

THE STATE OF THE PHILIPPINE ENERGY SECTOR

European Chamber of Commerce

SEC. VINCENT S. PÉREZ



23 June 2003

OUTLINE OF PRESENTATION

- **Overview**
- **Power Sector Developments**
 - ◆ **Demand Supply Profile**
 - ◆ **Reforms, Privatization & IPP Issues**
- **Other Developments in the Energy Sector**
 - ◆ **Natural Gas**
 - ◆ **Renewable Energy**
 - ◆ **Energization Update**
- **Other Issues**
 - ◆ **MERALCO**

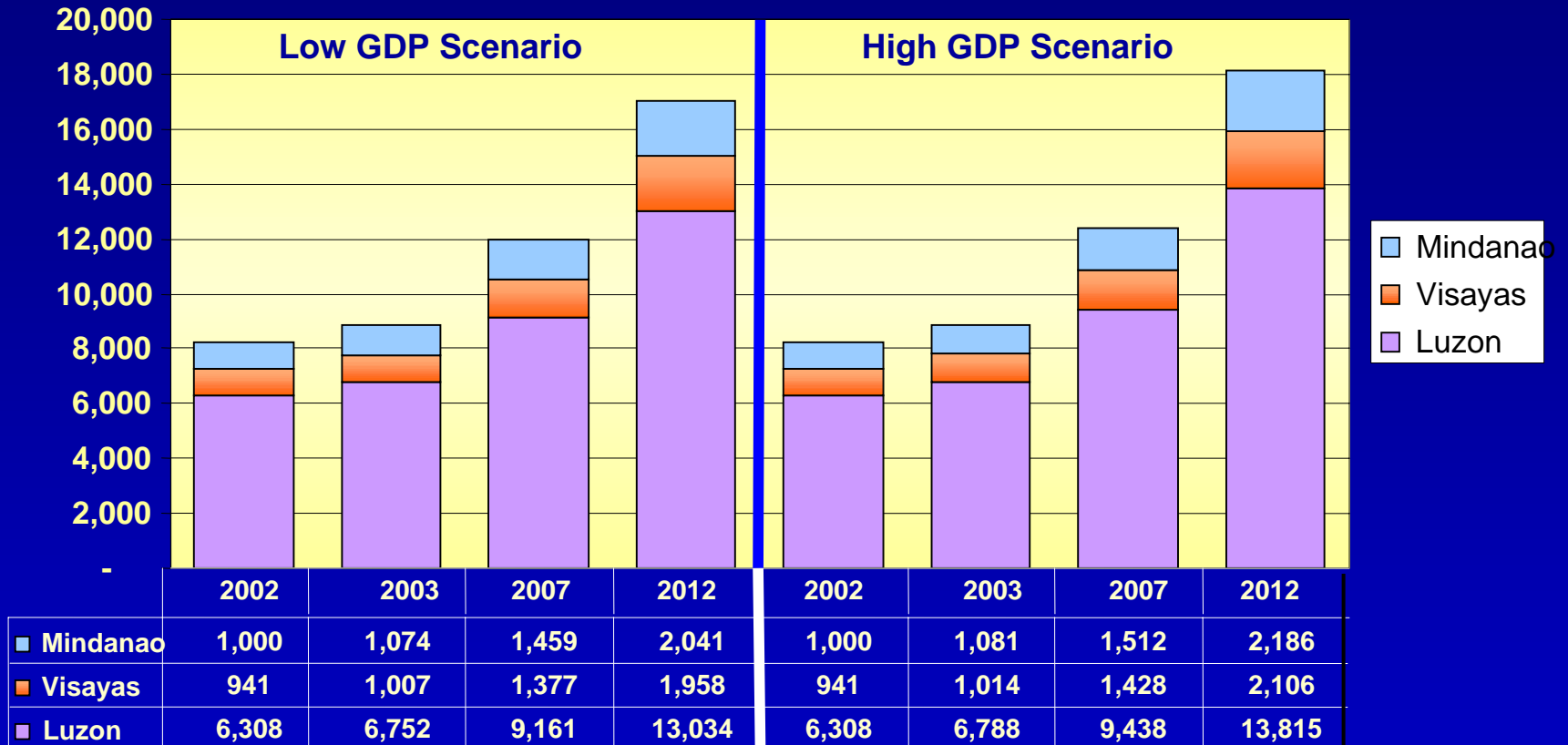


OVERVIEW



OVERVIEW

System Peak Demand Forecast, PEP 2003-2012



OVERVIEW

Philippine Power Development Plan

- Electricity growth rate forecast at **7.4%** annually
- Elasticity: demand to GDP maintain at **1.4x**
- Total installed capacity = **14,702 MW**
- Dependable capacity = **12,909 MW**
- Supply reliability dependent on interconnections and transmissions





POWER SECTOR



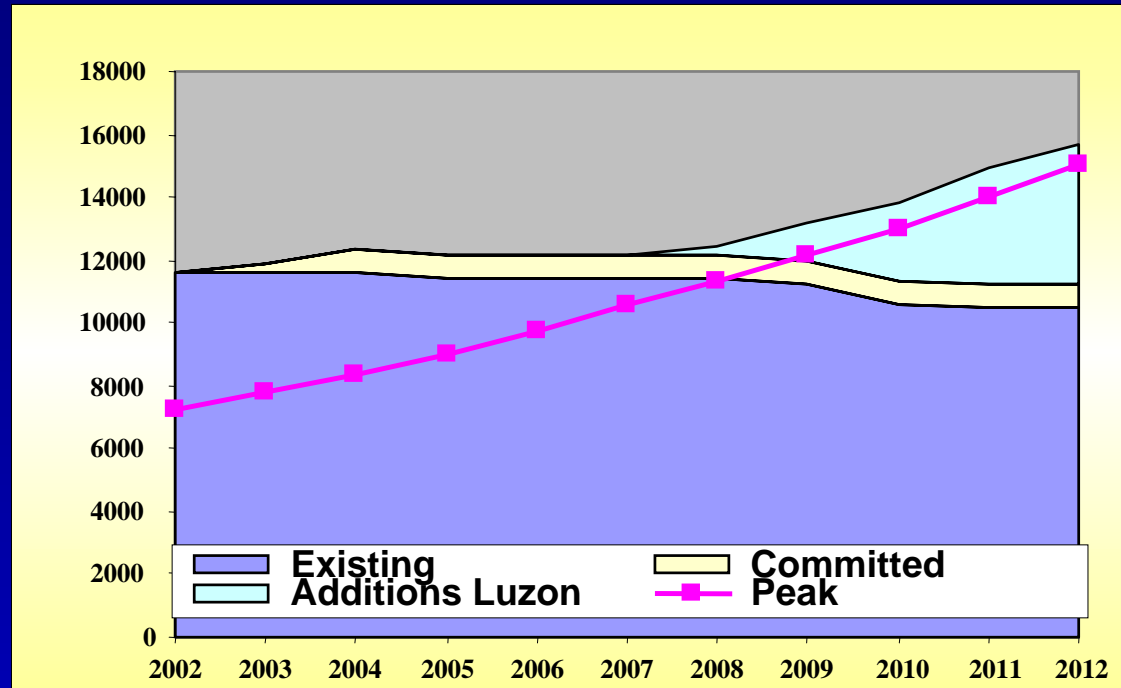
Luzon



SUPPLY DEMAND PROFILE

Luzon Power Situationer

- Supply–demand situation secure only until 2007-2008
- Low generation rates discourage new investments in power generation
- Long-range avoidable cost rate setting proposed to encourage new investments & promote efficient use of existing capacity



LUZON POWER SITUATIONER

Major Projects for Luzon

- **TOTAL Committed = 760 MW:**
 - San Roque Hydro, 345 MW as of May '03
 - Kalayaan 3 & 4, 350 MW by 1Q '04
 - Northwind Wind Power, 25 MW by 4Q '04
 - TIPCO/Formosa Plastics Clean Coal, 50 MW
 - PNOC-EDC Wind Power, 40 MW by 1Q '06
- **TOTAL Indicative \cong 2,190-2,590 MW:**
 - Batangas 4 T-Lines Upgrades, Jan/June/Aug./Dec. '04;
 - 3 Substations – Feb./May/Dec. '05
 - Makban Geo-3 Rehab., Jan. '05
 - BatMan Natgas pipeline, 1Q '07
 - Bacman Opt., 40 MW by Sept. '07
 - Sucat Priva., 450-850 MW (Bidding by 4Q '03)
 - Limay Expansion (LNG), 500 MW (Bidding by 4Q '03)
 - Mariveles Greenfield (LNG), 1,200 MW



