



*Ratchaburi Electricity Generating Holding PCL.*

*Analyst Meeting*

*11<sup>th</sup> May 2005*

*Presentation by*

*Boonchoo Direksathapon*

*Managing Director*

## *Disclaimer*

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The information contained in our presentation is intended solely for your personal reference only. In addition, such information contains projections and forward-looking statements that reflect the Company's current views with respect to future events and financial performance. These views are based on assumptions subject to various risks. No assurance is given that future events will occur, that projections will be achieved, or that the Company's assumptions are correct. Actual results may differ materially from those projected. Investors are, however, required to use their own discretion regarding, the use of information contained in this presentation for any purpose.

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# Agenda

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- Power Development Plan 2004
- Monthly Peak & Energy Generation
- Total Installed Capacity – Classified by Producers

## Section II Electricity Supply Industry Structure

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- Future Structure
- Regulator
- Uncertainty Issues

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- Shareholder Structure
- Total Capacity
- Capital Structure

## Section IV Operating Performance

- Operating Performance
- Dividend Policy

## Section V Project Expansion

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- Future Projects
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  - Mini Power plants

## Section VI Appendix

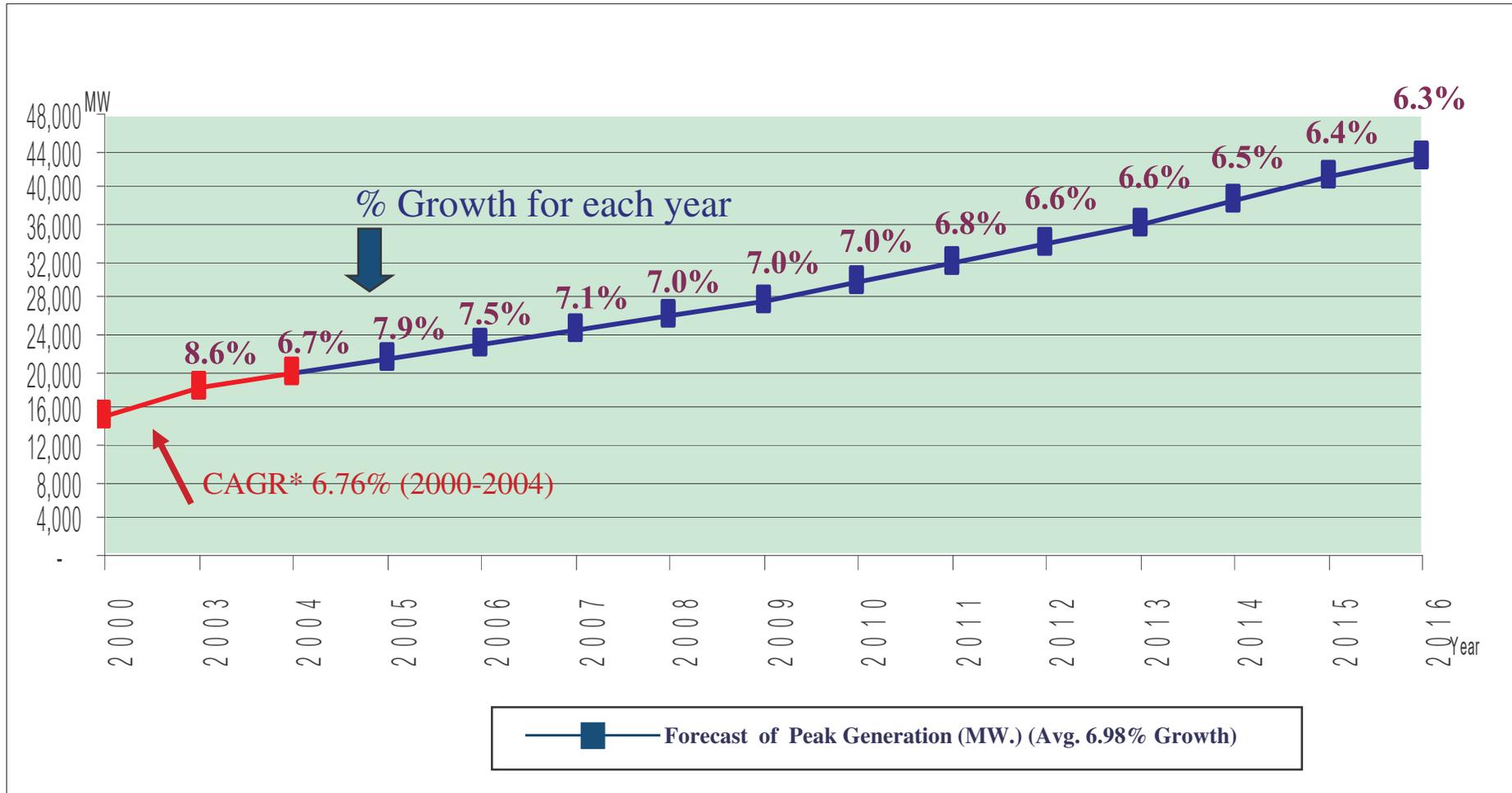
- Generating Information
- Planned Outage for 2004&2005



*Section I*

*Power Industry*

# Forecast of Peak Generation in Thailand

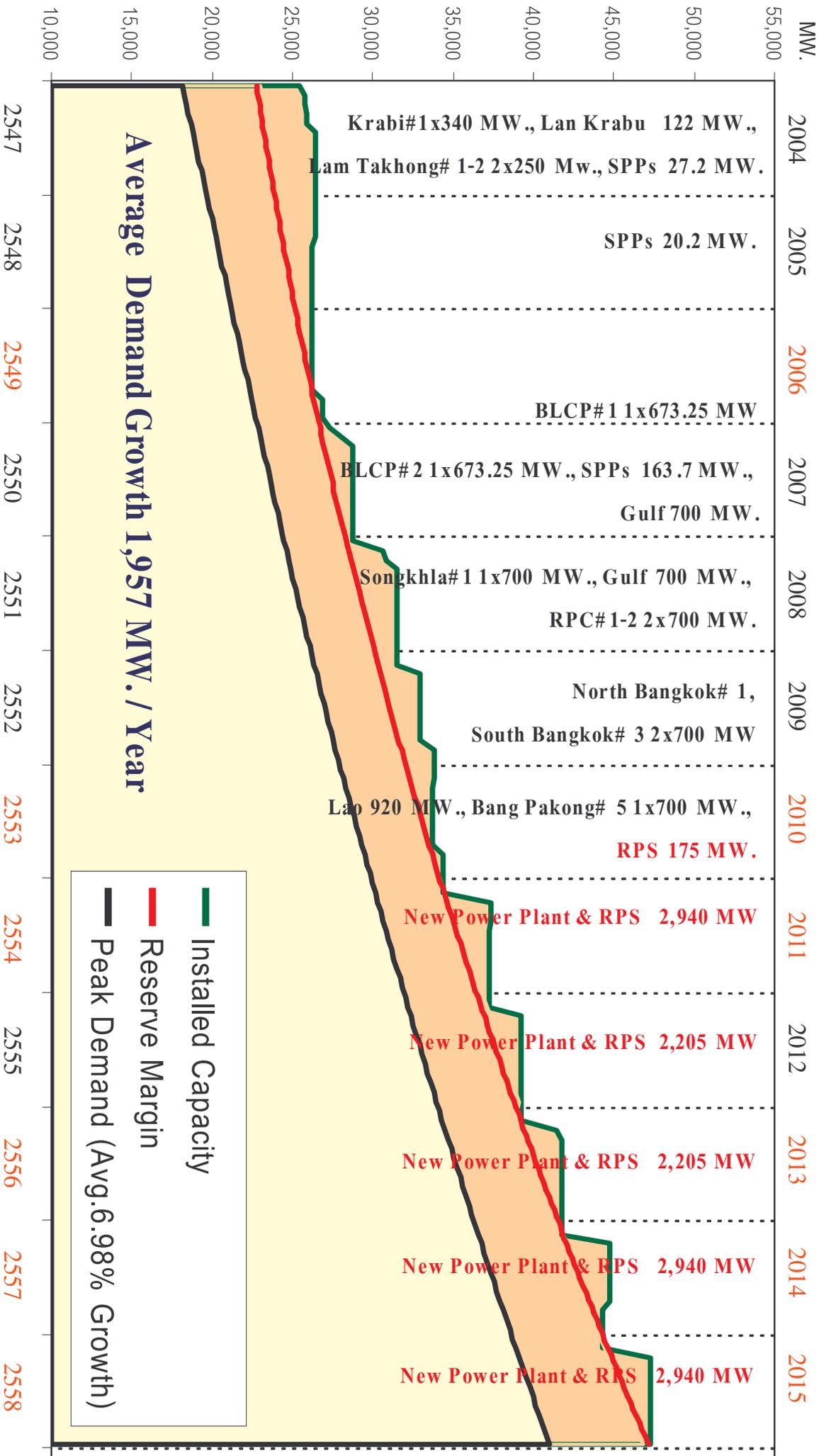


*\*CAGR : Compounded Annual Growth Rate*

*Source: Thailand Load Forecasting Sub-committee,  
Energy Planning and Policy Office (EPPO)*



