy like roof solar and distributed generation

This practice is already being done in establishments which do not have peak consumption at night or which have relatively stable consumption, such as in big educational institutions and malls. For instance, in the case of the UA&P, a contractor installed the solar panels at no cost but with the agreement that 80% of the UA&P's savings will accrue to the contractor. Savings through the use of solar panels are reckoned through net metering.

What remains to be done is a scaling up of this practice. The slight downside, however, is that solar power is intermittent (like wind) and, thus, increased solar capacity in the system will require additional reserve capacity to kick in when solar power declines.

- Pursue efficiency improvements in the retail supply sector in order to reduce charges

This is applicable to the contestable customers and is meant to improve efficiency. Such efficiency improvement will positively impact on the supply charge to contestable customers. RESA sees the need to improve the guidelines for retail supply with a view to establishing single billing and dual billing processes. In addition, the FFCCI suggests the following efficiency improvements in the retail supply sector: facilitate the direct membership of contestable customers to the WESM; allow billing by multiple retail electricity suppliers to a single contestable customer.

- Review the Performance-Based Rate (PBR) setting for DUs with the aim of reducing the price burden to consumers while balancing the viability objectives of DUs

In the case of electric cooperatives, NEA and PHILRECA stated that the Rules for Setting the Electric Cooperatives' Wheeling Rates (RSEC-WR) retained the basic features of a cost recovery regulatory framework with the underpinnings and attributes of a performance-based rate methodology under what is called the tariff glide path. There are ECs which are suffering from varying degree of financial difficulties arising from a number of factors, including the failure to comply with the one-month working capital requirement. Many ECs are financially hard pressed because the RSEC-WR does not even include provisions for: prudential requirements under the WESM, bilateral contracts with power producers and the NGCP, and extraordinary expenditures arising from natural calamities and other risk factors.

Under the RSEC-WR, particularly Section 3.1 of Article 3, the ECs' regulated tariff consists of the Distribution, Supply and Metering (DSM) charges. In the development of the tariff, the operating and capital expenditures (OPEX and CAPEX) were unbundled. Thus, the DSM charges recover only the OPEX. To help in CAPEX financing, a separate charge, the Members' Contribution for Capital Expenditures (MCC), renamed Reinvestment Fund for Sustainable CAPEX (RFSC) under ERC Resolution No. 14, Series of 2011, has been implemented. The RFSC is intended to fund the amortization of debt service of the ECs' indebtedness associated with the expansion, rehabilitation and upgrading of their electric power distribution system in accordance with the CAPEX Plan approved by the ERC. The RFSC now constitutes 22% of the DSM charges. However, the legality and constitutionality of the RFSC is currently being questioned before the Supreme Court. The ECs want a resolution of this issue and would like to have a mechanism for charging the MCC in a way that will ensure their viability¹⁵ but will not be burdensome to consumers; they believe that a review of the PBR as applied to ECs may shed light on this.

¹⁵ In relation to the viability concern of the ECs, the NEA and ECs' representatives noted that in the recently enacted NEA Reform Act or RA 10531, there is a provision saying that ECs registered with NEA shall enjoy preferential rights granted to cooperatives under RA 7160 (Local Government Code). Accordingly, the DOF is mandated to implement the said provision of the law. The NEA has already drafted the implementing rules and regulations for such provision and submitted the same to the DOF. During the last meeting of the Task Force, Usec. Reverente of the DOF explained that the said issue is currently not under his concerns but he will follow this up with the concerned DOF unit.

In addition, a review of the PBR as applied to private DUs may also yield some positive results. An ERC representative, for its part, mentioned during the fifth Task Force meeting that the PBR is indeed due for a review.

Medium term

- Review the cross-ownership rules and the current market dominance status of players

This pertains to the ownership and control by DUs of so-called “sister power producers”. According to the MSK representative, market dominance must be aligned with the EPIRA’s provision on limits on domination of “ownership, operation and control” of installed capacities, not just “control” as provided by Rule 11-4(b) in the implementing rules and regulations (IRR) of the EPIRA and that the rule on “control” is the loophole that is allowing undue market dominance.

PIPPA and Meralco representatives opposed this recommendation.¹⁶ However, this is being included here since majority of the Task Force members see no harm in exploring a “recommendation to review” the rules.

This is a medium-term recommendation since cross-ownership is stated not only in the IRR but also in the EPIRA and if there would be a future move to amend the cross-ownership rule, it should be supported by a move to amend the law itself.

3.4 System Losses (in transmitting and distributing power)

Short to medium term

- Carefully examine the components of the systems loss¹⁷ in order to identify ways of reducing this

¹⁶ The PIPPA representative said that the solution to the issue is the implementation of the retail competition and open access (RCOA) in accordance with the law. According to the Meralco representative, criticisms ignore the fact that power supply contracts can only be recovered through the rates for consumers after these have been approved by the regulator and after due notice, public hearings and intense regulatory scrutiny/evaluation.

¹⁷ The Philippine Distribution Code's classification of system loss is as follows:

- (a) technical loss - conductor loss, core loss in transformers, and other power losses in the wires/equipment
- (b) non-technical loss - due to pilferage, meter-reading errors, and meter tampering
- (c) administrative loss - energy required for the proper operation of the distribution system and any unbilled energy for community-related activities (but currently, administrative loss is already considered part of operating and maintenance expense).

Note that the transmission-related system loss charge is being collected by DUs and ECs on behalf of the transmission operator. ERC Resolution 17 s. 2008 states that the technical and non-technical losses that DUs can pass on to its customers shall be the actual losses but the sum should not exceed 8.5% for private utilities and 13% for ECs. Moreover, the same resolution states that administrative loss shall be treated as operating and maintenance expense.

There was no presentation on system loss breakdown by any Task Force member, and thus, the Task Force does not have information at this point on which components can be reduced. However, the DOE may pursue the analysis of this as part of the next steps.

