Power prices

Where we are and how do we reduce the bill

AUGUST 11, 2015
AUGUST 2015 RATES
Residential Consumption of 200kWh
P 0.26 per kilowatt hour
ELECTRICITY RATE (Residential Consumption of 200kWh)
AUGUST 2015 RATE CHANGES
Residential Consumption of 200kWh

- GENERATION: ↓ 0.19
- TRANSMISSION: ↓ 0.04
- DISTRIBUTION: NO CHANGE 0.00
- TAXES: 0.04
- OTHERS: ↑ 0.01

Taxes = Value-Added Tax + Universal Charge + Local Franchise Tax
Others = System Loss Charge + Subsidies + Feed-in-Tariff Allowance (FiT-All)

P0.26 PER KILOWATT HOUR
Generation Charge from Jan 2014 - Aug 2015 (PhP/kWh)

*Recalculated based on actual WESM adjustments for regulated WESM prices in accordance with ERC 2014-021 MC*
Key policy questions

- Why are power prices higher in the Philippines than in most other countries in the region (and can this gap be lowered)?

- Where does the customers’ money go (and how can we contain or reduce the customers’ bill)?
Regional Comparison of Electricity Prices
Findings of the International Energy Consultants

Philippine tariffs are “fully cost-reflective, which is sound economic policy”
- Policy is similar to Singapore, Japan, and Australia

Rates in Thailand, Malaysia, South Korea, Taiwan, & Indonesia are low due to “government subsidies”
- “Tariffs remain well below the cost”
- “Poor economic policy ... unsustainable”

John Christopher Morris, Ph.D.
Managing Director
Comparison of Average Retail Electricity Tariffs

Notes:
1. Weighted average tariff (all customer categories), excluding VAT
2. Tariffs are for January 2012

Source: International Energy Consultants
Government subsidies in other Countries

- Subsidy is up to 54% of the power cost
- Through **subsidized fuel, cash grants, additional debt, deferred expenditures**

Source: International Energy Consultants
Other Findings of the International Energy Consultants

Philippine dependence on the price of imported fuel

◦ “Fuel is the largest component of the tariff. Approx. 80% of generation on Luzon is fuelled with imported coal & oil (at full international market prices) & domestic gas (pegged to international prices)”

◦ “Several (but not all) other countries with lower tariffs provide fuel to their utilities at below-market rates”

◦ Their government-owned power generation, transmission, and/or distribution companies are subsidized, absorb costs, and/or incur losses
Over the past decade, some markets have passed rising fuel costs on to customers (eg. Singapore, Australia, Philippines) but others have not (eg. Indonesia, Korea)

NB. Meralco, Indonesia & Korea are averages of all tariff classes; Singapore, Australia are residential tariffs only. Source: IEC
Key Policy Responses/ Actions

Philippine electricity prices are higher due to no government subsidies, fully-priced and “heavily”-taxed across the supply chain.

Inadequate and unreliable capacity vs. demand forces the use of expensive oil-fired power plants and creates market price spikes.

Thus, new cost-competitive capacity, such as high efficiency coal-fired plants, must be built quickly.

Other countries are starting to reduce their own subsidies.
Key policy questions

- Why are power prices higher in the Philippines than in most other countries in the region (and can this gap be lowered)?

- Where does the customers’ money go (and how can we contain or reduce the customers’ bill)?
Average Retail Rate, 1H 2015

- 9.1% lower vs. 2014 (-89¢/kWh)
- Generation Charge, largest component in customer’s bill, 54.5%; Meralco 18.0%; NGCP 10.6%

### Bill Component

<table>
<thead>
<tr>
<th>BILL COMPONENT</th>
<th>1H 2014 Overall Ave, P/kWh</th>
<th>1H 2015 Overall Ave, P/kWh</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Charge*</td>
<td>5.54</td>
<td>4.83</td>
<td>-0.71</td>
</tr>
<tr>
<td>Distribution Charge** (MERALCO)</td>
<td>1.67</td>
<td>1.59</td>
<td>-0.08</td>
</tr>
<tr>
<td>Transmission Charge** (NGCP)</td>
<td>0.94</td>
<td>0.93</td>
<td>-0.01</td>
</tr>
<tr>
<td>System Loss Charge**</td>
<td>0.46</td>
<td>0.40</td>
<td>-0.06</td>
</tr>
<tr>
<td>Taxes, Univ. Charge**</td>
<td>1.13</td>
<td>1.07</td>
<td>-0.06</td>
</tr>
<tr>
<td>FIT-Allowance**</td>
<td>-</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>9.75</strong></td>
<td><strong>8.85</strong></td>
<td><strong>-0.89 (9.1% ↓)</strong></td>
</tr>
</tbody>
</table>