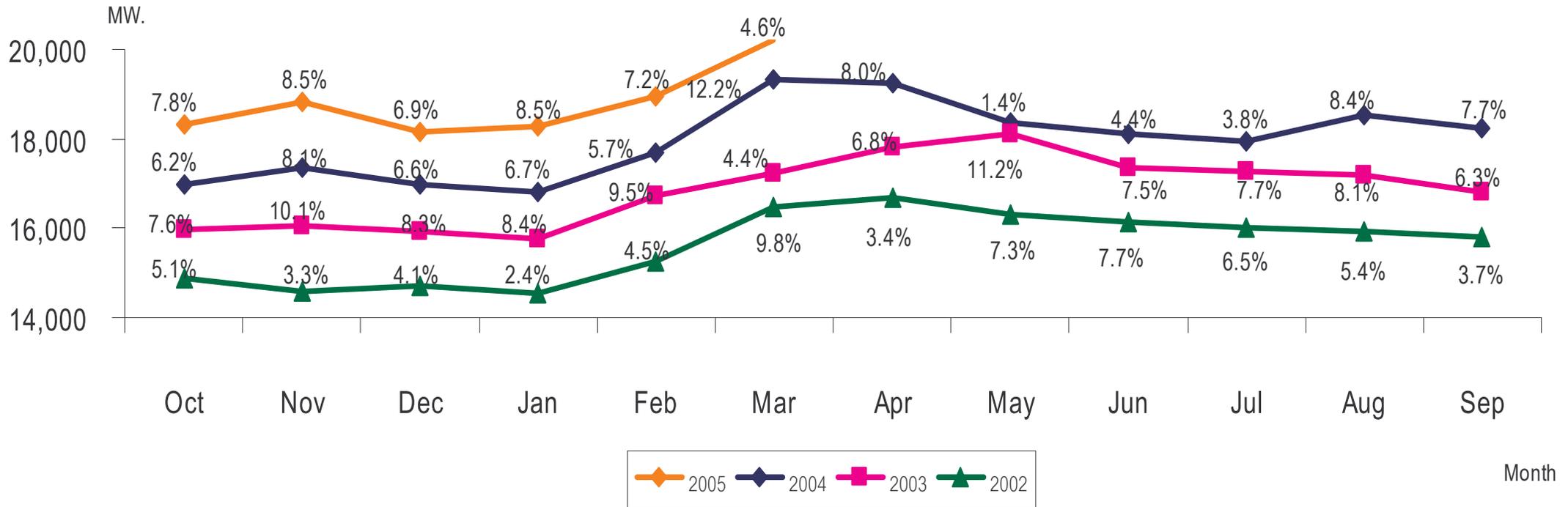
# Power Development Plan (PDP 2004)



Source: EGAT



# Monthly Peak Generation



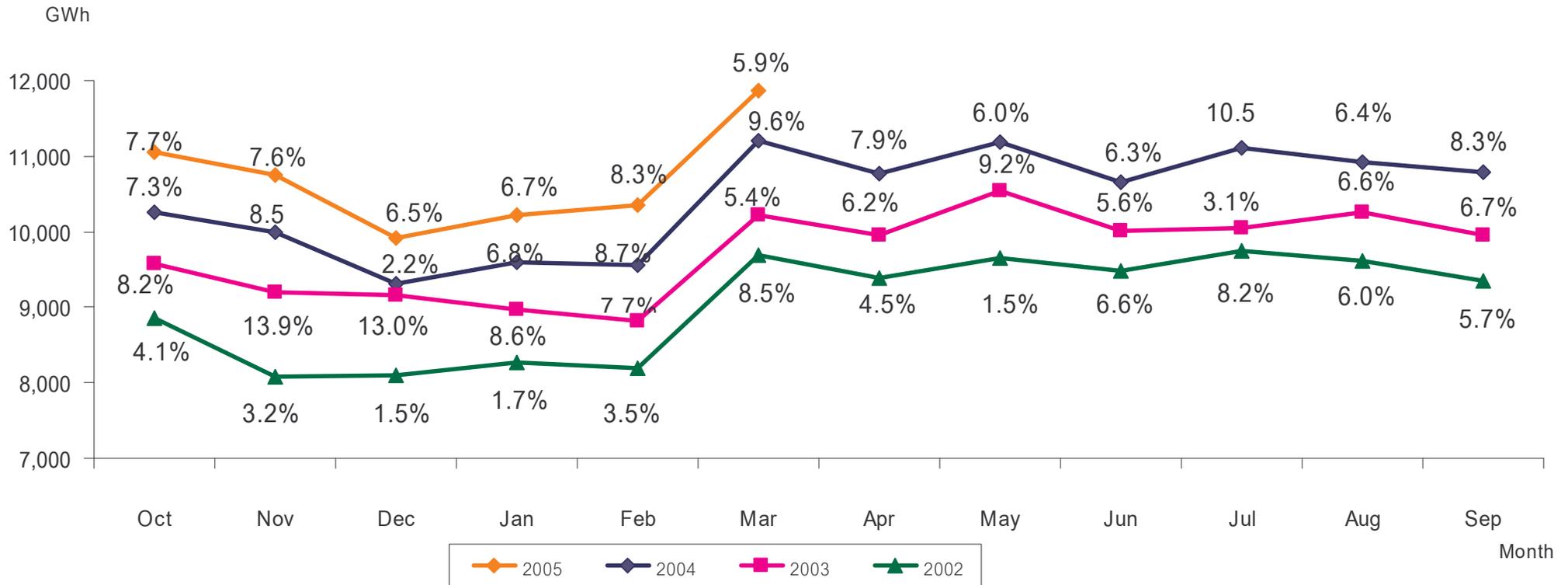
- In 2004, the highest peak generation was 19,326 MW on March 30<sup>th</sup> 2004, 6.65% increase yoy.
- For 2005, the highest peak generation was 20,221.50 MW on March 30<sup>th</sup> 2005, 4.63% increase yoy.

*Remark: EGAT account year is from October to September*

*Source :EGAT*



# Monthly Energy Generation



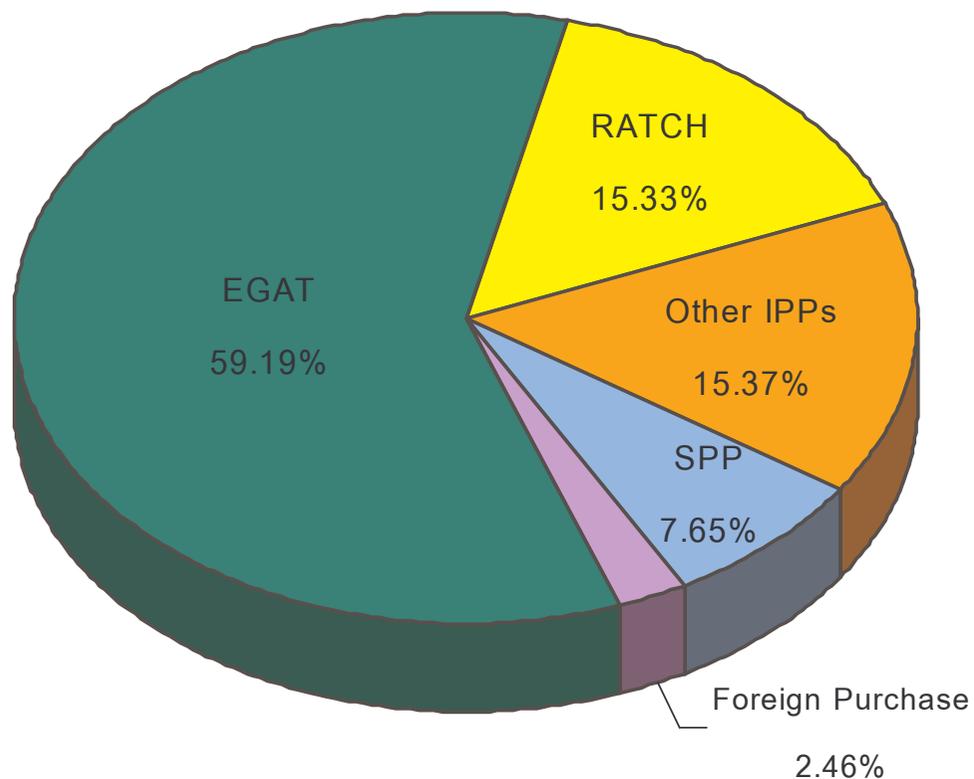
- In 2004, average monthly energy generation growth is 7.36%
- For 6 months of 2005, average monthly energy generation growth was 7.14%