- Review the ERC-set cap on systems losses

In the case of distribution system loss caps, the existing cap for private DUs is 8.5% and for electric cooperatives, 13%. Coming up with separate caps per major category of system losses was opposed by Meralco. Nevertheless, the ERC representative agreed with the need to review the caps and stated during the fifth meeting of the Task Force that such review is actually ongoing.

In the case of transmission system loss caps, the ERC-approved loss factor (cap) per grid are as follows:

Luzon -	2.98%
Visayas -	3.67%
Mindanao -	4.35%

The transmission system loss caps for Luzon, Visayas and Mindanao are the corresponding losses passed on by the NGCP to all transmission users. According to the Transco representative, these have been in place since October 2002 (as part of unbundling of rates) and it is high time that these be reviewed.

- Strictly enforce RA 7832 (the law on system losses) and aim for a long-term goal of single-digit losses

The MSK representative said that considering the 19% systems losses in 2011, there is a tremendous upside from reducing losses with a long-term goal of achieving single digit losses. Other Task Force members pointed out that there is no need to enact new laws on system losses; rather, the existing RA 7832 should be strictly enforced. Moreover, measures enabling DUs to strictly control and penalize power theft and pilferage should be pursued

3.5 Universal Charges

Short to medium term

- Ensure judicious action on any new universal charges, e.g., stranded debt recovery, Feed-In Tariff Allowance (FIT-All)

Collecting the universal charge for the National Power Corporation (NPC)'s stranded contract costs (SCC) amounting to 19.38 centavos/kWh started in March 2013. Note that universal charges for the NPC stranded debts and the FIT-ALL are upcoming. The majority of the Task Force members question the rationale for making consumers pay for the continuing losses of the NPC. Thus, the Task Force is calling for a judicious action on any new universal charges.

- Improve the missionary electrification implementation so as to reduce the universal charges

The MSK claims that a big contributor to the increase in this cross-subsidy is the high cost of the temporary power solutions of the Small Power Utilities Group (SPUG), a division of the NPC. The longer-term role of the NPC in missionary electrification should be clearly defined so that they can come up with long-term solutions. According to the MSK representative, because the SPUG is in a limbo (since privatization is hanging over its head), the SPUG is forced to adopt only band-aid solutions which are very expensive rental generators that are priced for the short-term but rented continuously for years, thereby contributing significantly to the universal charge for missionary electrification that is passed on to all consumers. Given this, the NPC's mandate for long-term missionary electrification should be established.

Nevertheless, the academe subgroup believes that the prospect of “privatization” should not deter the NPC from using least-cost generation in off-grid islands; whatever investments/debts/contracts the NPC makes in these islands can be passed on to its successor entity should privatization be pursued. The DOE should determine whether or not the NPC’s use of expensive rental generators is due to their consideration of the prospect of privatization, and whether something could be done to motivate them to use cheaper generators.

- Look into the prospect of the national government absorbing universal charges

Majority of the Task Force members, particularly the residential consumer group and some business sector representatives, are asking that the government look into other fiscal resources for meeting developmental objectives. The FFCCI stated that though the business sector can empathize with the government and knows that someone has to pay for goals like missionary electrification, it is unfair to make only one set of taxpayer (i.e., electric power consumers, rather than the taxpayers in general) bear this burden.

3.6 Taxes

Note that although the DOF representatives opposed the tax-related recommendations (except the one on real property tax), the majority of the Task Force members hold the view that energy taxes should at least be reviewed with the aim of reducing these. Thus, the tax-related recommendations are reported here. The bases for the DOF's opposition (basically underpinned by provisions of laws and interpretations of rules) are explained in the studies of the National Tax Research Center and Bureau of Local Government Finance of the DOF, which are reproduced here as Annex 3.

Short to medium term

- Review whether or not the government is “overtaxing” the energy sector

The DOF and Bureau of Internal Revenue (BIR) are being requested to provide data on the taxes that are collected from the electric power industry. Such data can be inputs in identifying how the tax burden can be reduced. The DOE can spearhead this identification and closely coordinate with the DOF and BIR.

The FFCCI suggests that the government consider the removal of taxes on systems loss charges, subsidies, universal charges, and other charges that are not consumption-related. Although the mechanism for such removal may take legislative action that could be longer than the short term period, the review of taxes on such items unrelated to consumption may already be started in the short term.

- Review the legislations on taxes on electric power and whether or not these can be gradually reduced or phased out

The 2001 EPIRA provided that electric power is zero VAT-rated; however, this provision was repealed by the 2007 Expanded VAT Law. Consumer groups contend that VAT on power must be phased out over a fiscally affordable timetable for the country. This can be started by restoring the zero VAT-rating of the industrial consumers, then the commercial consumers, and subsequently the residential consumers. As a minimum, there VAT on generation charges must be removed. The consumer groups also contend that the government can eliminate VAT on power supplied from the Malampaya gas where it is already making a windfall since its price is indexed to the foreign price of energy.

The consumer groups further contend that the tax base should be corrected since VAT should not be imposed on system loss, which is energy lost and not consumed by the public. The tax base for local franchise tax should also be reviewed to eliminate “tax on tax”.

Majority of the Task Force representatives (except the DOF) agree with a comprehensive review and possible reduction of taxes imposed on the sector. The government, however, must study these recommendations very carefully, estimate the fiscal impacts, and check how such impacts can be mitigated.