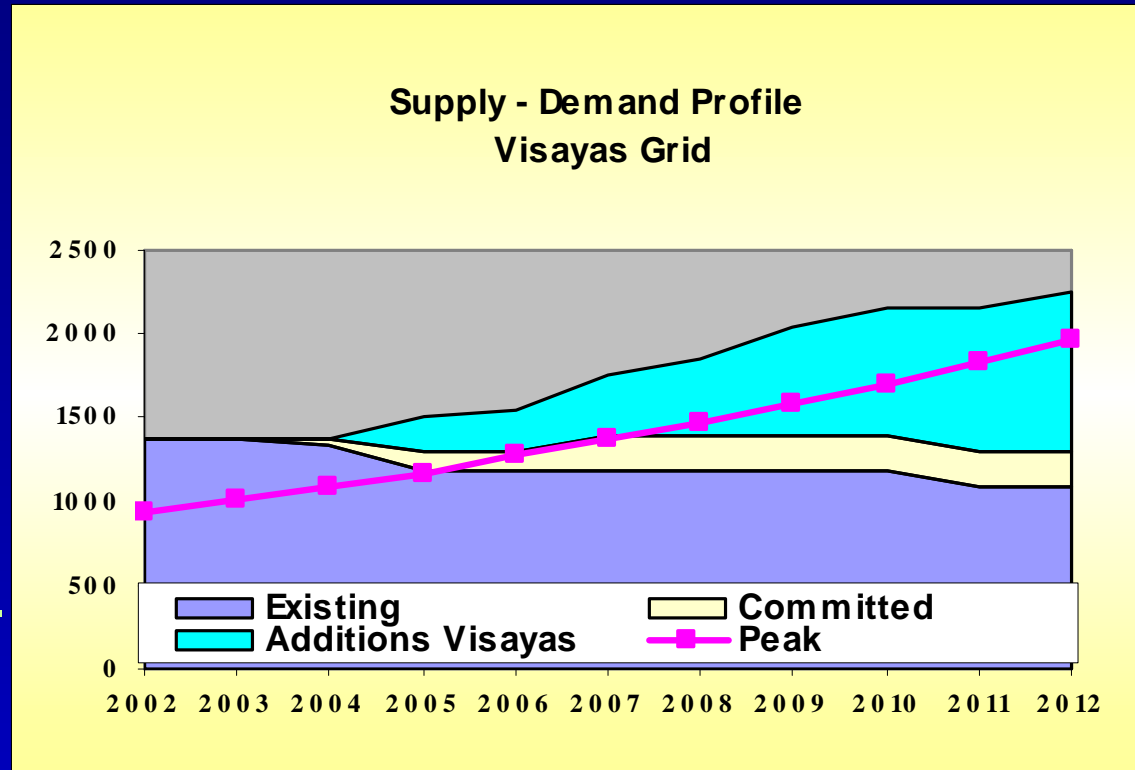
Visayas



DEMAND SUPPLY PROFILE

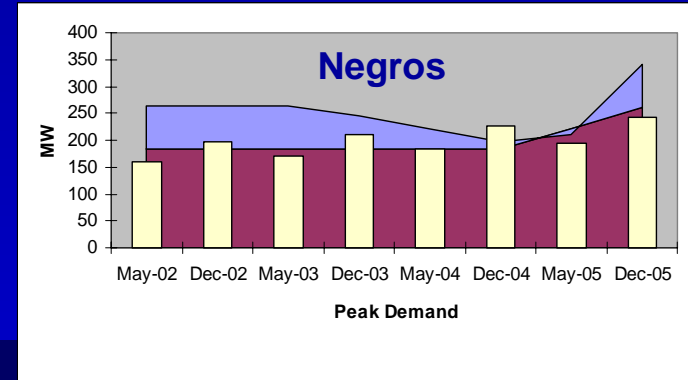
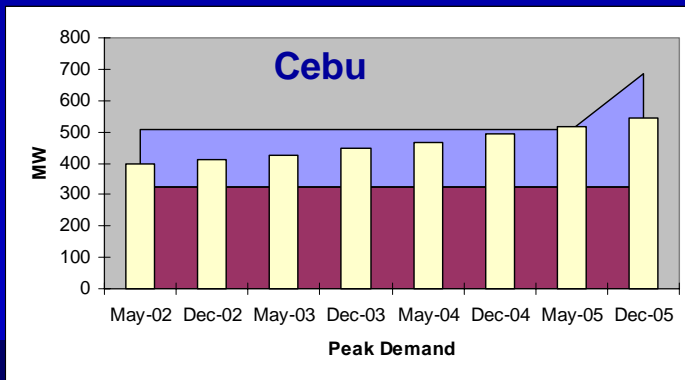
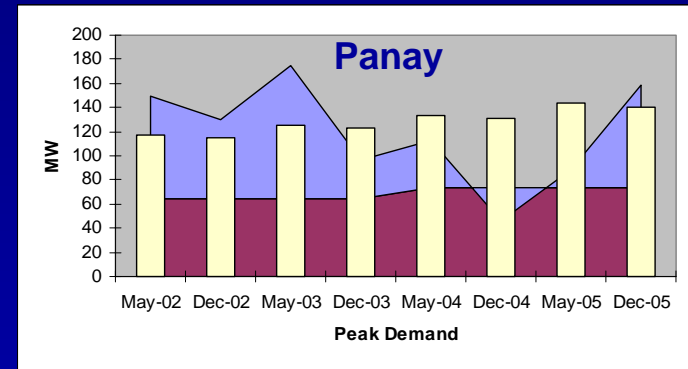
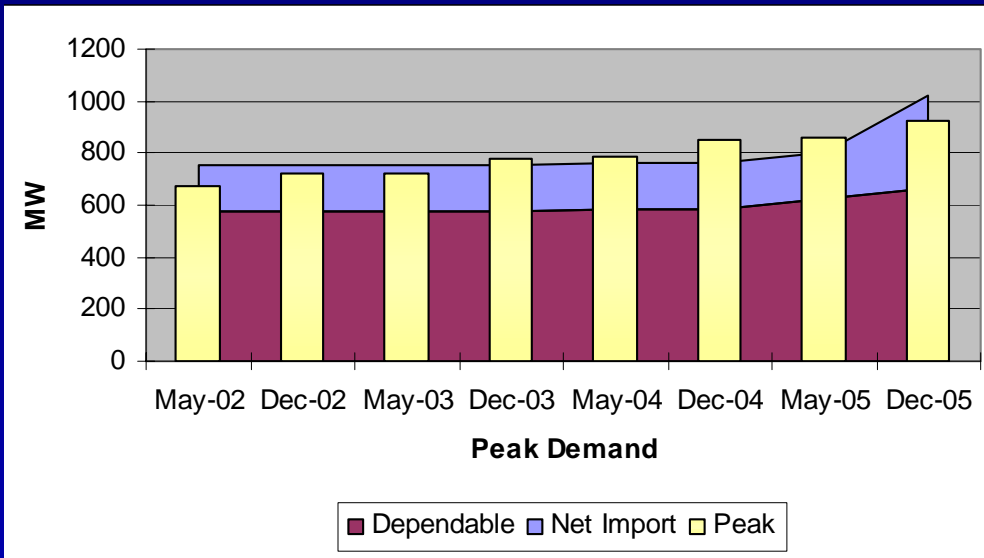
Visayas Power Situation

- Supply–demand situation for the whole Visayas including Leyte-Samar
- Low generation rates discourage new investments in power generation
- However, Cebu-Negros-Panay currently in critical supply situation



VISAYAS POWER SITUATIONER


Cebu-Negros-Panay (CNP) Supply-Demand Profile




VISAYAS POWER SITUATIONER

CNP Interdependence, 2003


PANAY
Dep. Cap.
73 MW
Peak
125 MW
Deficit
-52 MW



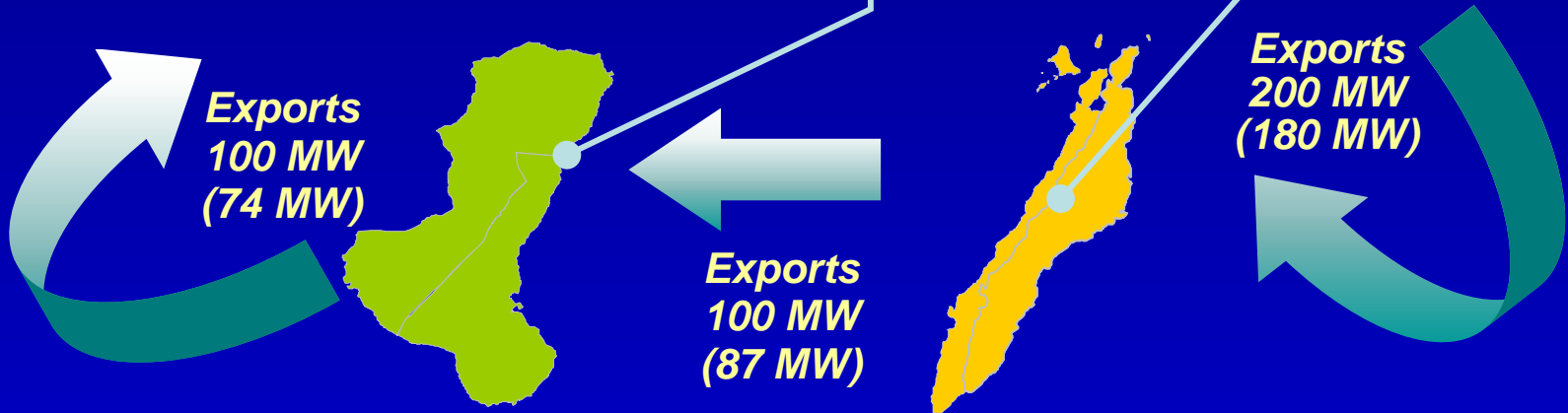
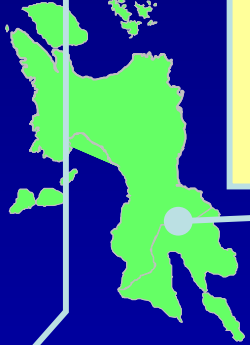
NEGROS
Dep. Cap.
180 MW
Peak
193 MW
Deficit
-13 MW