*Remark: EGAT account year is from October to September*

*Source :EGAT*



## Total Installed Capacity – Classified by Producers



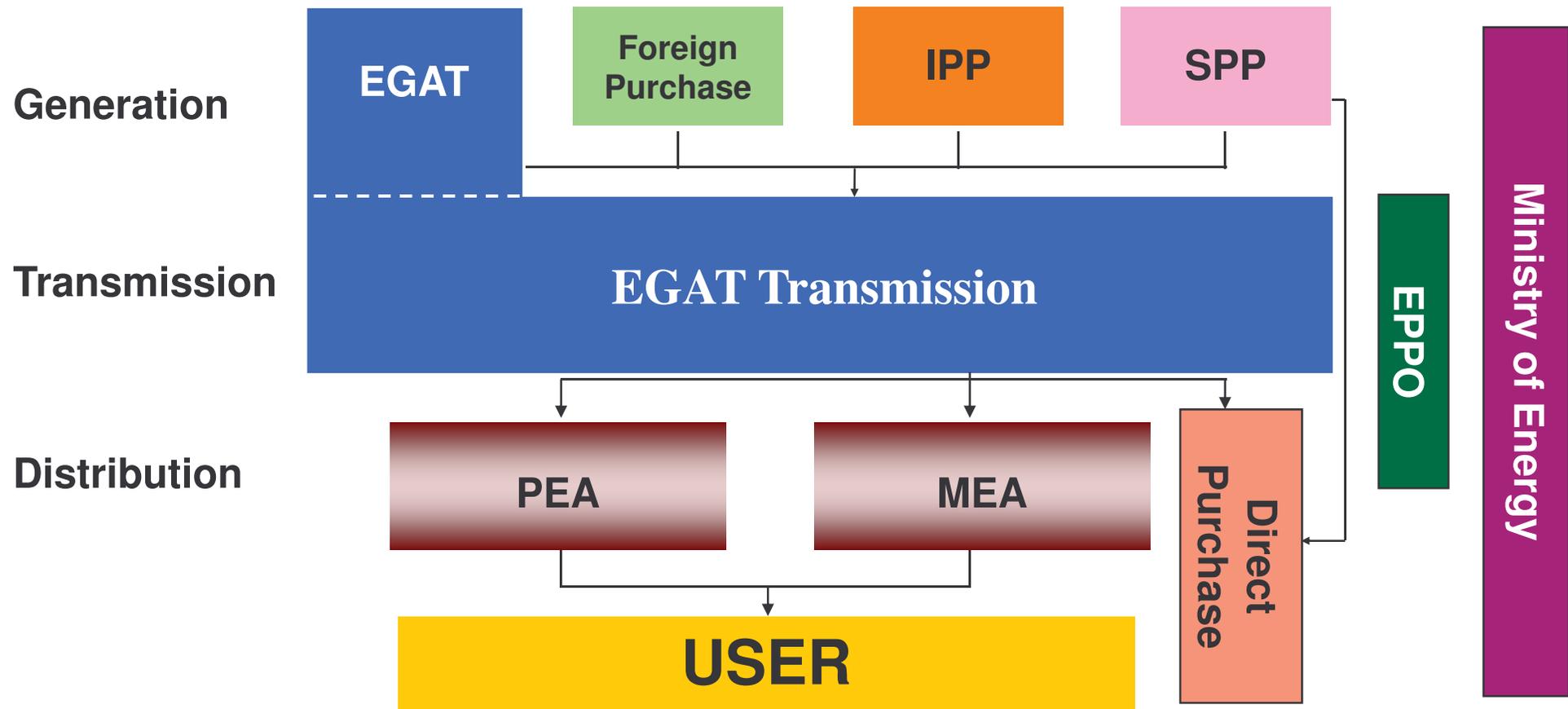
| As of March 2005 | Installed Capacity (MW.) | %             |
|------------------|--------------------------|---------------|
| EGAT             | 15,422.26                | 59.19         |
| RATCH            | 3,995.00                 | 15.33         |
| Other IPPs       | 4,005.00                 | 15.37         |
| SPP              | 1,994.00                 | 7.65          |
| Foreign Purchase | 640.00                   | 2.46          |
| <b>Total</b>     | <b>26,056.26</b>         | <b>100.00</b> |

*Source: EGAT, March 2005*

## *Section II*

# *Electricity Supply Industry Structure*

# Current Electricity Market Structure

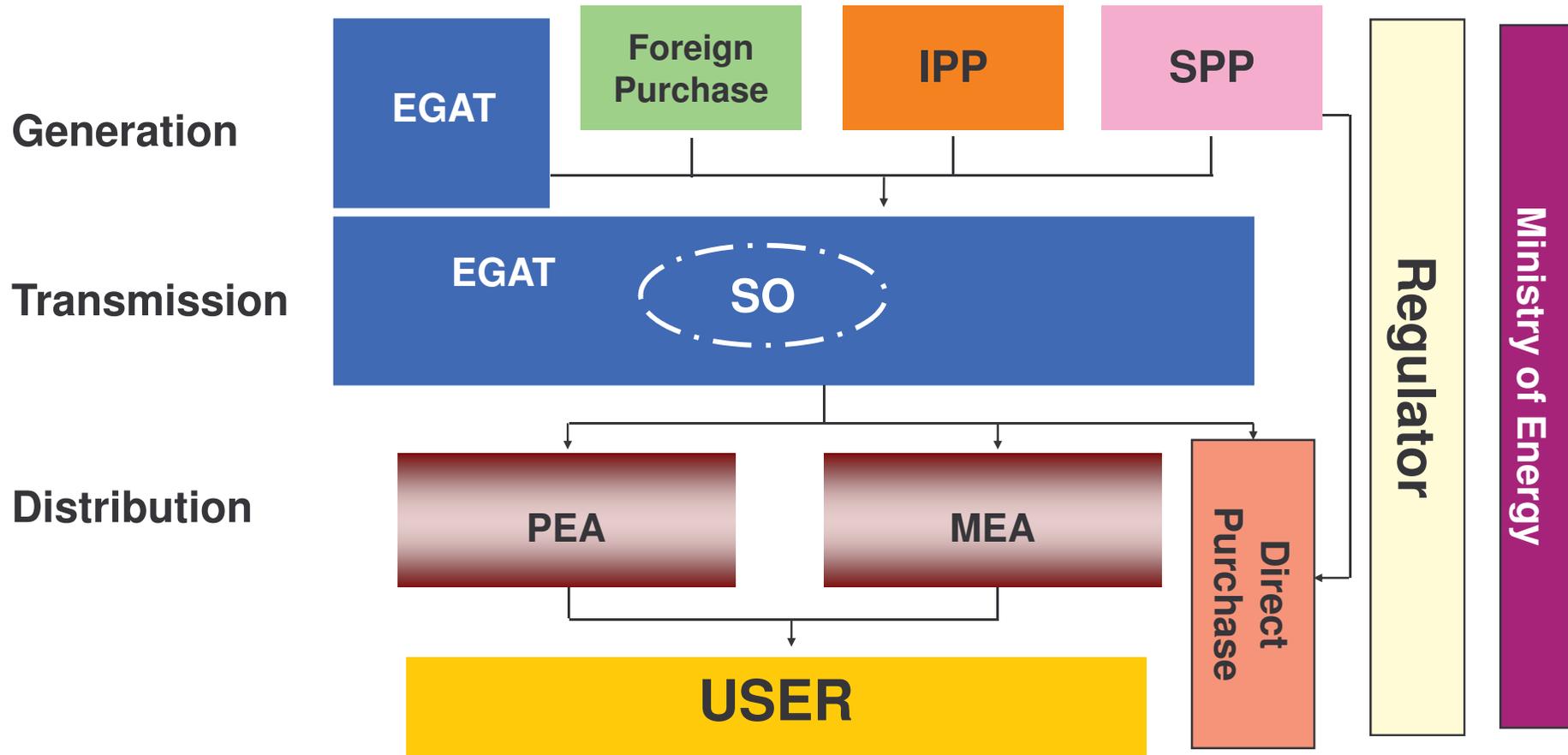


Source: EPPO

- EGAT : Electricity Generating Authority of Thailand
- PEA : Provincial Electricity Authority
- MEA : Metropolitan Electricity Authority
- IPP : Independent Power Producer
- SPP : Small Power Producer
- EPPO : Energy Policy and Planning Office



# *New Electricity Market Structure – Enhanced Single Buyer (ESB)*



Source: EPPO

- EGAT : Electricity Generating Authority of Thailand
- PEA : Provincial Electricity Authority
- MEA : Metropolitan Electricity Authority
- IPP : Independent Power Producer
- SPP : Small Power Producer
- SO : System Operator



# Regulator

## Board of Commission's Responsibilities

- Policy Formulation/Rule Governing competition
  - Forecast Power Demand
  - Formulate investment plans/ Investment auditing
  - Set rules and govern competition in the building of new power plants
  - Set tariffs
- Governance
  - Set and govern license for power business
- Quality Monitoring/Protect consumer
  - Governing tariffs
  - Monitor service quality
  - Protect consumer interests