3.7 Demand Management

Short to medium term

- Contain the consumers’ spending on power through intensive campaigns

Meralco suggested that these campaigns include:

- Active energy efficiency drive and consumption saving drive for Industrial, Commercial and Residential customers
- Energy saving campaigns / conservation-tips for households
- Energy advice and services for commercial and industrial customers

In order to ease the load on the grid, the government must intensify efforts to promote or even incentivize energy efficiency among households and industries. The MBC et al. suggested that the specific measures that can be adopted, and the possible demand savings or reduction in withdrawal from the grid, are:

Replacement of 220,000 old aircon	44 MW
Raising of aircon temperature to 22 degrees Celsius	198 MW
Reduction of aircon operating hours by 1 hour during peak hours	176 MW
Switching off aircon and lights when not in use, and using LED lights	5 MW
Reduction by factories of 10% of their load during one of two peak periods	100 MW
Conversion to LPG for cooking	10 MW
Use of standby gensets during peak period	150 MW
Total	683 MW

- Mobilize the self-generating capacity of large end-users to address the foreseen shortfall in Luzon (and possible high impact on electricity price)

The MBC et al. explain that as illustrated by the experiences of Visayan Electric Company in Cebu and Cagayan Electric Power and Light Company in Cagayan de Oro, among others, the Interruptible Load Program (ILP) has proven effective in easing the energy demand during periods of shortage. In the Luzon grid, available self-generating capacity amounts to as much as 1,500 MW, of which an estimated 600 MW to 700 MW are within the franchise area of Meralco. The government must provide the necessary support the ILP in the Luzon grid, particularly in establishing a fair and effective framework in compensating ILP participants of their generating costs.

Note, however, that the DOE is already doing this. Discussions on the framework for compensating ILP participants are ongoing.

Business sector representatives also emphasized that supply shortage compels businesses in the production industry to buy generating sets and this adds to production cost. They plead that any solution to the foreseen shortfall in Luzon must not add to their production cost.

- Adopt flexible work arrangement to help alleviate the tightness of energy supply

With respect to this, the Department of Labor and Employment (DOLE) clarified (through a letter to DOE) that in 2009, the DOLE issued Department Advisory No. 2 of the Guidelines on the Adoption of Flexible Work Arrangements. Among the recommended arrangements therein include compressed workweek, reduction of workdays, rotation of workers, forced leave, broken-time schedule, and flexi-holidays schedule. The adoption of flexible work arrangement should be voluntary and under the conditions mutually acceptable to both the employer and the employees. The DOLE advisory applies to establishments in the private sector. A similar effort is being promoted by the Civil Service Commission for government agencies. Note, however, that the flexible work arrangement is not applicable to the National Capital Region, according to the Office of the President.

3.8 Various cross-cutting recommendations

Short term to medium term

- Help create an environment that encourages investors to do business in the power sector

An investor-friendly environment that is graft-free, red-tape free and ensures a level playing field will attract more power generation companies and promote healthy competition which will benefit the consumers.

- Apply part of the government's natural gas royalty take to reduce power rates

Majority of the Task Force members, especially those from the consumer groups and business sector, support this recommendation. The government, however, must study this recommendation very carefully, estimate the fiscal impacts, and check how the impacts on government finances can be mitigated.

- Strengthen the planning units of the DOE

The DOE's power development plan is essentially a narrative of the state of the country's energy sector and a tally of what it calls "indicative and committed projects." It must include strategic plans in the areas of energy mix and locational targets. It must be expanded and provided with enforcement capability. Under the current rules, the private sector does not really have to follow the DOE's plan. This can be remedied if the ERC mandates that long-term bilateral contracts must be subjected to an auction mechanism that will be under the auspices of the DOE. The DOE must also see to it that its planning group is provided with resources to hire, train and retain good talent.

The NEA and Distribution Management Committee of the ERC should also step up and provide guidance on proper power planning by electric cooperatives.

- Establish a public-private steering committee to guide initiatives

The steering committee should be composed of government officials and private sector representatives who will guide the implementation and monitoring of current and proposed initiatives to improve the country's energy situation. It is proposed that such body exist until such time that the shortfall in energy supply is adequately resolved.

- The ERC must exercise its mandate strictly and efficiently given the pending cases (e.g., interim bid cap, secondary price cap)

The Php32/kWh Interim price offer or bid cap was extended up to February 2015, but stakeholders are wondering why there seems to be slow decision-making with respect to the secondary cap.

The secondary cap imposition by the ERC basically states that the WESM clearing price would be lowered to Php6,245/MWh (or Php6.245/kWh) when the average prices over a 72-hour period breach the threshold of Php8,186/MWh (or Php8.186/kWh). Though it is called a "secondary cap" by energy stakeholders, it is actually a price control mechanism and should not be confused as a secondary cap on the offers or bids of generating firms. The Php6.245/kWh WESM price cap would apply until average prices fall below the Php8.186/kWh threshold, which means that an hourly evaluation of possible lifting of the cap shall be in place once the same is imposed. While this price cap is in effect, oil-based plants are entitled to recover additional compensation if the price cap is not enough to cover their fuel and operations and maintenance cost and after submitting supporting documents to the Philippine Electricity Market Corp. (PEMC).

4 Next Steps

A major recommended next step for the DOE is to immediately hold a stakeholders' session with the DOE Secretary and the chairperson of the ERC. A direct feedback from the ERC chairperson is desired since many issues are regulatory in nature.

Another major recommended next step is for the DOE to come up with a strategy paper as a follow-through to this Task Force's Final Report. The following elements are desired in the DOE paper—strategies that can be committed, target timetable, responsible government agencies, and monitoring mechanism. (Director Tamang of the DOE clarified during the sixth Task Force meeting that this should apply to short-term or “actionable” recommendations only.) For transparency and ease of information dissemination, it also recommended that this Final Report and the DOE paper be posted on the DOE website. Such transparency may also facilitate nationwide consultations, if needed. Note that it is assumed that Task Force members carried a national perspective when they joined the Task Force. Moreover, many member-organizations have nationwide scope.

Since major issues (e.g., taxes) could be resolved via legislation, it is also recommended that the DOE initiate drafting of amendments to the existing laws, if needed.

The Task Force reiterates that the recommendations herein are a collection of insights gathered during the brainstorming sessions or from the submitted position papers and therefore not necessarily supported by quantitative simulations. Supporting quantitative simulations (e.g., counterfactual simulations of the impacts on the electricity price of suggested policy adjustments) may, however, be conducted by DOE technical staff or through dedicated experts hired for the job as part of the next steps forward.