CEBU
Dep. Cap.
346 MW
Peak
439 MW
Deficit
-93 MW



Leyte/Samar
Dep. Cap.
684 MW
Peak
173 MW
Surplus
*** 511 MW**



** Most of the surplus capacity are exported to Luzon & some to Bohol*



VISAYAS POWER SITUATIONER

Major Projects for Visayas

■ Committed \leq 60 MW :

- Leyte-Bohol Interconnection
40-100 MW by May '04
- Leyte-Cebu Interconnection
200 MW by Feb. '05
- Cebu-Mactan Interconnection by
Sept. '05
- Northern Negros Geothermal,
40 MW by Oct. '05
- Palinpinon Optimization,
20 MW by Dec. '05

• Total Indicative = 267.5 MW:

- TransAsia Diesel Power Plant
(Boracay), 7.5 MW by Mar. '04
- Mirant Diesel Power Plant
(Iloilo), 10 MW (8 mos. after
ECC)
- Victorias Bioenergy (Negros),
50MW by Oct. '05
- Panay Clean Coal Power Plant
(KEPCO), 100 MW by end-'05
- Southern Leyte Geothermal, 100
MW by Apr. '08

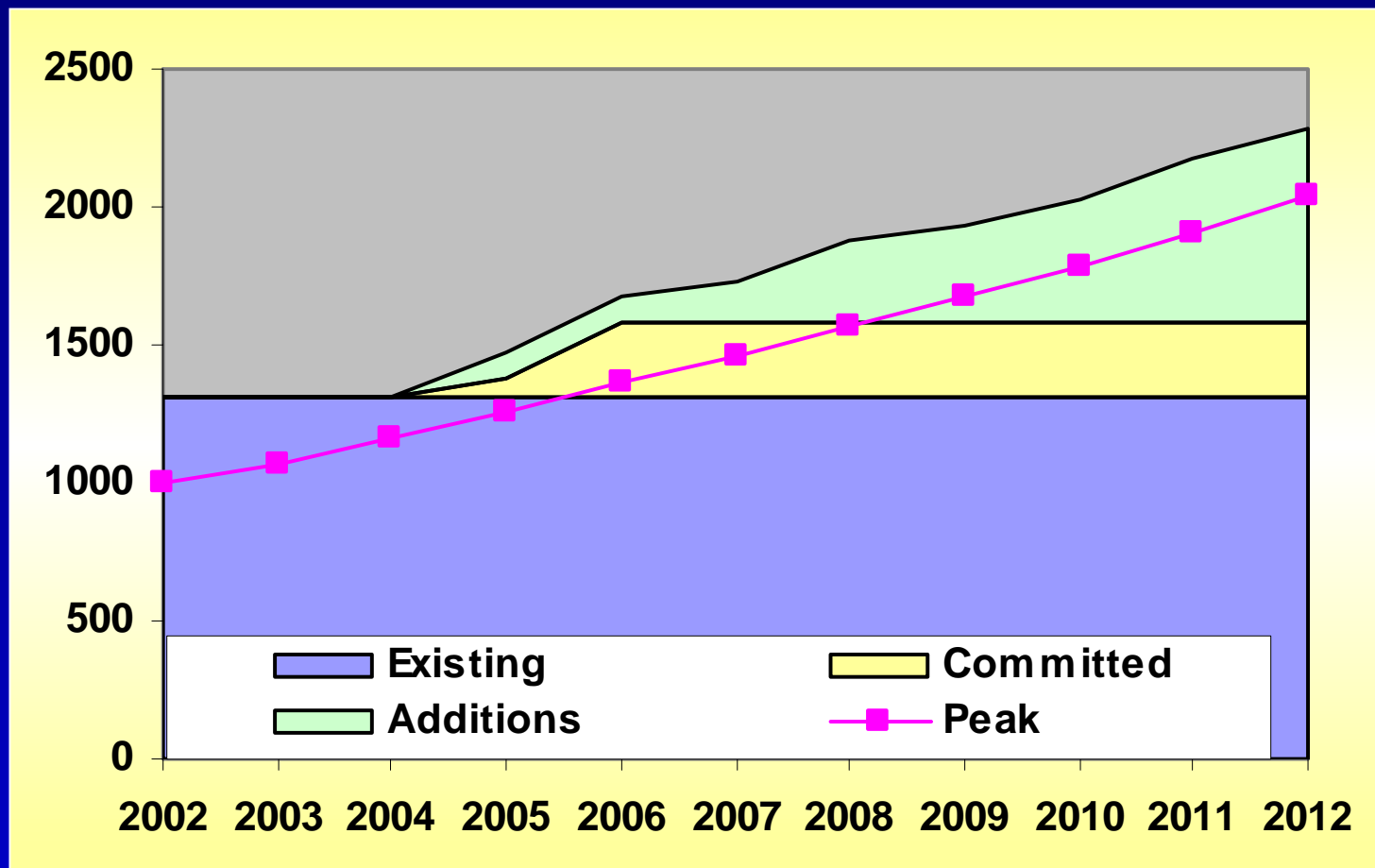


Mindanao



DEMAND SUPPLY PROFILE

Mindanao Grid in MW, Low GDP Scenario



MINDANAO POWER SITUATIONER

Supply Interdependence

NORTH MINDANAO

Supply = 937 MW

Demand = 454 MW

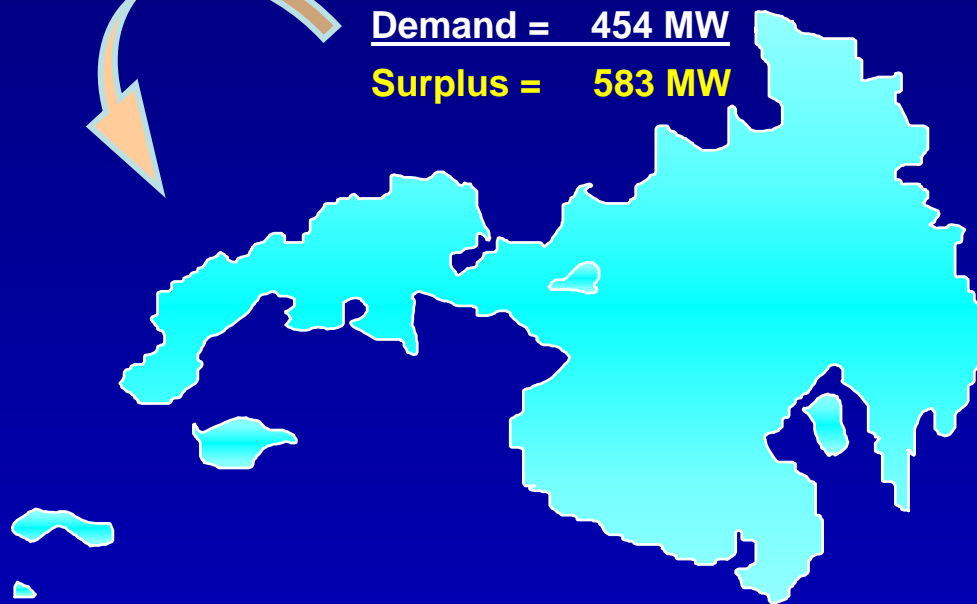
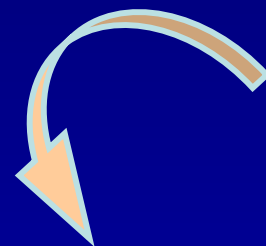
Surplus = 583 MW

WEST MINDANAO

Supply = 85 MW

Demand = 150 MW

Deficit = 60 MW



Mindanao Total

Dep. Cap = 1,228 MW

Peak = 1,074 MW

Surplus = 154 MW

SOUTH MINDANAO

Supply = 206 MW

Demand = 470 MW

Deficit = 264 MW



MINDANAO POWER SITUATION

Major Projects for Mindanao

- **Total Committed = 200 MW:**
 - Mindanao Coal, 200 MW by July '06

- **Total Indicative \cong 463-513 MW:**
 - Mt. Apo Geothermal Expansion, 20MW by '06
 - Tagoloan Hydro, 68 MW by '08
 - Sultan Kudarat Coal Power Plant, 150-200MW
 - Agus 3 Hydro, 225 MW



