

# Electric Power At a Glance

July 2005 AG-07-2005

## Power rates increase by an average of P0.36/kWh in June.

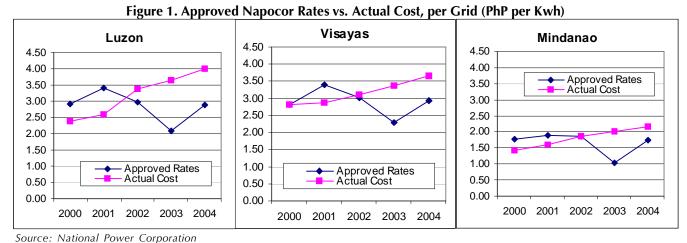
n In April 2005, the Energy Regulatory Commission (ERC) increased the effective selling rate of the National Power Corporation (NPC) by an average of P0.36/kWh, with the biggest increase in Luzon of P0.47/kWh. This will increase the charges of distribution utilities that source power from NPC by the same amount by June 2005.

Table 1. Summary of Adjustments in NPC Effective Selling Rate (P/kWh)

	Luzon	Visayas	Mindanao
NPC Effective Selling Rate as of			
Apr 2005	3.9384	3.1610	2.2509
Adoption of Return on Rate Base			
Methodology (Apr 2005)	0.0912	(0.1495)	0.0330
Generation Rate Adjustment			
Mechanism (Apr 2005)	0.3048	0.4734	0.4767
Less 3 <sup>rd</sup> GRAM (expired)	(0.1085)	(0.1059)	(0.1527)
Foreign Currency Adjustment			
(Apr 2005)	0.1821	(0.0967)	(0.0772)
NPC Effective Selling Rate as of			
May 2005	4.4080	3.3812	2.5307
Total Rate Increase	0.4696	0.1213	0.2798

Source: National Power Corporation

**n** The estimated rate increase for Meralco residential customers is P0.40/kWh, lower than the P0.47/kWh increase in Luzon, as Meralco also sources power from other generating plants.



Note: After September 2002, figures for rates and costs no longer include transmission-related businesses.

- **n** The rate increase was granted to reflect the true cost of power generation of NPC.
- **n** Since 2002, the generation rates of NPC have fallen behind its actual cost by an average of P1.13/kWh for Luzon, P0.70/kwh for Visayas and P0.40 in Mindanao.

Table 2. Monthly Residential and Commercial Electricity Rates, Selected Asian Countries, US cents/kWh

Country	as of	Commercial	Residential
Cambodia	Mar-05	20.00	15.18
Japan	Mar-05	17.54	no data
India	Jun-04	14.37	8.47
Hongkong	Jun-04	13.89	12.99
Philippines	Jun-05	13.58	14.43
Indonesia	Mar-05	12.53	10.10
Singapore	Dec-04	10.58	10.59
Lao PDR	Dec-04	10.49	10.49
Vietnam	Jun-04	9.79	9.86
Bangladesh	May-04	8.62	8.20
China	Mar-05	8.24	no data
Malaysia	Jun-04	7.64	5.78
Thailand	Dec-04	7.19	8.65
Brunei	Mar-05	3.10	no data

Source: Wholesale Electricity Spot Market

#### **Power Rates across Asia**

n The cost of power in the country remains relatively high compared to other Asian countries. ASEAN neighbors Indonesia, Vietnam and Thailand all have significantly lower residential and commercial electricity rates compared to the Philippines.

1,681

2,001

1,681

1,784

## The power supply and demand situation

- n In 2004, the Philippines had a total installed capacity of 15,763 MW of electric power (79.14% located in Luzon) of which 14,008 MW was considered dependable.
- n Forecasts of the Department of Energy (DOE) show that an additional 9,225 MW of new capacity is needed over the next ten

2005 2006 2009 2010 2012 Luzon 10,876 10,226 **Existing Capacity** 11,086 11,086 11,086 Peak Demand 6,953 7,397 8,948 9,545 10,870 **Visayas Existing Capacity** 1,435 1,435 1,410 1,410 1,366 Peak Demand 1,383 1,463 1,644 1,113 1,170 Mindanao

1,566

1,458

1,681

1,697

Table 3. Power Supply and Demand Forecast, per grid, 2004-2009

Source: Power Development Plan, 2004-2014, Department of Energy

1,515

1,371

years to avert the projected power supply shortages in Mindanao by 2009, Visayas by 2010, and Luzon by 2012.

**Existing Capacity** 

Peak Demand

Figure 2. Installed Capacity Mix, 2000 (in Gwh)

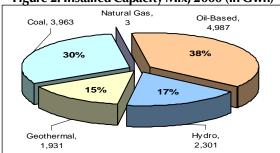
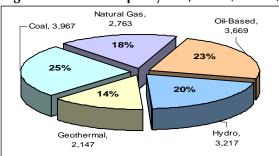


Figure 3. Installed Capacity Mix, 2004 (in Gwh)



Source: Philippine Power Development Plan

### The Philippines' power mix

- n The energy mix in the Philippines consists mainly of coalfired power plants, which account for 25% and oil-based plants which account for 23%.
- **n** Natural gas power has significantly increased its share in the power mix, now contributing 18% of total power supply from almost nothing in 2000.
- n Oil-based plants produced the most expensive power at P5.27/kWh with hydropower plants producing the cheapest at P2.11/kWh.

Table 4. Average Cost per Energy Source for NPC-Owned and NPC IPPs, 2003 (cost in million pesos)

	Fuel Cost	Fixed Cost	Sales GWh	P/kWh*
Coal	9,651.74	17,888.20	9,015.01	3.05
Geo	7,376.89	20,060.25	8,927.41	3.07
Hydro	-	15,419.87	7,323.36	2.11
Nat Gas	8,471.40	6,367.12	4,381.04	3.39
Oil-Based	9,117.69	17,408.37	5,033.47	5.27
Average	34,617.72	77,143.80	34,680.30	3.22

\*Estimates computed based from NPC data