The Task Force also appreciates the opportunity given to it by the DOE in helping find solutions to the high price of electricity in the country.

Annex 1 – Recommendations which elicited major differences in opinion or were not adequately discussed

On the amendment of the EPIRA

In their joint position paper, the Makati Business Club, Employers Confederation of the Philippines, and European Chamber of Commerce of the Philippines (MBC et al.) oppose opening up the EPIRA to amendments at present as this will reinforce concerns about an unstable and unreliable regulatory environment. Although PSALM did not send a representative to the Task Force, it sent a position statement dated November 4, 2014 saying that it fully supports the idea that full implementation of the EPIRA is needed instead of amendment.

However, many of the recommendations by the majority of the Task Force would require amendments of the EPIRA (e.g., those relating to taxes). The amendments, however, may be pursued as a medium-term goal.

On the revision of industry restructuring

The Movefree Philippines & Cheap Household Electricity Movement recommended this: revise the Business Separation Guidelines. As claimed by Movefree, the organization of the industry players is burdened by layers of "juridical entities" that were created by the structural and functional unbundling rules. Moreover, the industry restructuring allegedly "ladderized" the production and distribution services, creating layers of cost like the metering and supply charge. Thus, these juridical entities must be trimmed down if not totally dismantled. They cite the Independent Power Producer Administrator (IPPA) is a layer in the production of electricity that increases the production cost.

The Academe Subgroup believes that this recommendation is stemming from a weak appreciation by Movefree of unbundling what used to be a vertically integrated industry. More information dissemination from the DOE and deeper dialogue between the DOE and consumer sector can perhaps address this.

On setting a specific target price

The Philippine Chambers of Commerce and Industry (PCCI) recommended the establishment of a "Target Electricity Price" and timeline for achieving this. This is because in the long run, this will help in the revival of the manufacturing industry, attract Foreign Direct Investment (FDI) and contribute to the attainment of sustainable and inclusive growth for the country.

The Task Force's view on this is mixed. It is difficult to establish a target price and timetable within which such price can be achieved through the recommendations here since we do not have simulation models and data. Perhaps the DOE could procure consultants' services, or use the results of the 2013 USAID-funded study "Challenges in Pricing Electric Power Services in ASEAN Countries" where the impacts of various policy changes on price are simulated. Note, however, that the USAID study applies only to the tax-related recommendations. Moreover, the USAID study does not recommend any policy change and merely simulates the influence of policies on price.

Generation-related recommendations

- Utilize "shorter fuse" peaking plants, such as aero-derivatives and/or power barges during critical periods

This is MBC et al.'s recommendation. However, this is not clear (even to the DOE) so this is being included here merely for transparency.

- No trading post (WESM) for electricity while we have a thin energy supply

This is from Movefree. The Task Force maintains that the answer is not to dismantle WESM but to increase generation capacity.

- Allow the government through the DOE and NPC to undertake strategic power generation capabilities

This is from MSK, which stated that the government can start with reviewing the privatization of the remaining power generation assets and see which ones can be strategically retained by the government. It can be strategic reserve and should not include baseload plants unless the private sector is not stepping up.

The Task Force maintains that the EPIRA bars the government from investing in generation, except when there is a crisis and Congress authorizes it (Section 71 of the EPIRA). Moreover, this provision of the law is sufficient at this point and discussions in Congress are proceeding toward exercising the Section 71 provision.

- Have standards for measuring the cost of fuel used for each type of power plant such as gas, coal and steam (geothermal) in relation with a standard volume such as one MW as the case may be

This recommendation is from Movefree. As claimed, once the standards are in place, the variations can be monitored and controlled by the authorized agency such as the ERC. During the discussions, ERC said that standards are already being used and that the regulators refer to cost standards per type of technology when evaluating power supply agreements. Moreover, ERC has approved heat rates.

The Task Force's position on this is for the government to intensify information and education campaigns, including those related to power plant standards.

- Consider subsidizing partly the cost of bunker fuel

This recommendation is from Government Watch. As claimed, this is needed as the use of power barges to generate electricity usually result in expensive electricity rates because of the high cost of bunker fuel.

The Academe Subgroup strongly opposes this as it is an unwise to have a policy subsidizing fossil fuel, especially when juxtaposed with the policy of encouraging more renewable energy.

- Generators that exceed their outage allowances should be required to source power at contract cost, regardless of source, instead of passing through the higher cost from the WESM

This is from Government Watch, which it failed to clarify. It seems that Government Watch is suggesting that replacement power be paid at a pre-agreed contract cost regardless of source, but this is already the existing practice.

- Additional MW allocations to solar and wind FIT, as well as their related FIT rates must also be formally declared by the DOE; increasing the share of natural gas must be supported by the government.

This is from the MBC et al. The additional allocations for the FIT may have to be examined and the impact on the electricity price through additional FIT-All, grid reliability, and priority dispatch mechanism should be studied. The result of least-cost optimization of the generation mix should also be considered.

With respect to liquefied natural gas (LNG), the representative from the UA&P notes that there are no LNG receiving facilities in the country at present but several parties are looking at investing in LNG facilities. This is undoubtedly due to the shale gas revolution in the US, which is likely to export natural gas (in the form of LNG) in the coming years. Also, a number of LNG production projects are expected to take off soon in Australia, further increasing supply in this region. Then also, as Malampaya starts to run out, then we will need to look for alternative sources of natural gas.

The Task Force's position is that the basis for increasing solar and wind allocations for FIT as well as increasing the share of natural gas in the generation mix should first be established, and such should be supported by quantitative simulations.