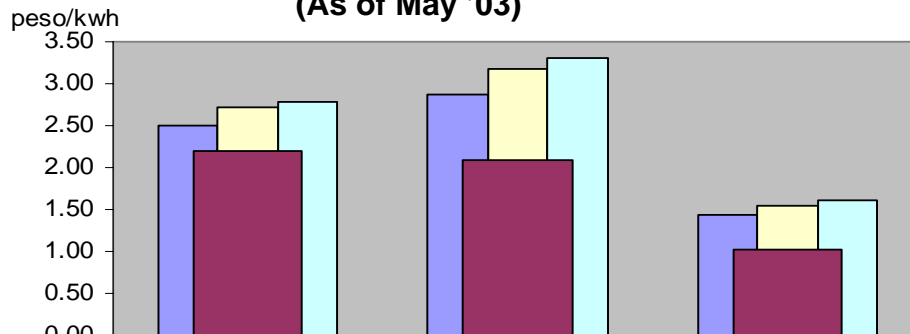
Rate Issue



EXISTING RATES NOT VIABLE

New Rate Regime must Reflect True Cost

**Generation Rates:
ERC Approved versus NPC Indicative
(As of May '03)**



	Luzon	Visayas	Mindanao
Off-Peak	2.4973	2.8694	1.4294
Weighted	2.7066	3.1722	1.5462
Peak	2.7903	3.3077	1.6026
ERC Approved	2.1913	2.0837	1.0217

- Rates artificially low & discourage new investments in generation & distribution (e.g. Cebu, Panay)
- DUs do not want regulatory risk vs. NPC rates
- NPC continues to incur heavy losses



POWER SECTOR REFORMS



POWER SECTOR REFORM

What has been done, 2001-2002

- Implementation of the P0.30/kWh Mandated Rate Reduction → August 2001
- Promulgation of Distribution & Grid Codes → December 2001
- Promulgation of EPIRA-IRR → Feb., 27, 2002
- ERC's issuance of Demonopolization & Shareholding Dispersal → March 26, 2002
- Unbundling of NPC Rates → June 26, 2002
- ERC's issuance of Rules on GenCos Certificate of Compliance → June 26, 2002



POWER SECTOR REFORM

What has been done, 2001-2002

- Adoption/Promulgation of WESM Rules** → **June 28, 2002**
- Launching of PGMA's 10-Pt. Plan to Reduce Power Rates** → **June 28, 2003**
- Completion of the Review of NPC IPP Contracts** → **July 05, 2002**
- Launching of the Special Program to Enhance Electricity Demand** **July 2002**
- Issuance of E.O. 119** → **August 28, 2002**
- Approval of the Priva Plan for NPC Generation Assets and TRANSCO through Concession** → **August 28, 2002**



POWER SECTOR REFORM

What Needs to be Done

- **Promulgation of Transco's Performance-Based Rate Making Methodology**
 - **Maximum Allowed Revenue Formula :**
$$\text{MAR}_t = [\text{MAR}_{t-1} \times \{1 + \text{CWI}_t - X\}] - K_t - \text{RBR}_t$$
- **Open Access Transmission Service (OATS) Rules**
- **WESM's Price Determination Methodology**
- **NPC awaiting ERC approval on the Long-Run Avoidable Cost/Time of Use Pricing scheme**
- **Performance-Based Rate Making Methodology for DUs**
- **Review of Systems Loss Cap Guidelines**



POWER SECTOR REFORM

Unbundling

- **Generation Rate Adjustment Mechanism (GRAM)**
- **Incremental Currency Exchange Rate Adjustment (ICERA)**
- **Unbundling of MERALCO's billing**
- **ERC to date, has decided on unbundling of rates application of 10 ECs, 2 Dus**
- **ERC introduced pre-tax WACC**



POWER SECTOR REFORM

Wholesale Electricity Spot Market

■ **WESM Project Management Consultancy Services**

- Invitation for bids issued to shortlisted firms on 21 April
- Submission of bid proposals due on 20 June 2003
- Short-listed firms:
 - Australian Power & Water/Transgrid
 - Marketplace Co. Ltd.
 - On-Line Systems/Wise Technology
 - KEMA Consulting
 - EPRI



POWER SECTOR REFORM

Wholesale Electricity Spot Market

▪ **Market Management System (MMS) Turnkey Project**

– Invitation for bids published on 14 May 2003

– List of interested companies:

- ALSTOM
- G.E. International, Inc
- ABB, Inc.
- Union Fenosa/Soluziona
- LOGICA
- Siemens
- Questronix Corp.
- China State Const. Eng. Corp.
- Ayala Systems Tech., Inc.
- ePLDT, Inc.
- Mitsubishi Corp.
- SAP, Inc.

▪ **Set-up Market Operator site**

– Robinsons Equitable Tower



POWER SECTOR REFORM

Wholesale Electricity Spot Market

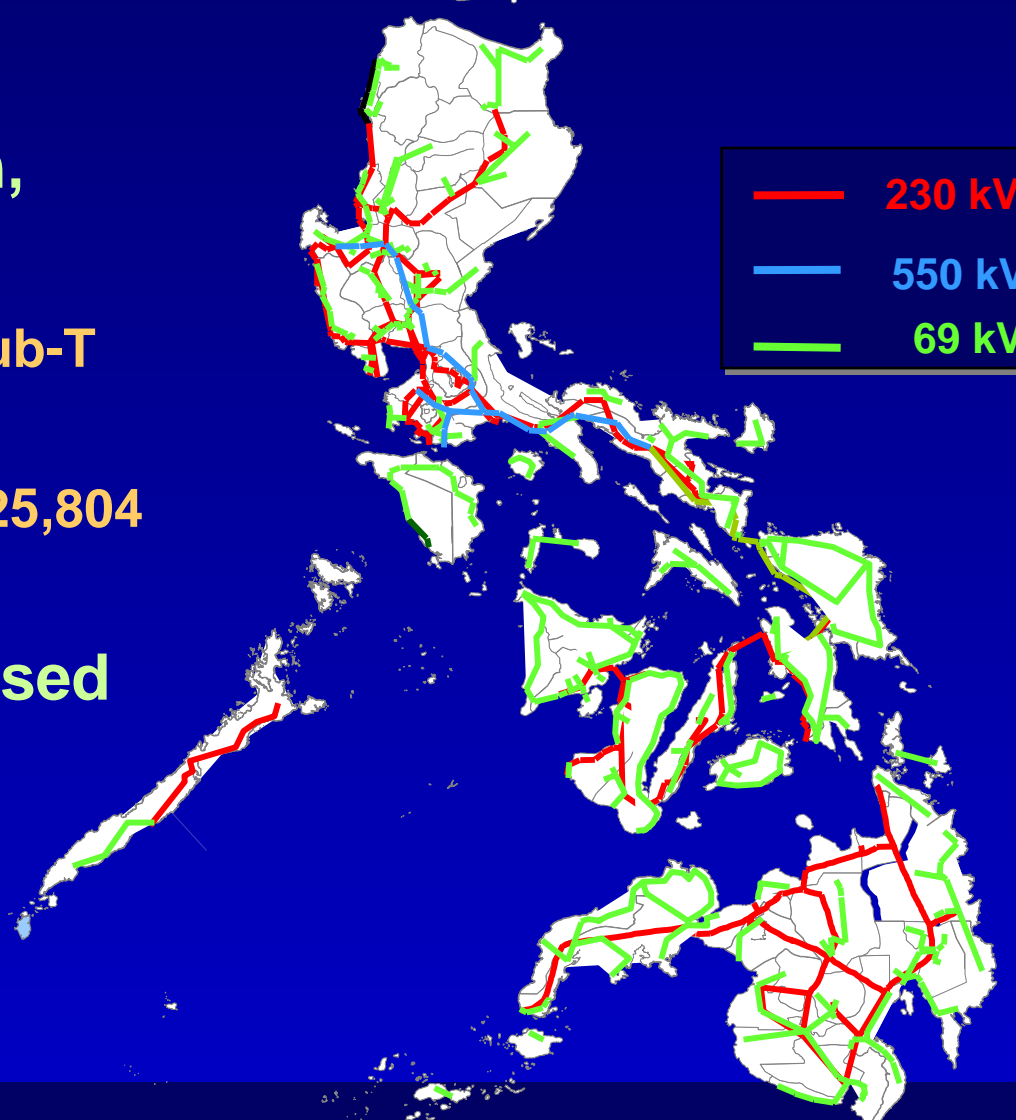
- **Commencement of demo market by Aug. 2003**
- **Constitution of the AGMO by 4Q 2003**
- **Trial introduction of WESM in Visayas by 4Q '03**
- **Full WESM by 3Q '04**



TRANSCO PRIVATIZATION

TRANSCO's Network

- **3 Island Grids – Luzon, Visayas & Mindanao**
 - Total transmission & sub-T lines – 20,721 cct km.
 - Substation Capacity – 25,804 MVA
- **Privatization via 2-phased concession**
- **Completed Bidding Package as of 21 April 2003**



TRANSCO PRIVATIZATION

Tasks Accomplished

- **Public Notice**
- **Receipt of Registrations of Interest from Investors**
- **Information Memorandum**
- **Data Room**
- **Roadshow**
- **Draft Transaction Documents (incl. Concession Agreement)**
- **Release of Bidding Package**
- **Promulgation of ERC on Transco's New Performance-Based Rate Making Methodology**
- **Finalized 10-year Transmission Development Plan**