Source: Ministry of Energy, Royal Thai Government



# *New Electricity Market Structure – Uncertainty Issues*

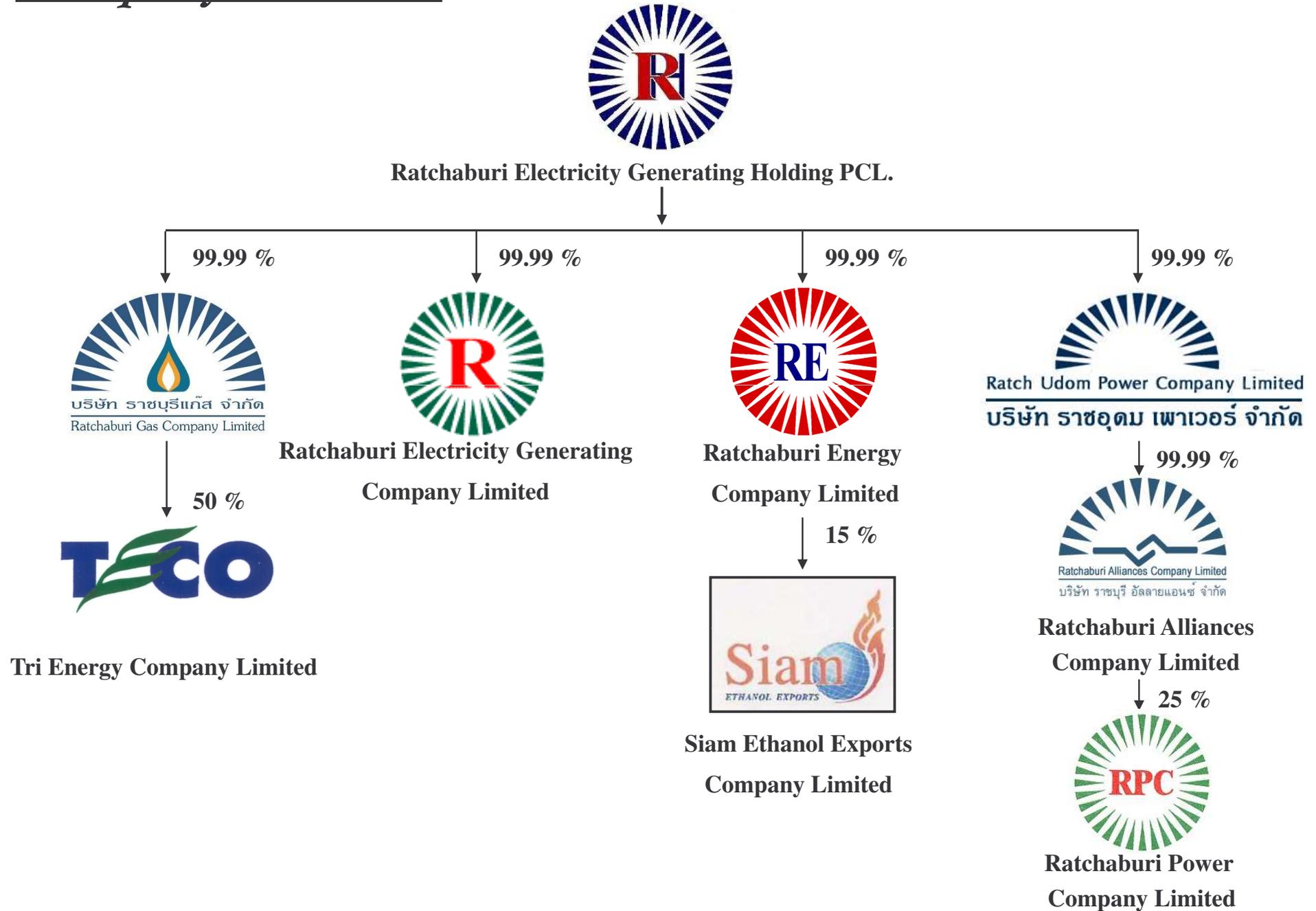
1. Regulation
2. New capacity allocation
3. IPP Bidding
4. RPS Policy
5. New PDP
6. Fuel Diversification



## *Section III*

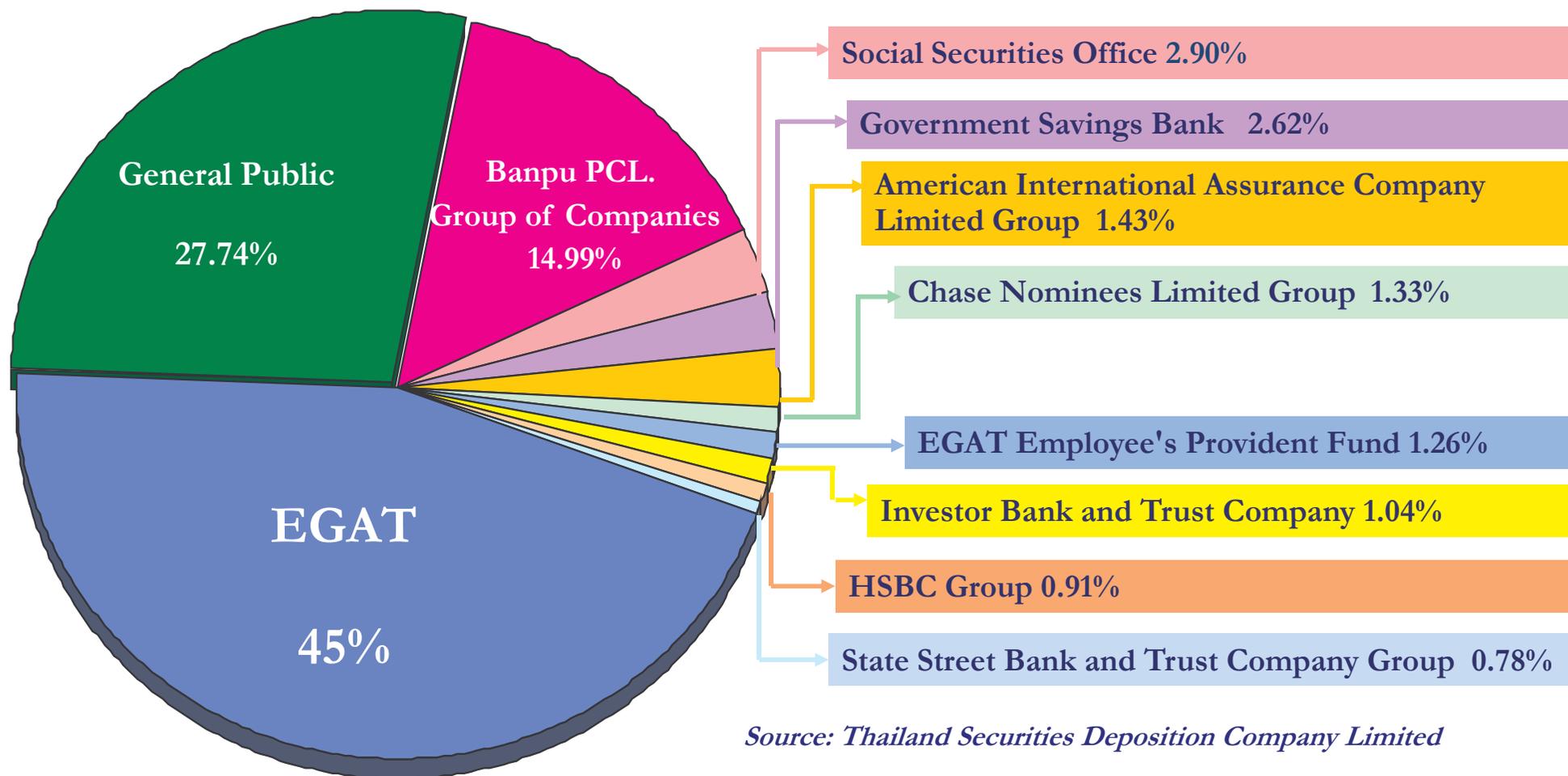
# *Company Structure*

# Company Structure



# Shareholder Structure

*As at 31 March 2005*



*Source: Thailand Securities Deposition Company Limited*

## Related Information

*As of booking closing date on 31 March 2005, foreign shareholders accounted for 8.54% and the total shareholders outstanding were 21,725*