- Rationalize the terms of bilateral power supply contracts specially the existing ones of sister power producers (SPPs)

This is related to MSK's claim that Meralco is using more expensive power from its SPPs even when other cheaper generation sources are available. Meralco disputed this. Meralco stated that the basis of MSK's claim is not clear. Prior to EPIRA, all IPPs had to be accredited by NPC or DOE before developing power projects in the 90s. Accredited IPPs were considered in NPC's Power Development Program and DOE's Philippine Energy Plan. Furthermore, before the cost of IPP contracts can be reflected in the rates of NPC and distributors like Meralco, contracts have to be approved by the regulator after public hearings, regulatory evaluation and scrutiny, just as what is being done until now. For instance, in 1997 and in 2004, the First Gas contracts were subjected to a Board Committee Review participated in by government directors in the Meralco board and both reviews upheld the contracts.

The Task Force's position is that the discussion of this matter be moved to the ERC's jurisdiction.

- Pay spot market suppliers for their bid prices and not the highest price as the market settling price. Through the ERC, establish the dispatch price of reserve capacities for each plant.

This is from MSK. However, other alternatives to the system marginal price (i.e., the price of generation needed at the margin in order to equate supply and demand) mechanism will have undesirable effects given that the demand is inelastic. Pay-as-bid pricing may result in generating firms bidding close to the price cap. Average cost pricing may discourage investments in peaking plants. What should be recommended instead is to pursue measures that would increase demand elasticity, like retail competition expansion to cover more contestable consumers.

Transmission-related recommendations

- Transco as the independent Systems Operator as it is independent from the NGCP, the transmission services concessionaire

This is from MSK. As claimed, Section 21 of the EPIRA specifically defined what the concessionaire's function would be and this does not include System Operation. MSK interprets that Section 9 of the EPIRA defined that System Operation would be a function of the Transco. NGCP makes its revenue from the use of its transmission lines. If they are the ones who makes the connection rules and ownership boundaries which should be based on technical efficiency and promotion of market competition, their rules could be influenced by the desire to maintain and generate revenue for their transmission wheeling services. This will lead to unnecessary transmission charges and deter the development of embedded generation, something that is essential for power reliability in our archipelagic country. A more independent systems operator can also better judge the proposed transmission expansions and channel them where they should be installed. This conflict of interest in the functions of NGCP, according to the MSK, must be corrected.

MSK pushes that Transco be the system operator. A relevant question is: will Transco have the incentives to maintain system reliability in an efficient manner in real-time dispatch? During the sixth meeting of the Task Force, the Transco representative did not support the MSK recommendation.

Moreover, note that the "system operation" function in Section 9 (a) of the EPIRA refers to one of the functions of the then newly created Transco when the system was transferred to it by the NPC, not explicitly the ongoing function by the time the grid is privatized or the grid concession is awarded. Note also that the same Section 21 of the EPIRA states that the concession awardee shall have international experience and expertise as a leading transmission system operator.

The UPLB representative nevertheless explained that a study assessing the performance of NGCP in its concurrent roles as grid concessionaire and system operator should be undertaken to determine whether a more efficient service can be provided if the system is run by a system operator independent from the facility operator. Thus, the possibility of searching for an independent system operator should be kept open. Other members of the Task Force opined that in other jurisdictions, an independent

system operator is needed because the grids are owned by different entities in different geographic areas. Such is not the case in the Philippines where there is only one national grid.

- Pro-rate the transmission and demand charges during power outages

(Note that this is also applicable to distribution, but it need not be repeated below.) This recommendation came from the FFCCCI during the last meeting of the Task Force (i.e., prior to this presentation of the Final Report). According to the FFCCI, during power outages, which are expected to be prevalent during the coming summer months, customers should not be made to bear the burden of shouldering their full transmission and demand charges. Thus, the NGCP and the DUs should charge these items on a pro-rated basis during a billing period, since the reason for the non-utilization of demand is due to non-availability of power which is not within their control. But the FFCCCI recommendation was not discussed well enough since the NGCP was not represented in the Task Force and the regulator and DU representatives did not give any reaction.

Distribution-related recommendations

- Cancel the performance-based rate (PBR) setting and revert back to return-on-rate base (RORB) methodology

This is from the MSK. As claimed, under the PBR setting, in addition to being allowed a return on rate base on installed facilities as in the old RORB system, PBR further allows for making the consumers pay in advance for the future and promised investments of the DUs like Meralco. And they don't even have to make the investments as long as they "deliver a level of performance as established by the ERC." In effect, the consumers are being charged for investments and returns that the DU stockholders did not even make. Section 25 of the EPIRA provided that the retail rates must be based on investments "incurred".

Note that the ERC representative said during the 5th Task Force meeting that the PBR scheme is being reviewed, but belies the MSK's claim that projected investments not yet incurred are included in the charges being recovered.

Meralco in a position paper also noted that the MBK's statements are misleading. It also made the following comparison between RORB and PBR at various aspect of operations:

- a. Improving service quality – Only PBR sets performance standards per DU and accords the DU financial penalty and reward mechanism that aims to draw the best out of the DU. In the process, the customer expects fewer brownouts and faster response times (for as long as it is controllable by the DU). There is no such incentive in RORB.
- b. Price – PBR aims to closer matching of revenues and cost of DUs, minimizing the regulatory lag present in RORB. Thus in the forecasting process of PBR, the DUs are more financially capable and more willing to undertake investments needed in the system. The uncertain timing of rate adjustments in RORB tends to discourage DUs to invest more than the funds available. The price cap mechanism in PBR also limits the over-all average price to what was approved by the

regulator via a correction mechanism. In RORB, the system average price may continuously go up or go down in changing mix of customers.

- c. Spending efficiency – PBR pulls DUs towards achieving lower cost operations and investments. Significant overspends will not be recoverable from customers while any savings incurred will accrue to the DU. If the DU continuously operate on a lower budget, the lower cost over time benefits customers. RORB relies on actual spending, with no check if it was improving over time.