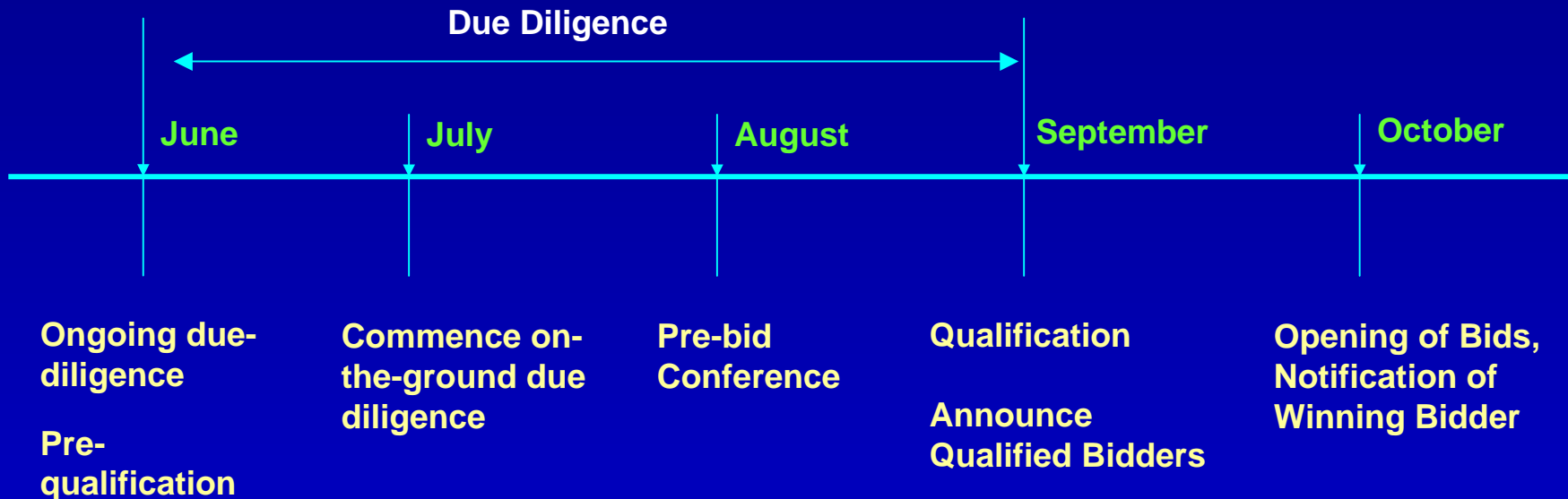


TRANSCO PRIVATIZATION

TRANSCO's Timeline

Next Steps

- On-the-ground Due Diligence
- Pre-qualification
- Qualification
- Bidding and Award

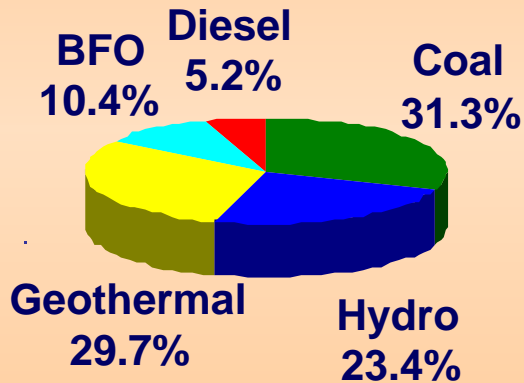


GENCO PRIVATIZATION

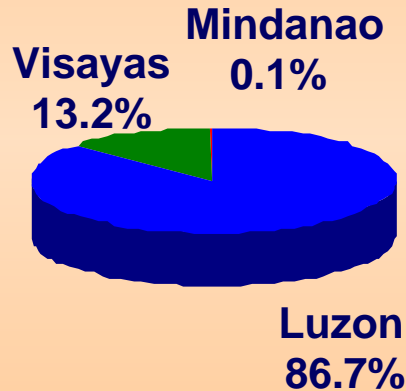
Generation Assets for Privatization

Installed Capacity (3,842MW NPC-operated; not ROM, ROL, BTO)
Excludes Agus and Pulangui

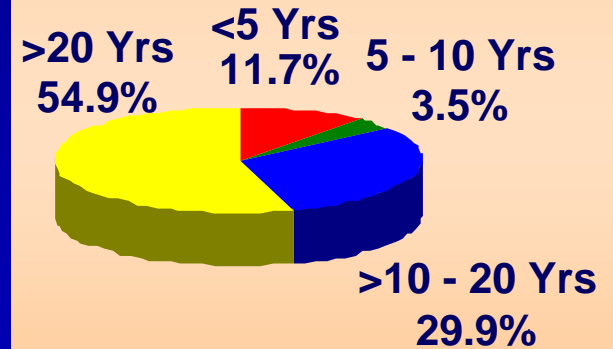
By Fuel Type



By Location



By Useful Life



Plus around 1,150MW IPPs reverting to PSALM in near term – mostly diesel, Luzon



GENCO PRIVATIZATION

Generation Assets Overall Program

1. Asset Sales

Plants

- Pinamucan
- Navotas I

Rationale

- IPP contracts due to expire; plants need to be relocated from site
- Do not require WESM

2. Initial Sales

Plants

- Sucat; Limay
- Bohol / Loboc
- Talomo
- Ambuklao / Binga

Rationale

- Energy integration opportunities - gas
- Investor interest

3. All Other Generation Assets

Plants

- All other plants (including Masinloc and Calaca)
- Individual plants groupings

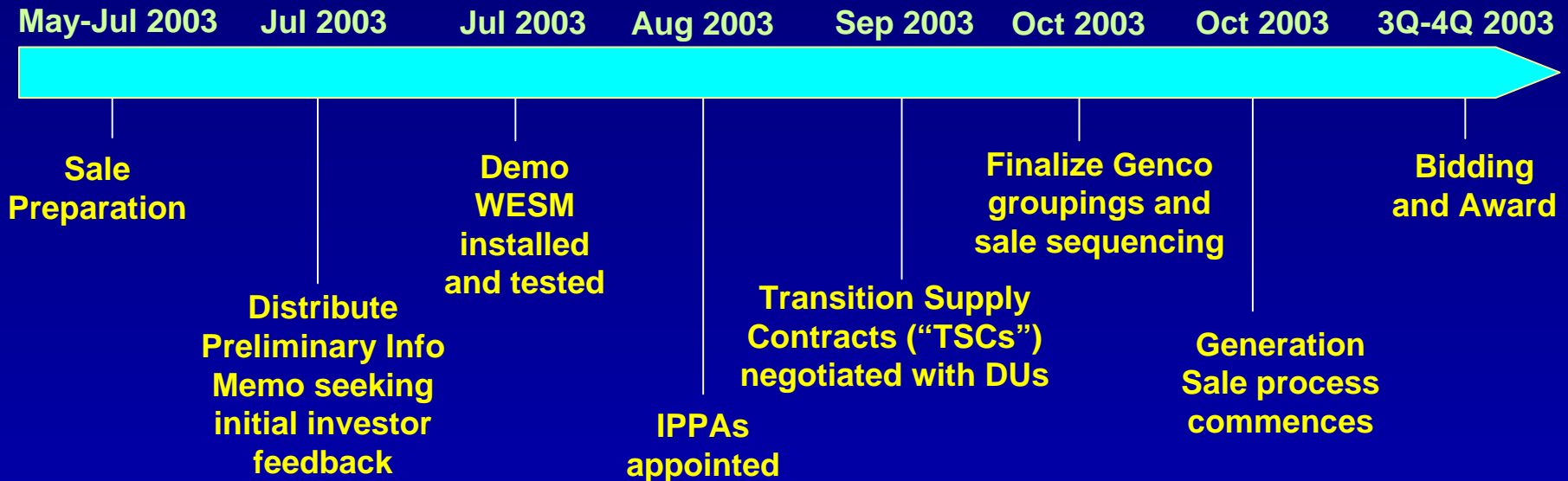
Rationale

- Groupings to be based on investor feedback



GENCO PRIVATIZATION

Overall Timeline for GenCo Sale



Critical Path Milestones

- Finalization of Asset and Debt Transfers
- Time-of-Use Generation Tariff (pending ERC approval)
- Transition Supply Contracts
- Demonstration WESM



GENCO PRIVATIZATION

Sale Process Timeline

- Sample sale process timeline for any grouping or large plant (such as Masinloc):



IPP CONTRACTS REVIEW

Overview of IPPs & Sponsors

Aboitiz / Pacific Hydro	Benguet (Ampohaw) Bakun	Sithe Marubeni	San Roque
Alsons / Tomen	Iligan City 1 Iligan City 1 Zamboanga General Santos	Mirant	Navota I-III Navotas IV Pagbilao Sual
Alstom	Limay Bataan A & B	Mitsui	Mindanao Barges
BPPC	Bauang La Union	NIA	Casecnan
Covanta	Cavite EPZA Bataan EPZA	Ormat	MakBan Binary
Enron	Pinamucan Subic Zambales	PNOC-EDC	Leyte A&B Mt. Apo I Mt. Apo II
IMPSA / EME	CBK	Salcon	Naga Complex
KEPCO	Malaya Ilijan Gas	State Power	Mindanao Coal
		Chevron-Texaco	San Pascual
		BHEPI	Binga

Total 18 firms/consortia representing 32 IPP contracts
Private sector BOT contractors in NIA-Casecnan and PNOC-EDC projects