*Generation Retail Rate (applies to captive customers only)  
**Other Charges are based on total captive and contestable customers in Meralco Franchise Area  
***Excludes contestable customers and Cavite Ecozone (CEZ)- started February 2015
Meralco Generation Charges have been relatively stable

At regulated WESM prices

WESM price cap reduced from ₱62/kwh to ₱32/kWh

Secondary price cap implemented
## Meralco WESM Purchases

% Share to Total Volume reduced

<table>
<thead>
<tr>
<th>SUPPLY PERIOD</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>5.6%</td>
<td>(0.1%)*</td>
<td>2.2%</td>
<td>3.9%</td>
</tr>
<tr>
<td>February</td>
<td>5.9%</td>
<td>1.3%</td>
<td>3.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>March</td>
<td>8.4%</td>
<td>3.0%</td>
<td>3.9%</td>
<td>4.2%</td>
</tr>
<tr>
<td>April</td>
<td>5.0%</td>
<td>4.8%</td>
<td>3.4%</td>
<td>10.2%</td>
</tr>
<tr>
<td>May</td>
<td>6.3%</td>
<td>5.5%</td>
<td>4.3%</td>
<td>6.6%</td>
</tr>
<tr>
<td>June</td>
<td>7.2%</td>
<td>6.0%</td>
<td>5.6%</td>
<td>7.5%</td>
</tr>
<tr>
<td>July</td>
<td>14.8%</td>
<td>7.1%</td>
<td>7.0%</td>
<td>11.1%</td>
</tr>
<tr>
<td>August</td>
<td>4.0%</td>
<td>2.5%</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>8.0%</td>
<td>8.3%</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>7.9%</td>
<td>9.2%</td>
<td>5.0%</td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>6.7%</td>
<td>11.5%</td>
<td>3.6%</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>9.4%</td>
<td>14.1%</td>
<td>3.1%</td>
<td></td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td><strong>7.5%</strong></td>
<td><strong>5.9%</strong></td>
<td><strong>3.6%</strong></td>
<td><strong>7.0%</strong></td>
</tr>
</tbody>
</table>

*Net of previous month’s negative adjustments

Increase in Nov and Dec 2013 due to 21 forced outages and 7 scheduled/ extended maintenance shutdowns
Meralco system loss
Consistent reduction = Savings to customers*

*Since 2008, a total of P16.8Bn or equivalent to 7.86¢/kWh
Phl Power Market is a fully-priced market. No Subsidies and heavily “taxed”

**GENERATION**

- VAT
- Royalty/Tax on indigenous fuels or Duty/Tax on imported fuels
- Real Property Tax
- Other taxes & fees

**DELIVERY**

Transmission

- 3% franchise tax, in lieu of all other taxes

Distribution

- VAT
- Local Franchise Tax on pass through gen/ trans/ system loss charges *
- Local Franchise Tax on distribution charges
- Real Property Tax
- Energy Tax on residential
- Universal Charges incl FIT
- Other taxes & fees

* not applicable to electric coops
# Impact of government proceeds from Malampaya Natural Gas (2001-2014)

<table>
<thead>
<tr>
<th>Description</th>
<th>In PhP billions</th>
<th>Estimated add-on to the Luzon power rate (PhP/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Proceeds, Net of Cost Recovery &amp; Contractor Revenue</td>
<td><strong>375.945</strong></td>
<td><strong>0.72</strong></td>
</tr>
<tr>
<td>National Govt Share, Net of Taxes &amp; LGU Assistance</td>
<td><strong>135.536</strong></td>
<td><strong>0.26</strong></td>
</tr>
</tbody>
</table>
Value-Added Tax (VAT) on electricity

Beginning November 2005

As VAT is a percentage tax (unlike excise taxes), the VAT burden increases with any increase in the other electric rate components.

For 1st half 2015, the VAT accounted for P0.67/kWh in the average customer bill.