PBR has been implemented only for two regulatory periods for Meralco, Dagupan Electric and CEPALCO. The other DUs have only undergone one PBR-based regulatory period. In contrast, RORB has been implemented for around seventy decades and, thus, many of the criticisms levelled against PBR may be premature.

- For the ERC, impose strict competitive bidding rules for procurement and contracting of rate base assets of the DUs

According to MSK, there is no assurance that DUs are procuring their materials and services in the most competitive manner. It further claimed that many are awarded to favored suppliers at negotiated prices, leading to an overpriced rate base. ERC belies the claim that there is overcharging. Moreover, PHILRECA avows that ECs implement a competitive procurement process.

The Task Force's position is that this is within the ERC's jurisdiction and if the consumer group representatives want to do so, they could course the issue through the regular petitioning process before the ERC.

System loss-related recommendations

- Improve transparency and integrity in how the monthly charges are determined by Meralco and other distribution utilities.

This is from MSK. As claimed, the ERC had established under its Resolution 17 s. 2008 that the system loss of private distribution utilities that can be passed on to consumers is 8.5%. However, for many years, the system loss charges on Meralco's electric bills of residential and commercial consumers range from the current 11.5% to 15.4% of the generation charge and indications are that system loss charges to industrial consumers are lower at 6.5%.

This is not really a recommendation for reducing electricity price but a recommendation for tracking the sources of electricity price increases. The ERC and Meralco provided clarification to MSK during the 5th Task Force Meeting, such as the following: averaging is applied; some classes of consumers may have higher system loss and some classes, lower.

The Task Force's position on the issues with Meralco is that these can be settled through the regular petitioning process before the regulator.

- Incentivize further reduction of the system loss through fair saving sharing program for DUs and Electric Coops

This is a recommendation from Meralco. The Academe Subgroup believes that any benefit from meeting system loss target or going way below the system loss cap should go to the consumers. The principle is: consumers should only be charged for the system losses 'actually' incurred, and such should be capped.

- Have separate caps per type of system loss

The UPLB representative noted that the system loss charge comprises payments for electricity losses from two sources: technical limitations and pilferage. (Data on the proportion of losses allotted to each of these sources has not been provided to the Task Force). Given this, consumers should be concerned about how much they are paying for inefficiencies in the transmission system and how much the honest consumers are paying for the losses due to dishonest consumers who "steal" electricity.

On the first item, it is generally accepted that there will be physical losses from the transmission of electricity among nodes. However, with more facilities and better dispatch planning, these technical system losses might be kept to an efficient minimum. As long as the providers are able to pass on these costs to the consumers, a disincentive to add or upgrade facilities exists, which will continue to raise electricity prices. Thus, a lower cap on the system loss charge allotted to these technical system losses should be considered.

With regard to the first item, since RA 7832 allows for the recovery of costs from violators, there should be minimal losses to the distribution companies from pilferage when violators are apprehended, however delayed the recovery may be. But the allowance for pilferage losses may be hindering efforts at apprehension as well as at safeguarding proper service contracts given that distribution companies may recoup these costs from the consumers. A lower cap on this type of system loss may reduce the total price of electricity and provide incentives for companies to be more vigilant in their anti-pilferage efforts.

Meralco, however, proposes to maintain the use of a single system loss cap instead of a cap for each type of system loss (technical and non-technical system loss) since separate caps will be costly as a DU has to embark on separate programs to address each cap. The necessary creation of separate programs to meet separate targets will then affect costs which are charged to customers. Moreover, setting individual system loss caps on technical and non-technical losses would remove the flexibility and efficiency of DUs to focus on measures (i.e., whether to focus on technical or non-technical loss) where it can make the most reduction.

Meralco also explains that there is a direct trade-off between reducing technical losses and the cost of capital expenditures. Technical loss is a function of the current flowing through the power line or equipment; thus, lowering technical losses basically means lowering the current that passes through individual system components. This will require investing on CAPEX-intensive projects. Some specific examples of said projects which MERALCO implements in its best effort to lower technical losses are installation of additional substation, power/distribution transformers to lower the loading of existing ones; installation of additional sub-transmission, primary distribution and secondary lines to lower the loading of existing lines; replacement of power transformer banks and distribution transformers with high efficient but more expensive ones; replacement (re-conductoring) of sub-

transmission, primary distribution and secondary lines with bigger wires; and installation of more capacitor banks in substations and distribution lines.

Meralco also claims that this will add to the case burden of the ERC. as the country develops or as urban areas become more densely populated, the technical loss will necessarily change, which would necessarily require a more frequent re-setting of segregated system loss caps, as well as the need for DUs to file for approval of CAPEX projects to lower increasing technical losses that is inherent in the distribution system.

Lastly, Meralco claims that the no matter how much work is put into the accuracy of data and distribution system modelling, the result remains to be just an estimate of technical losses. This could lead to a situation where customers will shoulder additional system loss costs, while DUs will be penalized, due to the inherent margin of error in the prescribed segregation methodology and the robustness of the network model. On the other hand, the aggregated or overall distribution system losses are based on the actual meter reading data which can readily be validated based on the DUs' power supply bills and individual retail customer bills.

As the previous discussions of the Task Force had not sufficiently settled (for lack of time) this issue of segregating system loss caps, this may form part of the DOE's and ERC's future deliberations.

On ECs' registration with the Cooperative Development Authority in order to avail of VAT exemption and other taxes and fees

This is a recommendation from PHILFECO that came in late and was not discussed during the times when the other group of electric cooperatives (PHILRECA), which are choosing to stay outside the CDA umbrella, were present.

Article 6, Tax and Other Exemptions, particularly paragraph (2), sub-paragraph (b) of RA 9520 or the Philippine Cooperative Code of 2008 allows exemptions on VAT for distribution, supply and metering transactions of member-cooperatives. Majority of PHILFECO's member-ECs have secured their Certificates of Tax Exemption from the BIR (the rest are in varying stages of compliance), and have subsequently reduced power rates benefiting their member-customer-owners, according to PHILFECO.