## Total Capacity

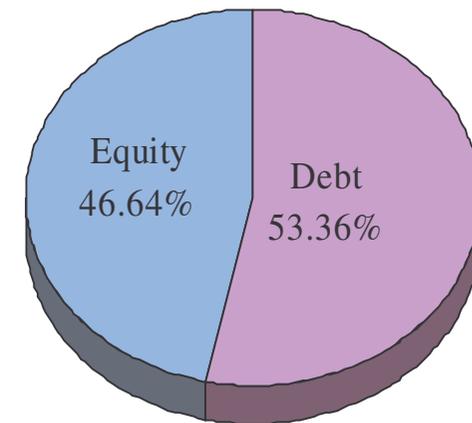
| Power Plant | Type     | Installed Capacity | % Holding | Attribute MW. | % of Total | PPA Years | COD        |
|-------------|----------|--------------------|-----------|---------------|------------|-----------|------------|
| RG          | TH#1&2   | 1,470              |           |               |            |           | Oct 2000   |
|             | CCGT#1-2 | 1,450              | 99.99     | 3,645         | 83.90      | 25        | April 2002 |
|             | CCGT#3   | 725                |           |               |            |           | Nov 2002   |
| TECO        | CCGT#1   | 700                | 50.00     | 350           | 8.05       | 20        | July 2000  |
| RPC         | CCGT#1   | 700                | 25.00     | 350           | 8.05       | 25        | Mar 2008   |
|             | CCGT#2   | 700                |           |               |            |           | June 2008  |
| Total       |          | 5,745              |           | 4,345         | 100        |           |            |



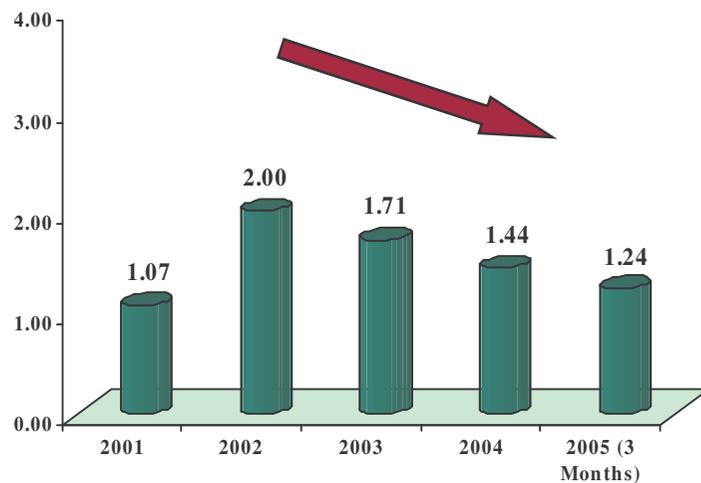
# Capital Structure

## Capital Structure as of March 31, 2005

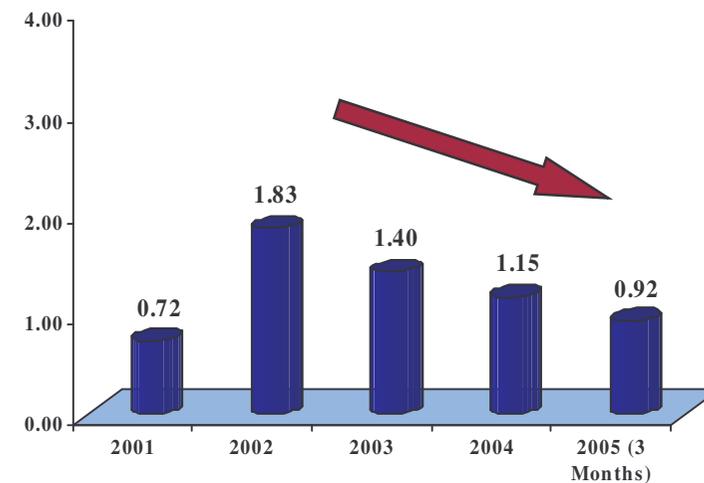
- Total Shareholder's Equity      30,617      Million Baht
- Total Loans                              35,028      Million Baht
- Total Capital                              65,645      Million Baht



**Debt/Equity (times)**



**Net Debt/Equity (times)**



## *Section IV*

# *Operating Performance*

# Operating Performance Q1/2005 & Q1/2004

## ➤ Income Statements

Unit : in Million Baht

|                  | Q1/2005         | Q1/2004         | Diff          | %      |
|------------------|-----------------|-----------------|---------------|--------|
| Revenues         | 10,933.67       | 9,710.55        | 1,223.12      | 12.60  |
| Expenses         | <u>8,455.02</u> | <u>7,853.68</u> | <u>601.34</u> | 7.66   |
| EBIT             | 2,478.65        | 1,856.87        | 621.78        | 33.49  |
| Interest Expense | 286.54          | 313.21          | (26.67)       | (8.52) |
| Income Tax       | <u>42.97</u>    | <u>8.68</u>     | <u>34.29</u>  | 395.05 |
| Net Income       | <u>2,149.14</u> | <u>1,534.98</u> | <u>614.16</u> | 40.01  |
| EPS (Baht)       | 1.48            | 1.06            | 0.42          |        |

# Operating Performance Q1/2005 & Q1/2004

## ➤ Revenue

Unit : in Million Baht

|   | Q1/2005          | Q1/2004         | Diff            | %       |
|---|------------------|-----------------|-----------------|---------|
| Net Sales                                     | 10,659.66        | 9,578.93        | 1,080.73        | 11.28   |
| <i>AP</i>                                     | 3,349.23         | 2,810.60        | 538.63          | 19.16   |
| <i>EP</i>                                     | 7,310.43         | 6,768.33        | 542.10          | 8.01    |
| Management service income                     |                  |                 |                 |         |
| TECO  | 4.51             | 4.26            | 0.25            | 5.87    |
| RPCL  | 1.63             | -               | 1.63            | -       |
| SEEC  | 0.09             | -               | 0.09            | -       |
| Share of profit of joint ventures             | 104.20           | 93.19           | 11.01           | 11.81   |
| Interest Income                               | 55.35            | 31.41           | 23.94           | 76.22   |
| Compensation of combustion system improvement | 106.00           | -               | 106.00          | -       |
| Other Incomes                                 | 2.23             | 2.76            | (0.53)          | (19.20) |
| Total Revenues                                | <u>10,933.67</u> | <u>9,710.55</u> | <u>1,223.12</u> | 12.60   |



## Operating Performance Q1/2005 & Q1/2004

### ➤ Cost and Expenses

Unit : in Million Baht

|                             | Q1/2005         | Q1/2004         | Diff          | %      |
|-----------------------------|-----------------|-----------------|---------------|--------|
| Cost of Sale                | 8,334.46        | 7,725.07        | 609.39        | 7.89   |
| Selling and Admin. Expenses | 117.54          | 125.94          | (8.40)        | (6.67) |
| Directors' Remuneration     | <u>3.02</u>     | <u>2.67</u>     | <u>0.35</u>   | 13.11  |
| Total Costs and Expenses    | <u>8,455.02</u> | <u>7,853.68</u> | <u>601.34</u> | 7.66   |



# Operating Performance Q1/2005 & Q1/2004

## ➤ Cost of Sales

Unit : in Million Baht

|                             | Q1/2005                | Q1/2004                | Diff                 | %              |
|-----------------------------|------------------------|------------------------|----------------------|----------------|
| Fuel Cost                   | 7,276.19               | 6,681.42               | 594.77               | 8.90           |
| Operation & Maintenance     | 180.08                 | 174.21                 | 5.87                 | 3.37           |
| Repairing Expense           | 43.36                  | 80.76                  | (37.40)              | (46.31)        |
| Spare parts and supplies    | 75.99                  | 47.96                  | 28.03                | 58.44          |
| Maintenance service expense | 38.32                  | 19.42                  | 18.90                | 97.32          |
| Insurance Premium           | 44.48                  | 55.98                  | (11.50)              | (20.54)        |
| Depreciation                | 628.62                 | 626.29                 | 2.33                 | 0.37           |
| Allowance for obsolescence  | 13.11                  | -                      | 13.11                | -              |
| Others                      | <u>34.31</u>           | <u>39.03</u>           | <u>(4.72)</u>        | <u>(12.09)</u> |
| <b>Total Cost of Sales</b>  | <b><u>8,334.46</u></b> | <b><u>7,725.07</u></b> | <b><u>609.39</u></b> | <b>7.89</b>    |

# Operating Performance Q1/2005 & Q1/2004

## ➤ Balance Sheets

| As of March 31,2005 |               |          |   |               |          |
|---------------------|---------------|----------|---|---------------|----------|
| <u>Asset</u>        | <u>M Baht</u> | <u>%</u> | <u>Liabilities &amp; Shareholders' Equities</u> | <u>M Baht</u> | <u>%</u> |
| Current Asset       | 15,646        | 22.80    | Current Liabilities                             | 6,660         | 9.70     |
| Properties & Plants | 48,742        | 71.02    | Lt.Liabilities                                  | 31,352        | 45.68    |
| Others Assets       | <u>4,241</u>  | 6.18     | Shareholders' Equities                          | <u>30,617</u> | 44.61    |
| Total Asset         | <u>68,629</u> | 100.00   | Total Liabilities & Shareholders' Equities      | <u>68,629</u> | 100.00   |
| As of Dec 31,2004   | 69,494        |          | As of Dec 31,2004                               | 69,494        |          |