IPP CONTRACTS REVIEW

Non-Extension of 4 Contracts

1. Navotas GT 1-3 (Navotas)

- Turned over to NPC on March 21, 2001
- Preparatory work for public bidding of the asset, on-going

2. Batangas Power Corp. (Pinamucan)

- Contract to end in July 2003
- Preparatory work for public bidding of the asset, on-going

3. N. Mindanao Power Corp. I (Iligan City)

- Contract to end in July 2003
- On-going: Formulation of transfer mechanisms & discussions on proposed O&M w/o energy off-take

4. Toledo Cebu Coal TPP

- Terminated in February 2003



IPP CONTRACTS REVIEW

Overview of Status to Date

11 Contracts	-	Agreement concluded (Enron, Mirant, BHEPI, Aboitiz, SRMP, Min. Coal) NO IAC issues outstanding
3 Contracts	-	No IAC issues, no scope for savings (Ambuklao, Paragua, Toledo) No action being taken
1 Contracts	-	IAC issue resolved, no scope for savings (Ormat MakBan Binary) No further action being taken
5 Contracts	-	Agreement in principle, documentation being finalized (Alsons, San Pascual, Mindanao Coal)
3 Contracts	-	No pending IAC issues (Ilijan, Alstom – separate discussions on-going re: Limay Privatization)
2 Contracts	-	Recent agreements reached (CBK, Salcon)

25 out of total 35 contracts largely resolved

3 Contracts	-	Discussions on-going
7 Contracts	-	Pending actions by other Government Agencies



OTHER DEVELOPMENTS



NATURAL GAS POLICIES

Policy Framework

- EO 66 designating DOE as lead agency for the development of the Philippine natural gas industry
- IRR for the transmission, distribution & supply of nat gas promulgated on 27 Aug. 2002 providing framework for investment and operations of downstream nat gas industry
- Nat Gas Policy and Regulatory Framework in place



NATURAL GAS PROJECTS

Proposed Natural Gas Pipelines

- **Proposed nat gas pipeline to connect Batangas & Manila (BatMan)**
 - PNOC-EC granted provisional permit to construct
 - Target commencement of operation by 2007
- **Bataan-Manila 2 (BatMan 2)**
 - To receive LNG importation and supply industrial ecozones in Subic & Clark



BATMAN PIPELINE

Transmission Diagram



SUCAT PRIVATIZATION

Downstream Natural Gas

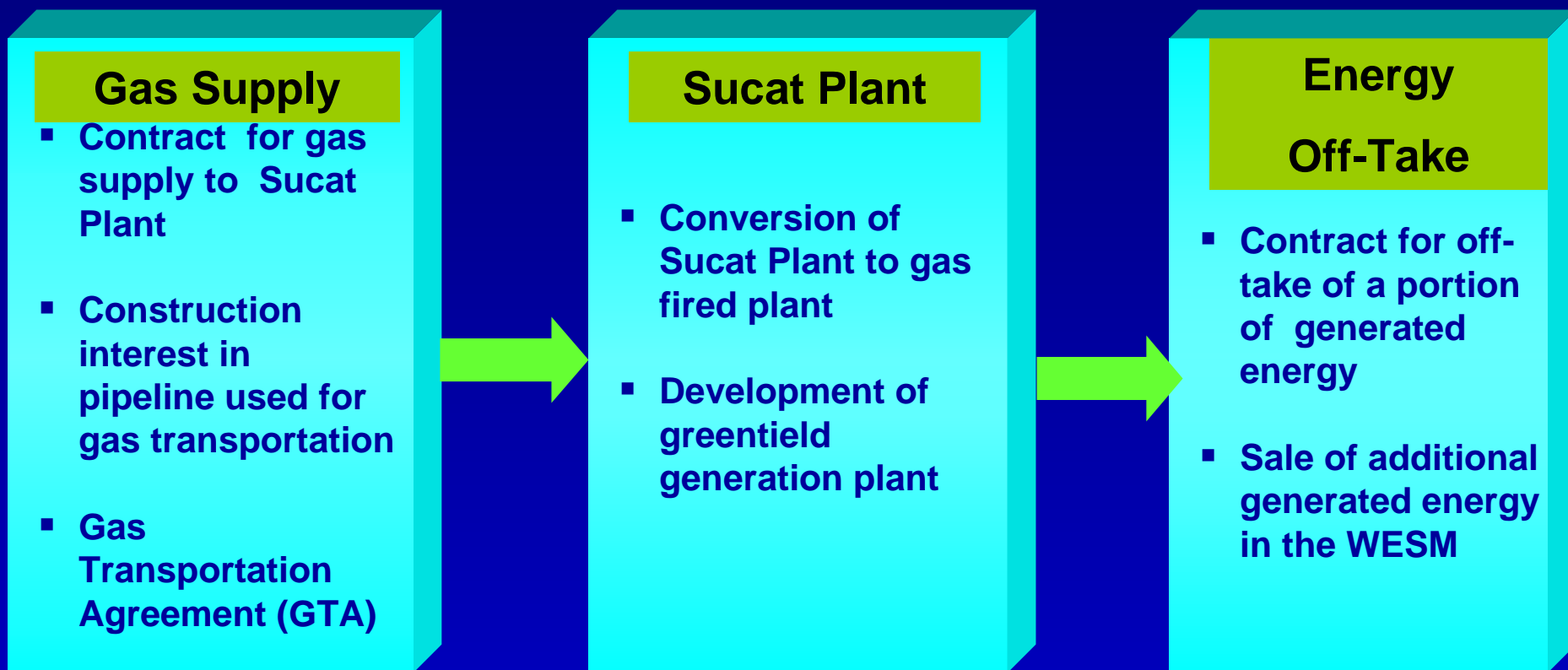
■ **Assets**

- 10.6 hectare site
- Decommissioned 850 MW Oil-Fired Thermal Power Generation Plant
- 30 MW Gas Turbine Unit
- 115 kV substation
- 230/115 kV Transmission
- Fuel Storage Tank Yard



SUCAT PRIVATIZATION

Proposed Transaction Structure



LIMAY PRIVATIZATION

Bataan Limay Combined Cycle Plant

■ Bataan Limay Combined Cycle Plant

- 32.7 hectare site
- 620 MW combined cycle plant currently operating on diesel
- 230 kV T-line connection to Luzon Grid

■ Bataan Thermal Plant 18 hectare site

- 225 MW oil-fired thermal plant
- 120 MW gas turbine plant
- 230 kV T-line connection to Luzon Grid
- 9.4 hectare housing



LIMAY PRIVATIZATION

Plant Features

■ Features

- Sites are situated for long term power generation use
- Bataan Limay Plants have 9 years operating life with Alstom O&M agreement expiring in 2008
- Importation of LNG as fuel is viable



RENEWABLE ENERGY

Targets by 2013

- Be the number one geothermal energy producer in the world
- Be the number one wind energy producer in Asia
- Double hydro capacity using run-of-river development scheme
- Develop other renewable systems (i.e. solar, biomass, ocean, etc.)
- Become a solar manufacturing base
- Passage of appropriate measures and incentives to promote development of RE



RENEWABLE ENERGY

Installed Generating Capacities

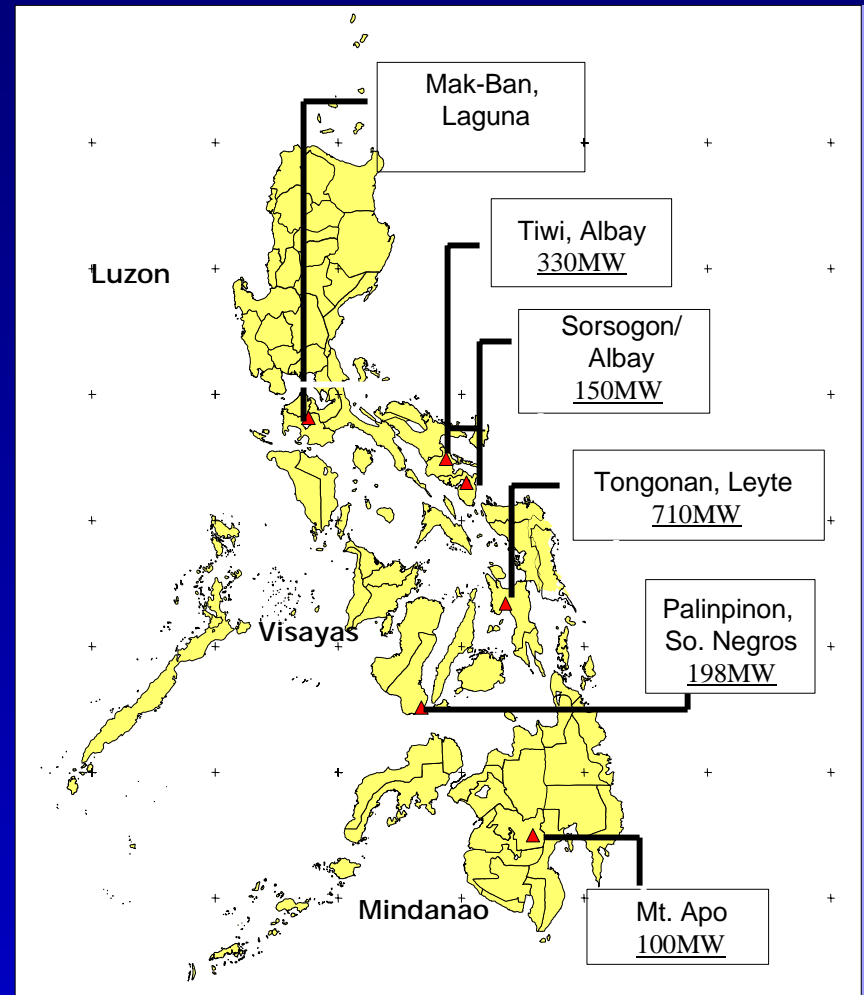
	2002	Add'l/ Capacity	2013
Geothermal	1,932	1,200	3,132
Hydro	2,518	2,685	5,203
Wind	0	415	415
Solar, Biomass, Ocean	0	250	250
TOTAL	4,450	4,550	9,000