On top of these discounts, the CDA-registered ECs with accumulated reserves and undivided net savings of not more than Php10 million are similarly exempt, under Article 61(1) of the same law, from the payment of all national, city, provincial, municipal or barangay taxes of whatever name and nature, including franchise tax, real property tax, income tax, customs duties and importation of machineries, equipment and spare parts (which are not available locally), court and sheriff fees, bonds for bringing an appeal against the decision of an inferior court, and register of deeds registration fees for loan documents, among others. These exemptions thereby pre-empt any power rate increase for the recovery of tax payments.

PHILFECO also claimed that the idea of registering all ECs with CDA should not be a critical issue for NEA, given that under RA 10531, also called the NEA Reform Act of 2013, the latter is empowered to exercise the powers of supervision and control over all ECs, regardless of where these are registered – NEA, CDA

or the Securities and Exchange Commission (SEC) – and had, in fact, been granted step-in rights for “ailing” ECs upon its and DOE’s joint determination as such.

Annex 2 – Task Force Composition

Table A1. List of Task Force members based on attendance

Organization	Representatives	Meetings Attended
Bureau of Internal Revenue (BIR)	Ms. Sarah B. Mopia Ms. Tess Villan Ms. Venus Beta-Chi B. Santiago Mr. Nestor S. Valeroso Mr. Edgar Espiritu Ms. Ma. Daisy Loyola Teresita M. Angeles Teresita B. Villamor	WESM 101, 1st, 3rd, 4th, 5th
Cheap Household Electricity Movement, Inc.	Mr. Arturo D. Damias	4th
Citizen Watch	Atty. Tim Abejo Mr. Orly Oxales	3rd, 4th, 5th, 6th
Department of Energy (DOE)	Hon. Carlos Jericho L. Petilla Hon. Raul B. Aguilos Hon. Loreta B. Ayson Hon. Zenaida Y. Monsada Hon. Donato D. Marcos Atty. Patrick T. Aquino Dir. Mylene C. Capongcol Dir. Jesus T. Tamang Dir. Mario C. Marasigan Dir. Melita V. Obillo Atty. Arthur T. Tenazas	WESM 101, 1 st , 2 nd , 3 rd , 4 ^h , 5 th , 6 th
Department of Finance (DOF)	Ms. Joanna Castillo Ms. Anya Marasigan Palileo Mr. Jonathan Chu	WESM 101, 1st, 2nd
Department of Labor and Employment (DOLE)	Atty. Rebecca C. Chato Atty. Romeo M. Montefalco, Jr. Atty. Alvin B. Curada Atty. Argyle Karen L. Bajas	2nd, 3rd, 4th, 6th
Department of Trade and Industry (DTI)	Ms. Anna Virgilia V. Rodriguez Mr. Adrian Echano Mr. Nestor P. Arcansalin Mr. Dexter S. Pajarillo	WESM 101, 1st, 2nd, 3rd, 4th, 5th
Employers Confederation of the Philippines (ECOP)	Mr. Robert Ela Ms. Pamela To-ong	WESM 101, 1st
Energy Regulatory Commission (ERC)	Atty. Florescinda Digal	2nd, 3rd, 4th, 5th

Organization	Representatives	Meetings Attended
	Engr. Legario L. Galang, Jr. Mr. Alvin Jones M. Ortega	
Federation of Filipino Chinese Chambers of Commerce and Industry, Inc. (FFCCCII)	Mr. David O. Chua Mr. Leonardo Chua	WESM 101, 1st, 2nd, 4th, 6th
Federation of Philippine Industry	Mr. Emmanuel Y. Go Mr. Erymar Reyes Mr. Edwin Olan	WESM 101, 3rd, 6th
GOVT Watch	Mr. Pete Cura Ms. Erika Cruz	WESM 101, 1st, 2nd, 3rd, 6th
Joint Foreign Chambers of the Philippines (JFC)	Mr. John A. Becker Mr. Roberto Racelis Mr. Kent Marjun B. Primor	WESM 101, 1st
Makati Business Club (MBC)	Mr. Peter Angelo V. Perfecto Mr. Anthony Patrick Chua Mr. Paolo Adrian B. Monteiro	1st, 3rd
Management Association of the Philippines (MAP)	Mr. Gregorio S. Navarro Ms. Francesca Rey	WESM 101
Matuwid na Singil sa Kuryente Consumer Alliance Inc. (MSK)	Mr. David Celestra Tan Ms. Aya Jallorina Mr. Irene Ramilo	WESM 101, 1st, 2nd, 3rd, 4th, 5th
National Association of Electricity Consumers for Reforms (NASECORE)	Mr. Pete Ilagan Mr. Siefriedo A. Veloso	1st
National Consumer Affairs Council (NCAC) / Nationwide Association of Consumers, Inc. (NACI)	Mr. Jose P. Pepito	WESM 101, 1st, 3rd, 4th
National Economic Development Authority (NEDA)	Mr. Ruben S. Reinoso, Jr. Ms. Kathleen P. Mangune Mr. Francis Bryan C. Coballes	2nd, 3rd
National Electrification Administration (NEA)	Mr. Goldelio G. Rivera Mr. Francisco A. Caymo	WESM 101, 1st, 3rd, 4th, 5th, 6th
National Federation of Women's Clubs of the Phils. (NFWC)	Ms. Aleth P. Maglalang Ms. Carmela E. Valdez	WESM 101, 1s
National Grid Corporation of the Philippines (NGCP)	Ms. Agnes F. Dela Cruz	4th
National Transmission Corporation (TransCo)	Mr. Rolando T. Bacani Mr. Generoso M. Senal	4th, 6th
Philippine Chamber of Commerce and Industry (PCCI)	Atty. Jose S. Alejandro Dr. Benjamin S. Austria Ms. Cheska Alvarez Ms. Rhuby R. Conel	WESM 101, 1st, 2nd, 3rd, 4th, 5th, 6th