## Operating Performance Q1/2005 & Q1/2004

### ➤ Financial Ratio Highlights

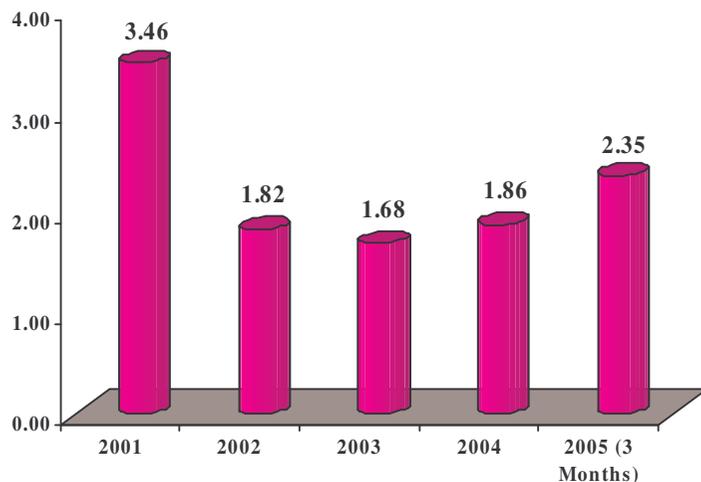
|                             | Q1/2005 | Q1/2004 |
|-----------------------------|---------|---------|
| Current Ratio (times)       | 2.35    | 1.84    |
| Net Profit Margin (%)       | 19.66   | 15.81   |
| ROE (%)                     | 7.27    | 6.02    |
| ROA (%)                     | 3.11    | 2.28    |
| EBITDA (Million Baht)       | 3,150   | 2,511   |
| EBITDA/Avg. Assets (%)      | 4.56    | 3.72    |
| Debt/Equity (times)         | 1.24    | 1.58    |
| Net Debt/Equity (times)     | 0.92    | 1.31    |
| DSCR (times)                | 3.04    | 2.46    |
| Book Value (Baht per share) | 21.12   | 18.12   |
| EPS (Baht per share)        | 1.48    | 1.06    |



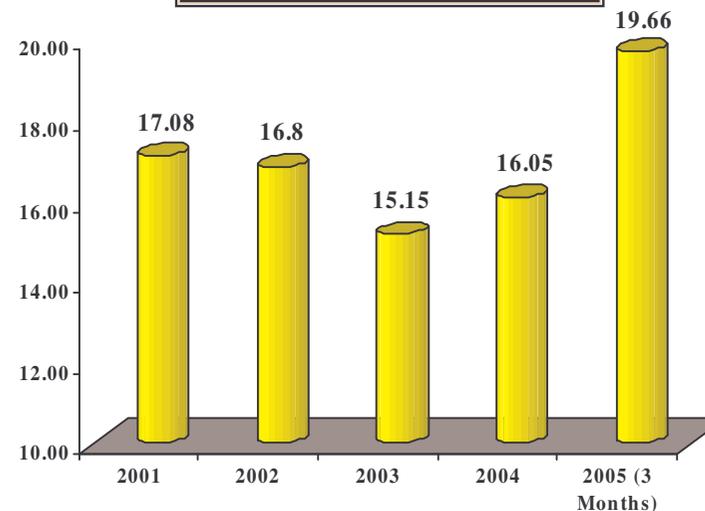
# Operating Performance 2001 - 2005 (3 Months)

## ➤ Financial Ratio Highlights

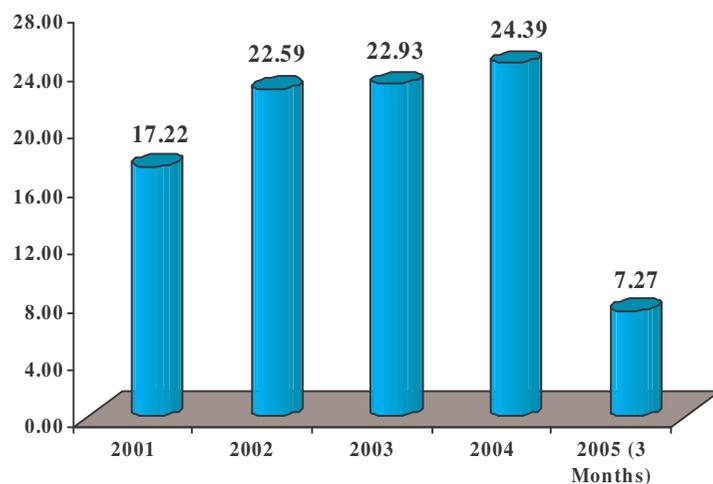
Current Ratio (times)



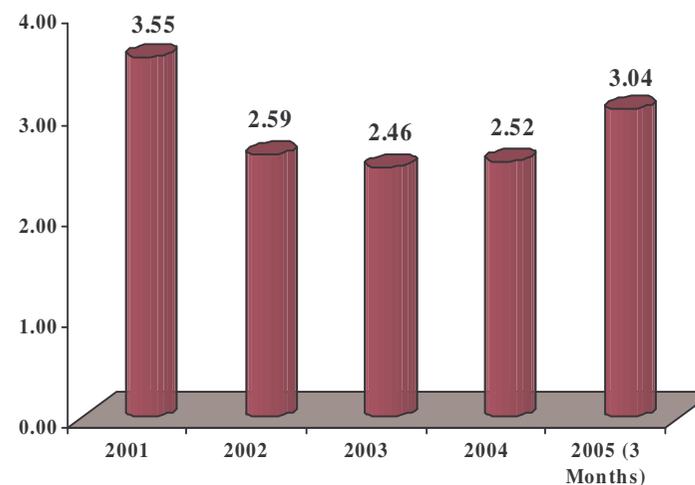
Net Profit Margin (%)



ROE (%)



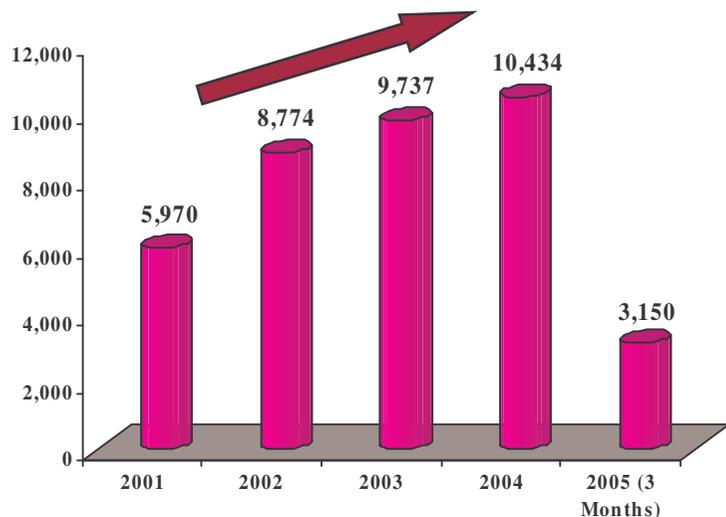
DSCR (times)



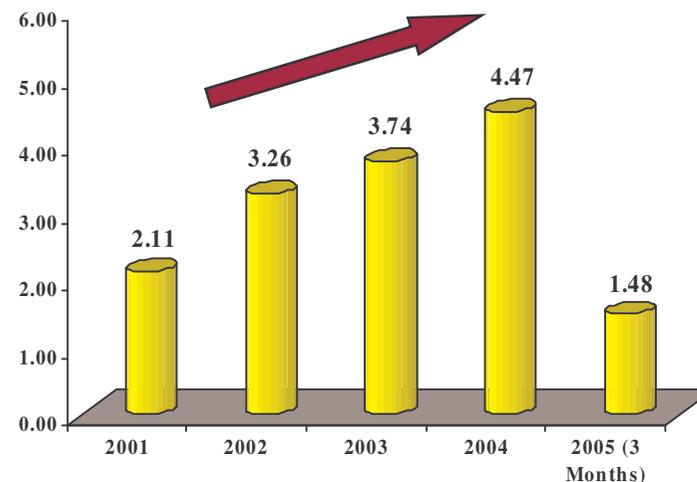
# Operating Performance 2001 - 2005 (3 Months)

## ➤ Financial Ratio Highlights

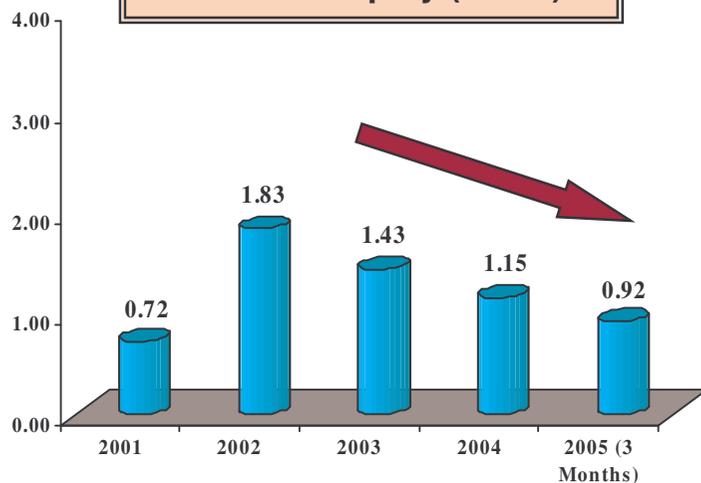
EBITDA (Million Baht)



