Enabling more RE share in the Power Mix through Local Action

Bert Dalusung
Energy Transition Advisor
RE Law in 2008 did not increase RE Mix

Coal alone accounted for all increases in capacity and generation since 2008.

RE mix declined from 34% in 2009 to 21% in 2020.
Coal promised to be “cheap” and “reliable”

Coal generation in MERALCO, VECO and Davao Light now costs from **8 to 12 Pesos per kilowatt-hour**

Coal power plants have registered many forced outages, exceeding ERC standards
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The key action needed is to optimize power procurement by the local electric distribution utility.
### BREAKDOWN OF GENERATION CHARGE

<table>
<thead>
<tr>
<th>Source</th>
<th>% of Total kWh Purchased</th>
<th>(A) kWh Purchased</th>
<th>(B) Basic Generation Cost (PhP)</th>
<th>(C) Other Cost Adjustments (NSS and Other Billing Adjustments) (PhP)</th>
<th>(D = B + C)</th>
<th>Total Generation Cost for the Month (PhP)</th>
<th>(D/A) Average Generation Cost (PhP/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quezon Power Phils Ltd. Co. (QPPL)</td>
<td>6.3%</td>
<td>184,204,410</td>
<td>2,406,155,832</td>
<td>51,323,259</td>
<td>2,457,479,091</td>
<td>13.3410</td>
<td></td>
</tr>
<tr>
<td>First Gas Power Corporation (FGPC) – Santa Rita</td>
<td>22.6%</td>
<td>662,460,555</td>
<td>5,058,258,724</td>
<td>65,758,563</td>
<td>5,124,017,288</td>
<td>7.7348</td>
<td></td>
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<tr>
<td>FGP Corp. (FGP) – San Lorenzo</td>
<td>12.7%</td>
<td>373,019,849</td>
<td>2,478,036,641</td>
<td>27,199,479</td>
<td>2,505,236,120</td>
<td>6.7161</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal - Independent Power Producers (IPPs)</strong></td>
<td>41.6%</td>
<td>1,219,684,814</td>
<td>9,942,451,198</td>
<td>144,281,301</td>
<td>10,086,732,500</td>
<td>8.2700</td>
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<tr>
<td>First NatGas Power Corp. (FNPC) - San Gabriel</td>
<td>7.8%</td>
<td>229,274,220</td>
<td>1,370,395,436</td>
<td>18,050,001</td>
<td>1,388,445,436</td>
<td>6.0558</td>
<td></td>
</tr>
<tr>
<td>San Buenaventura Power Ltd. Co. (SBPL)</td>
<td>7.4%</td>
<td>217,154,013</td>
<td>2,611,107,757</td>
<td>29,823,829</td>
<td>2,640,931,586</td>
<td>12.1616</td>
<td></td>
</tr>
<tr>
<td>AC Energy (baseload)</td>
<td>5.1%</td>
<td>148,800,000</td>
<td>662,024,398</td>
<td>(0)</td>
<td>662,024,398</td>
<td>4.4491</td>
<td></td>
</tr>
<tr>
<td>San Miguel Energy Corp. (SMEC)</td>
<td>6.4%</td>
<td>189,069,000</td>
<td>817,018,442</td>
<td>(108,445,136)</td>
<td>708,573,306</td>
<td>3.7477</td>
<td></td>
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<tr>
<td>South Premiere Power Corp. (SPPC) (baseload)</td>
<td>13.1%</td>
<td>383,946,000</td>
<td>1,659,101,509</td>
<td>(18,963,323)</td>
<td>1,640,138,186</td>
<td>4.2718</td>
<td></td>
</tr>
<tr>
<td>AC Energy (midmerit)</td>
<td>1.7%</td>
<td>49,104,000</td>
<td>246,844,390</td>
<td>-</td>
<td>246,844,390</td>
<td>5.0270</td>
<td></td>
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<tr>
<td>South Premiere Power Corp. (SPPC) (midmerit)</td>
<td>3.4%</td>
<td>99,998,000</td>
<td>543,641,517</td>
<td>(9,017,775)</td>
<td>534,623,743</td>
<td>5.3463</td>
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<tr>
<td>Energy Development Corporation (EDC) (midmerit)*</td>
<td>1.2%</td>
<td>33,800,000</td>
<td>182,946,855</td>
<td>-</td>
<td>182,946,855</td>
<td>5.4126</td>
<td></td>
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<tr>
<td>Other PSAs**</td>
<td>2.4%</td>
<td>70,166,337</td>
<td>282,844,036</td>
<td>(17,840,093)</td>
<td>175,003,943</td>
<td>2.4914</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal - Power Supply Agreements (PSAs)</strong></td>
<td>48.4%</td>
<td>1,421,311,570</td>
<td>8,285,924,339</td>
<td>(106,392,497)</td>
<td>8,179,531,842</td>
<td>5.7549</td>
<td></td>
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<tr>
<td>WESM</td>
<td>9.9%</td>
<td>291,231,403</td>
<td>2,015,289,166</td>
<td>77,545,606</td>
<td>2,092,834,772</td>
<td>7.1862</td>
<td></td>
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<tr>
<td>EXPORT ENERGY FROM NET METERING CUSTOMERS</td>
<td>0.05%</td>
<td>1,552,423</td>
<td>-</td>
<td>10,156,696</td>
<td>-</td>
<td>6.5425</td>
<td></td>
</tr>
<tr>
<td>OTHERS</td>
<td>0.03%</td>
<td>1,016,788</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100.0%</td>
<td>2,934,796,998</td>
<td>20,253,821,399</td>
<td>115,434,410</td>
<td>20,369,255,810</td>
<td>6.9406</td>
<td></td>
</tr>
</tbody>
</table>

### OTHER GENERATION ADJUSTMENTS (OGA)

- Pilferage Recovery
- ILP Recovery
- High Load Factor Rider
- TOU Differential

- Pilferage Recovery (0.0118)
- ILP Recovery (0.0000)
- High Load Factor Rider (0.0001)
- TOU Differential (0.0104)

### SEPTEMBER 2022 GENERATION CHARGE

6.9393

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*Formerly First Gen Hydro Power Corp. (FGHPC), PSA transfer starting Aug 2022 supply
**Solar Philippines Tarlac Corp. (SPTC), Powersource First Bulacan Solar Inc. (PFBS), Solar Philippines Tanauan Corp. (SPTanC), and Panay Energy Development Corp. (PEDC) 2022
Some common issues in power contracts

- Overcontracting specially on baseload capacity

![Graph showing coal and gas baseload capacity](image)

- Coal: 5,000 MW
  - Dependable = 6,855 MW
- Gas: 2,200 MW
  - Dependable = 3,286 MW

- Ideal baseload capacity

Some common issues in power contracts

- Overcontracting specially on baseload capacity
- Preference for a single contract to address full power requirements
  - What if a smaller capacity power plant can be more cost effective?
  - What if a mix of power plants can be least-cost?
- Automatic fuel price pass-through or "pasaload"
  - Can there be price caps?
  - Can fuel price be fixed?
- Benchmark values in computation of monthly power costs
  - Low benchmark values in e.g. exchange rate produce higher monthly effective costs
- Automatic fuel consumption escalation
  - e.g. 1% increase per year
- Can minimum offtakes be aligned with seasonal consumption?
Key areas to enable more RE

- Local community participation
  - Monitor monthly generation cost breakdowns of local distribution utility
  - Engage with local distribution utility during planning for new capacity
  - Observe conduct of competitive selection process
  - Participate in ERC hearings on pricing

- Support and welcome renewable energy projects locally
  - More investments into the community
  - More jobs and opportunities for support services