RENEWABLE ENERGY

Geothermal Power

- Installed capacity of **1,931 MW**
- **2nd largest user of geothermal energy resources for power generation**
- **Target of additional 820 MW by 2015**



RENEWABLE ENERGY

Wind Energy Potentials

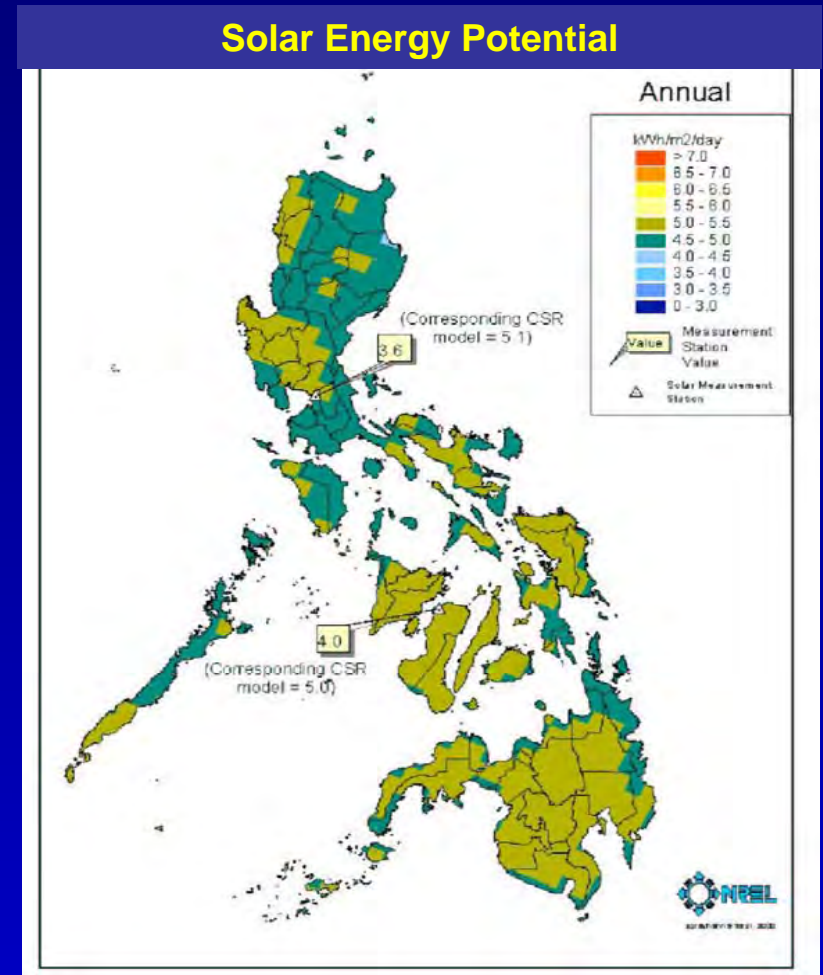
- Philippine wind energy potential could be **as much as 70,000 MW**
- Significant progress in wind farms:
 - ◆ **40MW wind farm** project in Burgos, Ilocos Norte by PNOC-EDC
 - ◆ **25 MW wind farm** project in Bangui Bay, Ilocos by Northwind Power funded by **Northwind Power of Denmark**



RENEWABLE ENERGY

Solar Power

- 3,957 systems installed throughout the country
- 3,455 solar homes installed
- 1 MW solar farm project planned in Northern Mindanao, largest among developing countries
- On average, potential generation of 4 to 6 kwh per sq. m. per day



RENEWABLE ENERGY

On-Going Solar Power Projects

■ **PNOC Solar Project**

- Joint project with DOE, Shell Solar Energy B.V. and the **Government of Netherlands**
- Target installation of 15,000 solar home systems (SHS) within 5 years in Regions 1-6 & CAR
- Pilot installation of 20 units in Banaue
- As of 23 May 2003, a total of 1,266 SHS units have been installed
- 1,000th SONA barangay for energization scheduled on 27 June 2003



RENEWABLE ENERGY

On-Going Solar Power Projects

- **Solar Power Technology Support (SPOTS) Project to ARCs**
 - Launched on June 16, 2003 with DAR as lead agency and DOE as support
 - A 3-year integrated social & agricultural development project which seeks to energize 34 agrarian reform communities (ARCs)
 - Project sites include 14 Mindanao provinces
 - **Spanish Government**, under a Mixed Credit Facility, will provide funding of approx. US\$64.773 Mn



RENEWABLE ENERGY

RE Committed Projects, by 2012

Plant	Type	MW	Year
San Roque	Hydro	400	May 03
Kalayaan 3&4	Hydro	350	2004
Wind Power	Wind	40	2004
Northwind	Wind	25	2004
Northern Negros	Geo	40	2004
Total		855	



ENERGIZATION EFFORTS

Status and Recent Developments

- Total of **37,070** barangays energized as of **May 2003**
- SONA Target to energize **1,500** barangays for the period **July 2002 – June 2003**
- DOE signed MOU last **03 June 2003** with **Paris-Manila Technology Corporation (PAMATEC)**, **Electricité de France** and **ETDE of Bouygues Construction** to provide energy services to rural areas through the **Philippine Rural Electrification Service (PRES) Project**



OTHER ISSUES



MERALCO VIABILITY ISSUE

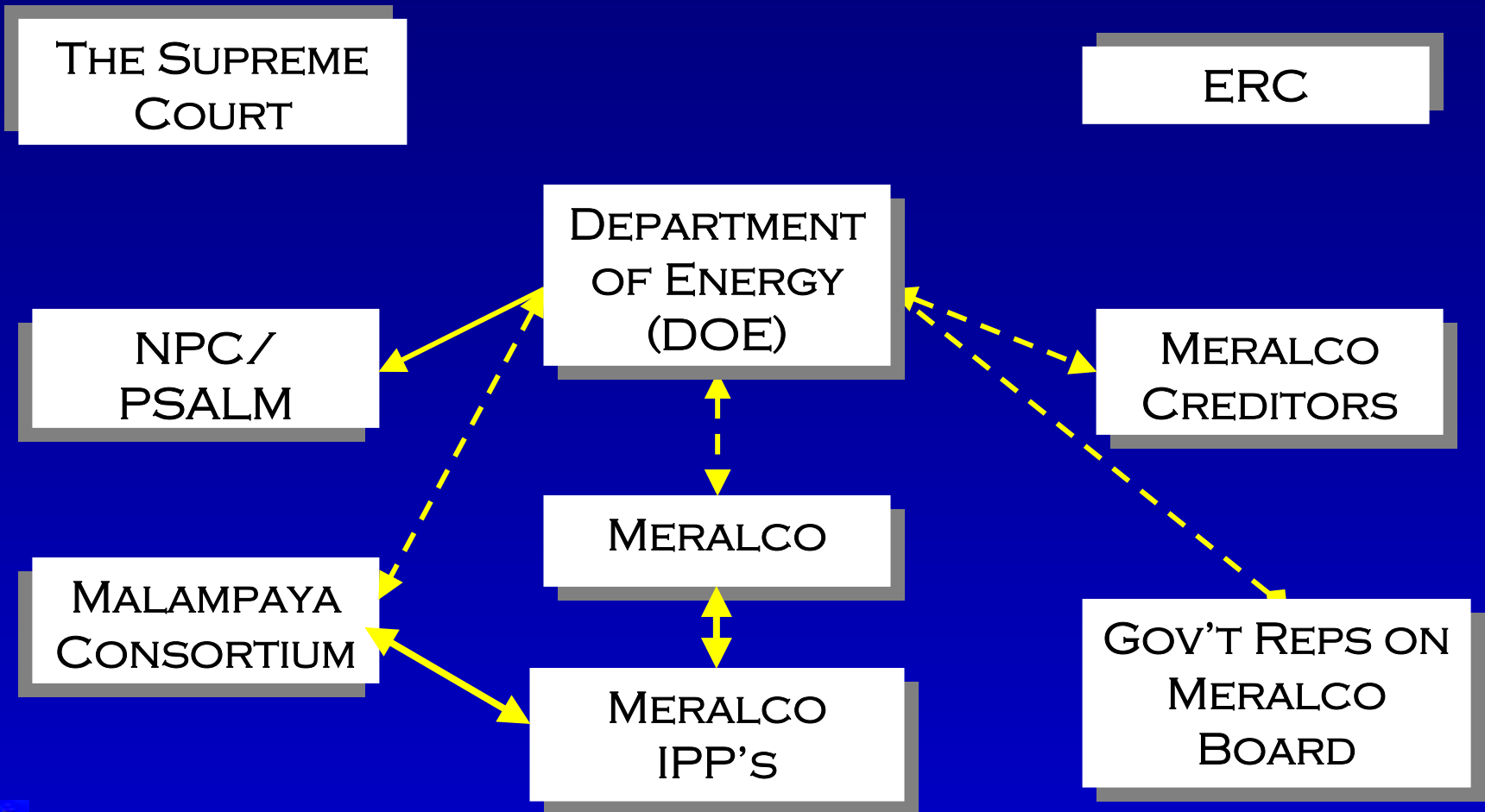
Objective of the Government

- **Ensure viability of the electricity industry and not necessarily limited to Meralco**
- **Ensure realistic implementation of the refund scheme**
- **Maximize gains for the lower income sector of society**