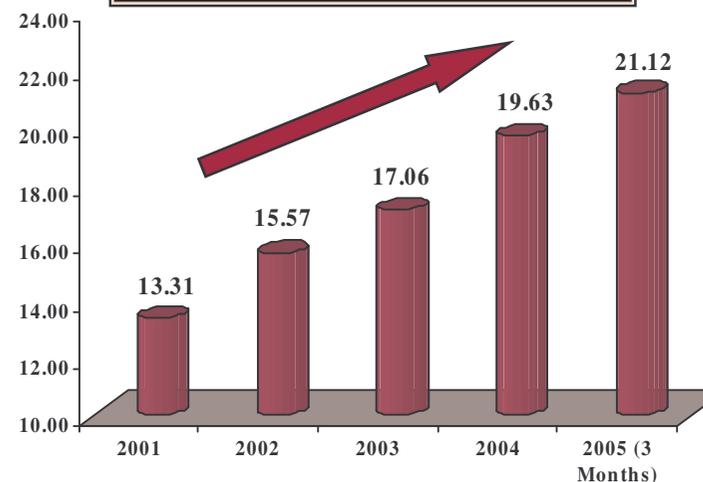
EPS (Baht per share)



Net Debt/Equity (times)



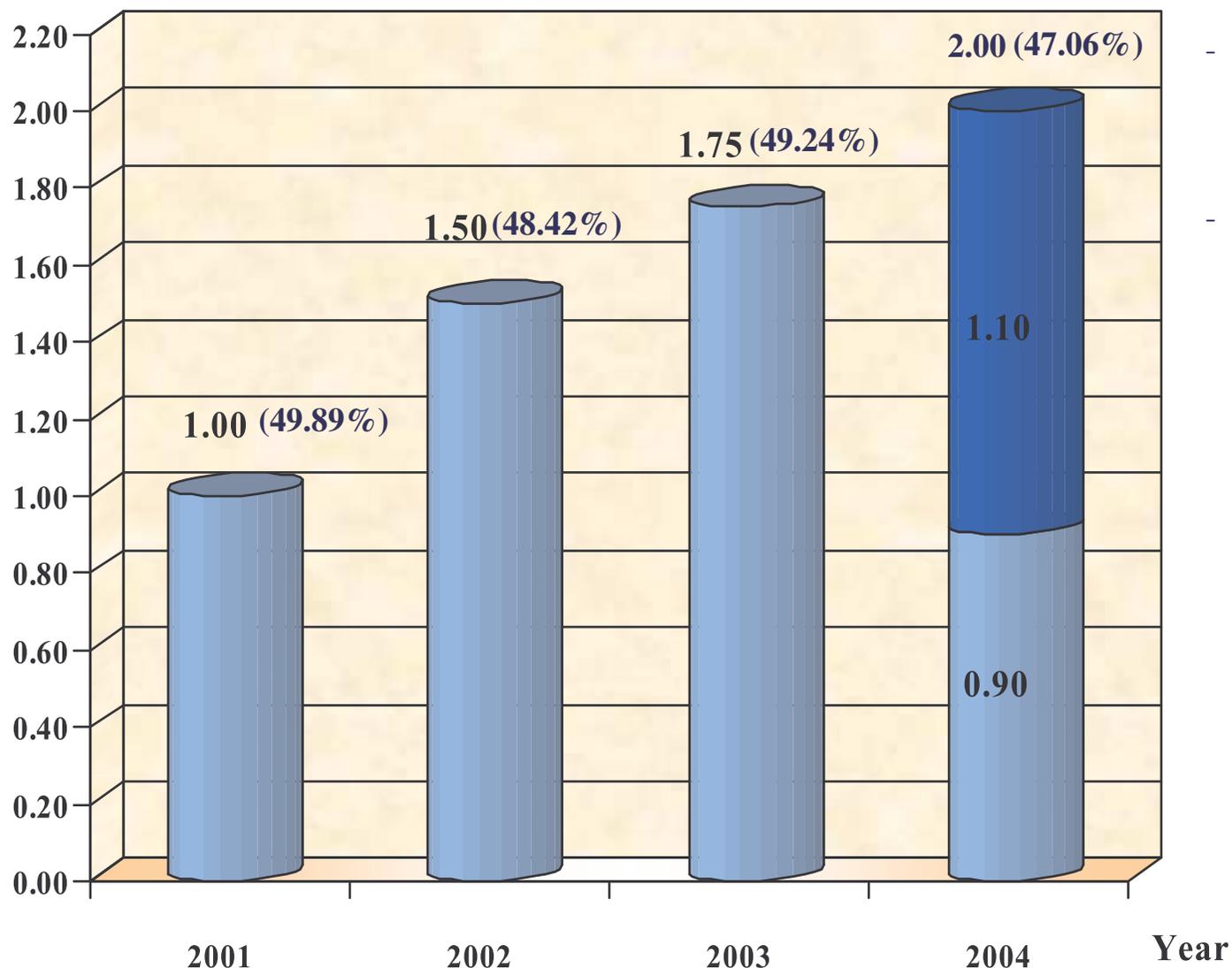
Book Value (Baht per share)



# Operating Performance 2001 – 2004

## ➤ Dividend Policy

Baht/Share (% of Net Profit)



- *Dividend Policy at minimum 40% of Net Profit.*
- *Resolution from AGM on April 20, 2005 to pay dividend of Baht 2.00 per share for 2004 operating performance of which interim dividend had been made for Baht 0.90 per share on October 8, 2004; therefore, 2<sup>nd</sup> dividend payment will be Baht 1.10 per share.*
- *Dividend payment date will be on May 16, 2005.*



*Section V*

*Project Expansion*

# Development Projects

## Ratchaburi Power Co.,Ltd. (RPC)



Technology

Combined Cycle Power Plant

Expected Paid Up  
Capital

THB 8,800 Million  
(USD 220 Million)

Expected Debt

THB 24,800 Million  
(USD 620 Million)

Progress Project

- Financial advisor (SMBC, SCBS, BBL)
- Expected financing closed by March 2006
- Construction contracts completed with the consortium comprised of Mitsubishi Heavy Industries Limited., Mitsubishi Corporation and Sino-Thai Engineering & Construction Public Company Limited.

### Ratchaburi Power Co.,Ltd. (RPC)

|          |                       |                               |     |
|----------|-----------------------|-------------------------------|-----|
| Location | Ratchaburi Province   | <u>Shareholders Structure</u> |     |
| Capacity | 1,400 MW. (2x700 MW.) | RATCH                         | 25% |
| Fuel     | Natural Gas           | PTT                           | 15% |
| PPA      | 25 Years              | Union Energy                  | 10% |
| COD      | Unit1: March 2008     | Hongkong Electric             | 25% |
|          | Unit2: June 2008      | Chubu Electric                | 15% |
|          |                       | Toyota Tsusho                 | 10% |



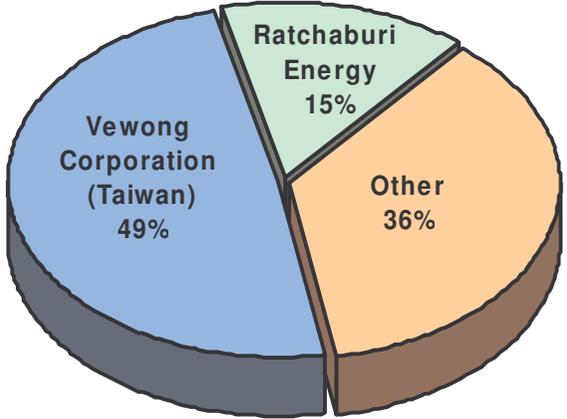
# Development Projects

## Siam Ethanol Export Co, Ltd.

|               |  |
|---------------|--|
| Location      | Rayong Province                              |
| Product       | Alcohol 95%                                  |
| Technology    | Fermentation, Distillation and Dehydration   |
| Capacity      | 100,000 Liter/Day<br>(30 Million Liter/Year) |
| Target Export | Taiwan and Japan                             |

|                    |                                      |
|--------------------|--------------------------------------|
| Registered Capital | THB 300 Million<br>(USD 7.5 Million) |
| Expected Debt      | THB 200 Million<br>(USD 5 Million)   |
| Expected COD       | January 2006                         |

|                  |  |
|------------------|--|
| Progress Project | <ul style="list-style-type: none"> <li>- Land acquisition completed</li> <li>- EPC Contractor to be selected by March 2005</li> <li>- Construction work to be commenced in March 2005</li> </ul> |
|------------------|--|