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<td>0.93</td>
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<tr>
<td>System Loss Charge**</td>
<td>0.40</td>
</tr>
<tr>
<td>VAT</td>
<td>0.67</td>
</tr>
<tr>
<td>Other Taxes, FIT-All Univ Charge**</td>
<td>0.44</td>
</tr>
<tr>
<td>** TOTAL</td>
<td>** 8.85</td>
</tr>
</tbody>
</table>

* Generation Retail Rate (applies to captive customers only)
** Other Charges are based on total captive and contestable customers in Meralco Franchise Area
*** Unaudited
Universal Charges have been increasing

<table>
<thead>
<tr>
<th>Component</th>
<th>Purpose/description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing</strong></td>
<td></td>
</tr>
<tr>
<td>EC</td>
<td>Environment Charge</td>
</tr>
<tr>
<td>ME</td>
<td>Missionary Electrification. <strong>P0.0381/kWh deferred increase resumed</strong> this August 2014</td>
</tr>
<tr>
<td>SCC</td>
<td>NPC’s Stranded Contract Cost. Two petitions are pending before ERC for a cumulative <strong>additional UC-SCC of P0.1805/kWh</strong></td>
</tr>
<tr>
<td><strong>Pending</strong></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>NPC’s Stranded Debt. PSALM’s proposal of a UC-SD of P0.0382/kWh was denied by ERC</td>
</tr>
</tbody>
</table>
Feed-In Tariff Allowance (FIT-All)

- Separate Line Item
- Reflected starting the February 2015 bills to Meralco customers

### Billing Period: 08 Feb 2015 to 07 Mar 2015

<table>
<thead>
<tr>
<th>Rate Components</th>
<th>Base</th>
<th>Price</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Loss Charge</td>
<td>61.28</td>
<td>9.9400%</td>
<td>6.09</td>
</tr>
<tr>
<td>Distribution Charge</td>
<td>244.88</td>
<td>12.0000%</td>
<td>29.39</td>
</tr>
<tr>
<td>Subsidies and Others</td>
<td>20.58</td>
<td>12.0000%</td>
<td>2.47</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td><strong>113.74</strong></td>
</tr>
</tbody>
</table>

**FIT-ALL (RENEWABLE)**

- **FIT-All (Renewable)**
  - 106 kWh
  - 0.0406
  - **4.30**

**UNIVERSAL CHARGES**

- Missionary: 106 kWh, 0.1561, 16.55
- Environmental Fund: 106 kWh, 0.0025, 0.27
- NPC Stranded Contract Costs: 106 kWh, 0.1938, 20.54
- NPC Stranded Debts: 0.00
- DU Stranded Contract Costs: 0.00
- Equalization of Taxes and Royalties: 0.00

**TOTAL ENERGY AMOUNT**: 1,176.31

**Total Bill**

- **VAT Sales**: 927.05
- **VAT Zero Rated**: 0.00
- **VAT Exempt**: 141.12

**TOTAL CURRENT BILL AMOUNT**: 1,176.31

**Additional Bill Information**
How can we contain or reduce the customers’ bill?

**POWER SUPPLY COST & RELIABILITY**

*(55% of Ave. Customer Bill)*

- Build highly fuel-efficient and reliable new capacity
- Seek more cost competitive fuel sources (coal, indigenous nat gas and LNG), local and offshore
- Better scheduling of maintenance turnaround of power plants
- Enhanced reliability of existing power plants
- Resolve transmission congestions
How can we contain or reduce the customers’ bill?

**TRANSMISSION & DISTRIBUTION RELIABILITY AND COST**
*(29% of Ave. Customer Bill)*

- Flat Distribution charge/kWh from 2012-2015, reduced by 11.3% starting July

- About 60-80% of Transmission Charge/kWh will be relatively flat, the balance of 20-40% constituting ancillary service charges of generators, which may fluctuate

- Undertake required Capex investments to further strengthen T & D system, to resolve transmission congestions and to modernize the T & D infrastructure

- Drive for more effective T & D coordination / synchronization to minimize supply interruptions
How can we contain or reduce the customers’ bill?

**SYSTEM LOSS**

*(4.5 % of Ave. Customer Bill)*

- Incentivize further reduction through fair saving sharing program for DUs and Electric Coops
How can we contain or reduce the customers’ bill?

**TAXES & UNIVERSAL CHARGES**

*(12% of Ave Customer Bill)*

- Carefully consider reducing government take.
  - Reduced VAT rate and RPT rate, esp. during interim period of tight supply
  - “Correct” tax base for VAT and LFT, to eliminate ‘tax on tax’ and on royalty
  - Apply part of Natural Gas royalty take to reduce power rates

- Extend BOI fiscal incentives for required new plants, targeted to reduce power prices

- Judicious action on any new Universal Charges, e.g., Stranded Debt recovery, Feed-In Tariff Allowance (FIT-All)
How can we contain or reduce the customers’ bill?

**CONTAIN CONSUMER SPEND ON POWER**

- Actively drive energy efficiency and consumption for Industrial, Commercial and Residential customers
  - Energy saving campaigns / conservation-tips for households
  - Energy advise and services for commercial and industrial customers
THANK YOU