Organization	Representatives	Meetings Attended
	Ms. Krisitne Gayem	
Philippine Federation of Electric Cooperatives (PHILFECO)	Ms. Alicia F. Mercado	1st, 4th
Philippine Independent Power Producers Association (PIPPA)	Mr. Chrysogonus F. Herrera Ms. Cherry Javier Mr. John Cleofas Atty. Anne Estorco Macias	1st, 2nd, 3rd, 4th, 5th, 6th
Philippine Institute for Development Studies	Dr. Gilberto M. Llanto (chair of last/wrap-up meeting) Dr. Adoracion M. Navarro Mr. Keith C. Detros	WESM 101, 1 st , 3 rd , 4 th , 5 th and 6 th except for Dr. Llanto
Philippine Rural Electric Cooperatives Association, Inc. (PHILRECA)	Mr. Wendell V. Ballesteros	3rd, 4th, 6th
Regulatory Management Office, Manila Electric Company (MERALCO)	Ms. Ivanna G. dela Peña Mr. Lawrence S. Fernandez Atty. William S. Pamintuan Mr. Manuel Luis Zagala Mr. Mark Anthony T. Delumen Ms. Noemi B. Jimenez	1st, 2nd, 3rd, 4th, 5th, 6th
Retail Electricity Suppliers Association of the Philippines (RESA)	Mr. Raymond R. Roseus Mr. Ernesto M. Cabral	1st, 2nd, 3rd

Note: Based on the records of the DOE Task Force Secretariat

The Task Force Meetings were held on the following dates:

1st Meeting (Inaugural) – 18 June 2014

WESM 101 – 3 July 2014

2nd Meeting - 1 August 2014

3rd Meeting - 28 August 2014

4th Meeting – 08 October 2014

5th Meeting – 30 October 2014

6th Meeting – 26 November 2014

Table A2. Members of the Academe Subgroup of the Task Force

Institution	Name	Meetings Attended
Ateneo de Manila University <i>Ateneo School of Government (ASoG)</i>	Pauline Caspellan	2nd Academe Subgroup RTD
Philippine Institute for Development Studies (PIDS)	Dr. Adoracion Navarro	1st Academe Subgroup RTD, 2nd Academe Subgroup RTD, WESM 101, 3rd TF Meeting, 4th TF Meeting, 5th TF Meeting, 6th Meeting
University of Asia and the Pacific (UA&P)	Dr. Peter Lee U	2nd Academe Subgroup RTD, 4th TF meeting, 6th TF Meeting
University of the Philippines Diliman <i>School of Economics</i>	Dr. Ramon L. Clarete	1st Academe Subgroup RTD, 2nd Academe Subgroup RTD,
University of the Philippines Diliman <i>College of Engineering</i>	Benjo Malquisto	1st Academe Subgroup RTD
University of the Philippines Los Baños <i>College of Economics and Management</i>	Anna Floresca F. Fimalino	1st Academe Subgroup RTD, 2nd Academe Subgroup RTD, 4th TF meeting, 6th TF Meeting

Note: Based on the records of the DOE Task Force Secretariat

For the Academe Subgroup, PIDS hosted the roundtable discussions held on July 7, 2014 and September 22, 2014.

Table A3. List of invited organizations which were unable to send representatives

Institution	Name
Private Electric Power Plants Association (PEPOA)	Atty. Ranulfo M. Ocampo
NAGKAISA c/o Alliance of Progressive Labor	Mr. Joshua Mata
Asian Institute of Management (AIM)	Dr. Ricardo A. Lim

Table A4. DOE Task Force Technical Secretariat

Name	Position	Agency
Mrs. Carmencita A. Bariso	Assistant Director	Energy Policy and Planning Bureau, Department of Energy (EPPB-DOE)
Mrs. Victoria B. Capito	OIC-Division Chief	Energy Policy and Planning Bureau, Department of Energy (EPPB-DOE)
Mr. Danilo V. Vivar	Supervising Science Research Specialist	Energy Policy and Planning Bureau, Department of Energy (EPPB-DOE)
Mr. Arnel C. Antonio	Senior Science Research Specialist	Energy Policy and Planning Bureau, Department of Energy (EPPB-DOE)
Ms. Lilibeth T. Morales	Senior Science Research Specialist	Energy Policy and Planning Bureau, Department of Energy (EPPB-DOE)
Ms. Marietta M. Quejada	Senior Science Research Specialist	Energy Policy and Planning Bureau, Department of Energy (EPPB-DOE)
Ms. Rosanna Y. Tejuco	Senior Science Research Specialist	Energy Policy and Planning Bureau, Department of Energy (EPPB-DOE)
Mr. Michael B. Coligado	Science Research Specialist II	Energy Policy and Planning Bureau, Department of Energy (EPPB-DOE)
Ms. S. Magnolia. B. Olvido	Science Research Specialist II	Energy Policy and Planning Bureau, Department of Energy (EPPB-DOE)
Ms. Charmaine R. Taliping	Science Research Specialist II	Energy Policy and Planning Bureau, Department of Energy (EPPB-DOE)
Ms. Jovee Rose B. Jandusay	Science Research Specialist I	Energy Policy and Planning Bureau, Department of Energy (EPPB-DOE)
Ms. Luningning Baltazar	Supervising Science Research Specialist	Electric Power Industry Management Bureau, Department of Energy (EPIMB-DOE)
Mr. Antonio S. Barcelona	Senior Science Research Specialist	Electric Power Industry Management Bureau, Department of Energy (EPIMB-DOE)
Mrs. Melanie C. Papa	Science Research Specialist II	Electric Power Industry Management Bureau, Department of Energy (EPIMB-DOE)

Annex 3 – Department of Finance’s Comments on the Tax-related Issues

(See attached scanned documents.)