MERALCO REFUND ISSUE

Factors Affecting MERALCO



MERALCO UNBUNDLING

Sample Billing Prior to Unbundling

ELECTRIC BILL									
Contract in the name of					Service Address				
HARDA VENTURINA					(DP251) 225 SAMPAGUITA ST BOTANICAL GARDEN CENTRAL Q. C.-CENTRAL METRO MANI				
Service ID. No. (SIN)		Bill Date	Billing Period	Due Date	Current Amount Due				
723546201-8		01/31/2002	12/29/2001 to 01/31/2002	09 FEB 2002	P 1,568.35				
Circuit No.		Rate							
		Residential							
Meter	Prev	Pres	Mult	Registered					
Number	Rdg	Rdg							
34SHW46302	9597	9852	1	255 kWh					
					BASIC CHARGE ENERGY (kWh) 255 X 3.0745 784.00 FIRST 10 17.40 NEXT 40 @ 1.7400 69.60 NEXT 205 @ 3.4000 697.00 CURRENCY ADJ. 784.00 X 5.95 % 46.65 PPA 255 X 3.193 814.20 PowerAct Redn * 255 X -0.300 -76.50				
					CURRENT AMOUNT DUE P 1,568.35				
					Your monthly electricity consumption chart				
ADDITIONAL INFORMATION * PowerAct Redn - Rate reduction for residential customers as mandated by RA 9136 (Electric Power Industry Reform Act of 2001) NOW more SERVICES at your CONVENIENCE 24 hrs a day. Dial 16-211 for inquiries about billing & service applications. Call for maintenance work schedules and electric service problems. You can pay your up-to-date bills through banks and other collection partners.									

Components:

1. Basic Charge
2. Currency Adjustment
3. PPA
4. Power Act Reduction



MERALCO UNBUNDLING

Sample Unbundled Billing

ELECTRIC BILL				Page: 1 of 1																																																													
Service ID. No. (SIN)	Bill Date	Billing Period	Due Date	Current Amount Due																																																													
212686301-8	06/10/2003	05/10/2003 to 06/10/2003	19 JUN 2003	P 4,172.65																																																													
METERING INFORMATION			RATE: Residential																																																														
Meter Number	Prev Rdg	Pres Rdg	Mult	Registered																																																													
330ZN77846	9466	77	1	611 kWh																																																													
<p>You can pay your up-to-date bills through banks and other collection partners.</p> <p>NOW more SERVICES at your CONVENIENCE 24 hrs a day. Dial 16-211 for inquiries about billing & service applications. Call for maintenance work schedules and electric service problems.</p>			<table border="0"> <tr> <td>Generation Charge</td> <td>611 X 3.4029</td> <td>2,079.17</td> </tr> <tr> <td>Transmission Charge</td> <td>611 X 0.9605</td> <td>586.87</td> </tr> <tr> <td>System Loss Charge</td> <td>611 X 0.5493</td> <td>335.62</td> </tr> <tr> <td>Distribution Charge</td> <td>611 X 1.6615</td> <td>1,015.18</td> </tr> <tr> <td colspan="3">METERING CHARGE</td> </tr> <tr> <td>Retail Customer Charge</td> <td>5 X 1 mo</td> <td>5.00</td> </tr> <tr> <td>Metering System Charge</td> <td>611 X 0.2435</td> <td>148.78</td> </tr> <tr> <td>Supply Charge</td> <td>611 X 0.5271</td> <td>322.06</td> </tr> <tr> <td>Lifeline Rate Subsidy</td> <td>611 X 0.0761</td> <td>46.50</td> </tr> <tr> <td>Interclass Subsidy</td> <td>611 X -0.7130</td> <td>-435.64</td> </tr> <tr> <td>PowerAct Redn</td> <td>611 X -0.3000</td> <td>-183.30</td> </tr> <tr> <td>CERA</td> <td>1015.18 X 11.87%</td> <td>120.50</td> </tr> <tr> <td colspan="3">FRANCHISE TAX</td> </tr> <tr> <td>National</td> <td>4040.74 X 2%</td> <td>80.81</td> </tr> <tr> <td>Local</td> <td>4040.74 X 0.50%</td> <td>20.20</td> </tr> <tr> <td colspan="3">UNIVERSAL CHARGES</td> </tr> <tr> <td>Missionary</td> <td>611 X 0.0168</td> <td>10.26</td> </tr> <tr> <td>Environmental Fund</td> <td>611 X 0.0025</td> <td>1.53</td> </tr> <tr> <td colspan="3">OTHER CHARGES</td> </tr> <tr> <td>FEB-MAR MEC*</td> <td>1137 KWH X 0.0168</td> <td>19.10</td> </tr> </table>			Generation Charge	611 X 3.4029	2,079.17	Transmission Charge	611 X 0.9605	586.87	System Loss Charge	611 X 0.5493	335.62	Distribution Charge	611 X 1.6615	1,015.18	METERING CHARGE			Retail Customer Charge	5 X 1 mo	5.00	Metering System Charge	611 X 0.2435	148.78	Supply Charge	611 X 0.5271	322.06	Lifeline Rate Subsidy	611 X 0.0761	46.50	Interclass Subsidy	611 X -0.7130	-435.64	PowerAct Redn	611 X -0.3000	-183.30	CERA	1015.18 X 11.87%	120.50	FRANCHISE TAX			National	4040.74 X 2%	80.81	Local	4040.74 X 0.50%	20.20	UNIVERSAL CHARGES			Missionary	611 X 0.0168	10.26	Environmental Fund	611 X 0.0025	1.53	OTHER CHARGES			FEB-MAR MEC*	1137 KWH X 0.0168	19.10
Generation Charge	611 X 3.4029	2,079.17																																																															
Transmission Charge	611 X 0.9605	586.87																																																															
System Loss Charge	611 X 0.5493	335.62																																																															
Distribution Charge	611 X 1.6615	1,015.18																																																															
METERING CHARGE																																																																	
Retail Customer Charge	5 X 1 mo	5.00																																																															
Metering System Charge	611 X 0.2435	148.78																																																															
Supply Charge	611 X 0.5271	322.06																																																															
Lifeline Rate Subsidy	611 X 0.0761	46.50																																																															
Interclass Subsidy	611 X -0.7130	-435.64																																																															
PowerAct Redn	611 X -0.3000	-183.30																																																															
CERA	1015.18 X 11.87%	120.50																																																															
FRANCHISE TAX																																																																	
National	4040.74 X 2%	80.81																																																															
Local	4040.74 X 0.50%	20.20																																																															
UNIVERSAL CHARGES																																																																	
Missionary	611 X 0.0168	10.26																																																															
Environmental Fund	611 X 0.0025	1.53																																																															
OTHER CHARGES																																																																	
FEB-MAR MEC*	1137 KWH X 0.0168	19.10																																																															
<p>Your monthly electricity consumption chart</p> <p>AVERAGE USAGE FOR 12 MONTHS: 610 kWh/MONTH * P 116.87 /DAY</p>			<p>*Represents the Missionary Electrification Charges (MEC) applicable only to February and March kWh consumption.</p>																																																														
<p>This will serve as a receipt when machine validated</p>			<p>TOTAL CURRENT AMOUNT P 4,172.65</p>																																																														

Components:

1. Generation
2. Transmission
3. Systems Loss
4. Distribution
5. Metering
6. Supply
7. Lifeline Rate Subsidy
8. Interclass Subsidy
9. Power Act Reduction
10. CERA
11. Franchise Tax
12. Universal Charges
13. Other Charges
14. Refund



CONCLUSION



CONCLUSION

Way Forward

- We need to build new power plants **NOW** to mitigate power shortage by **2004 (Visayas)**, 2006 (Mindanao) & 2008 (Luzon)
- We need viable & sustainable power rates to encourage new investments in power generation and distribution
- Power reform is a work-in-progress & would need the support of the private sector to make is successful
- As we proceed with the privatization process, the Government reiterates its position of upholding the sanctity of all contracts
- Renewable energy will power the future and we need more private sector investments in this area to fully develop our potential



“No electricity is the most expensive electricity”



THANK YOU!

www.doe.gov.ph