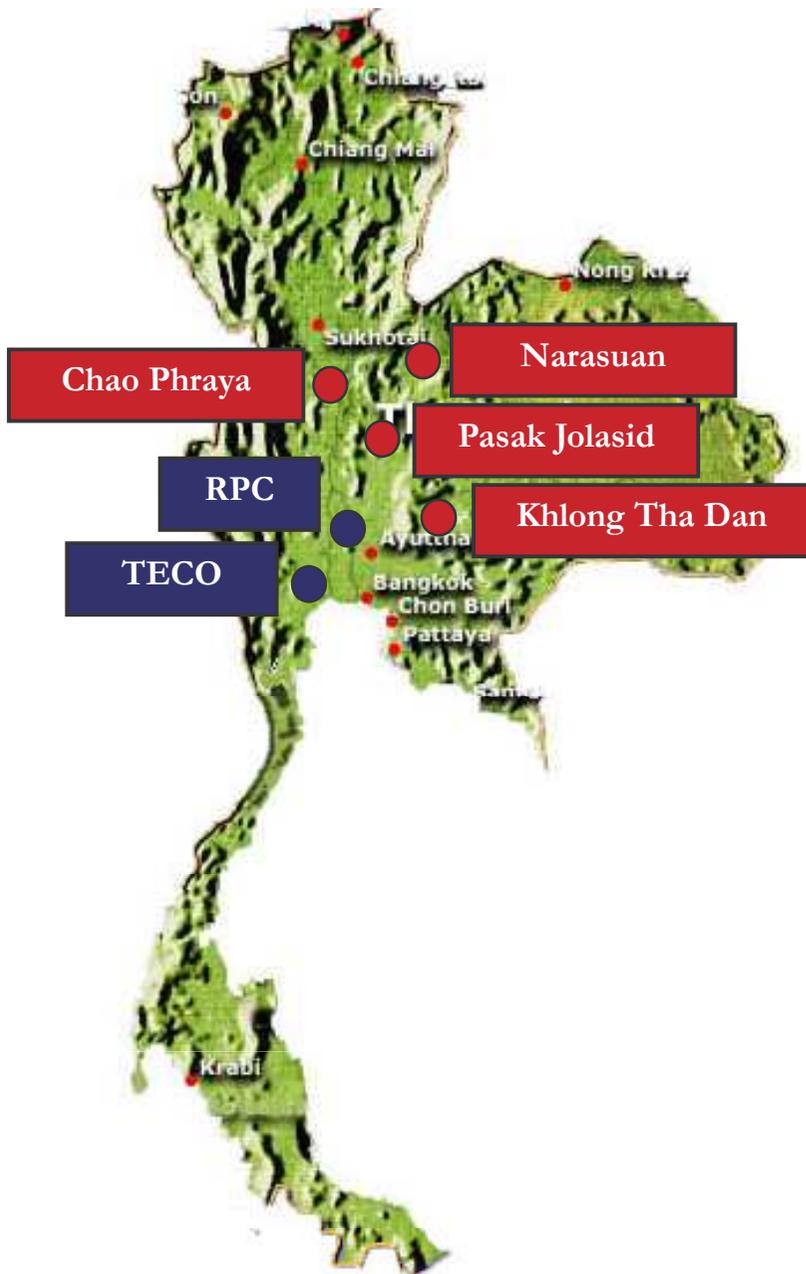
# Future Projects

## Develop IPP & SPP Project 700 – 1,400 MW



- *Participate next round IPP bidding (2005)*
- *Invest in existing IPP and neighboring country project (2005 – 2006)*
- *Invest in projects under “RPS” policy (2005 – 2006)*

# Future Projects



## Small Hydropower

▶ **Status**: Under consideration between EGAT and Royal Irrigation Department for project implementation

## Wind Energy

▶ **Status**: Under study

## Solar Energy

▶ **Status**: Under study

## Bio-gas

▶ **Status**: Under study

*Section VI*

*Appendix*

## Generating Information Q1/2005 & Q1/2004

|           | Q1/2005                |            | Q1/2004                |            |
|-----------|------------------------|------------|------------------------|------------|
|           | Dispatch Factor<br>(%) | EAF<br>(%) | Dispatch Factor<br>(%) | EAF<br>(%) |
| ■ TP #1   | 74.93                  | 99.69      | 64.41                  | 100.00     |
| ■ TP #2   | 75.00                  | 99.02      | 65.05                  | 97.40      |
| ■ CCGT #1 | 82.63                  | 75.79      | 70.22                  | 74.92      |
| ■ CCGT #2 | 84.95                  | 97.14      | 78.09                  | 97.48      |
| ■ CCGT #3 | 87.05                  | 98.91      | 77.27                  | 95.82      |



## Generating Information Q1/2005 & Q1/2004

|                                      | Q1/2005         | Q1/2004         |
|--------------------------------------|-----------------|-----------------|
| <b>Total Net Generation GWh</b>      | <b>5,767.59</b> | <b>4,994.34</b> |
| <b>Net Generation (TP#1-2) GWh</b>   | <b>2,323.43</b> | <b>1,970.89</b> |
| - By Gas GWh                         | 2,263.75        | 1,236.10        |
| - By Oil GWh                         | 59.68           | 734.79          |
| <b>Net Generation (CCGT#1-3) GWh</b> | <b>3,444.16</b> | <b>3,023.45</b> |
| - By Gas GWh                         | 3,444.16        | 2,710.99        |
| - By Oil GWh                         | -               | 312.46          |



## Generating Information Q1/2005 & Q1/2004

|   | Q1/2005 | Q1/2004 |
|---|---------|---------|
| <b>Fuel Consumption (TH#1-2)</b>            |         |         |
| - Gas                      Million MMBTU    | 21.66   | 12.49   |
| - Heavy Oil                Million Litres   | 14.57   | 163.82  |
| - Diesel                    Million Litres  | 0.14    | 0.41    |
| <b>Fuel Consumption (CCGT#1-3)</b>          |         |         |
| - Gas                      Million MMBTU    | 24.62   | 20.72   |
| - Diesel                    Million Litres  | 0.04    | 32.94   |
| <b>Gas Price (Average) Baht/MMBTU</b>       | 154.31  | 152.88  |
| <b>Heavy Oil Price (Average) Baht/Litre</b> | 9.12    | 7.29    |



# ACTUAL OUTAGE FOR RATCHABURI POWER PLANT FOR 2004

 actual outage

| Plant        | JAN.                | FEB.                | MAR. | APR.                | MAY                | JUN. | JUL. | AUG. | SEP. | OCT.                | NOV. | DEC. |
|--------------|---------------------|---------------------|------|---------------------|--------------------|------|------|------|------|---------------------|------|------|
| RG CCGT-10   |                     |                     |      |                     |                    |      |      |      |      |                     |      |      |
| CCGT-11      |                     | 15 <sup>CI</sup> 5  |      |                     |                    |      |      |      |      |                     |      |      |
| CCGT-12      |                     | 19 <sup>CI</sup> 12 |      |                     |                    |      |      |      |      |                     |      |      |
| RG CCGT-20   |                     |                     |      |                     |                    |      |      |      |      |                     |      |      |
| CCGT-21      |                     |                     |      |                     |                    |      |      |      |      | 9 <sup>MI</sup> 8   |      |      |
| CCGT-22      |                     |                     |      |                     |                    |      |      |      |      | 26 <sup>MI</sup> 24 |      |      |
| RG CCGT-30   |                     |                     |      |                     |                    |      |      |      |      |                     |      |      |
| CCGT-31      |                     |                     |      |                     | 1 <sup>CI</sup> 20 |      |      |      |      |                     |      |      |
| CCGT-32      |                     |                     |      |                     | 5 <sup>CI</sup> 22 |      |      |      |      |                     |      |      |
| Thermal-1    |                     |                     |      |                     |                    |      |      |      |      |                     |      |      |
| Thermal-2    |                     |                     |      |                     |                    |      |      |      |      |                     |      |      |
| TECO CCGT-10 |                     |                     |      |                     |                    |      |      |      |      |                     |      |      |
| CCGT-11      |                     |                     |      | 10 <sup>CI</sup> 16 |                    |      |      |      |      |                     |      |      |
| CCGT-12      | 31 <sup>CI</sup> 10 |                     |      |                     |                    |      |      |      |      |                     |      |      |

| THERMAL PLANT | MINOR INSPECTION (MI)    |                          | 40 DAYS | MAJOR OVERHAUL (MO)   |  | 57 DAYS          |                |
|---------------|--------------------------|--------------------------|---------|-----------------------|--|------------------|----------------|
| GAS TURBINE   | WARRANTY INSPECTION (WI) |                          |         | COMBUSTION INSPECTION |  | MINOR INSPECTION | MAJOR OVERHAUL |
|               | NORMAL (WI)              | GEN. ROTOR REMOVED (WI*) |         | (CI)                  |  | (MI)             | (MO)           |
|               | 26 DAYS                  | 32 DAYS                  |         | 15 DAYS               |  | 30 DAYS          | 52 DAYS        |
| STEAM TURBINE | WARRANTY INSPECTION (WI) |                          |         | MINOR INSPECTION      |  | MAJOR OVERHAUL   |                |
|               | NORMAL (WI**)            | GEN. ROTOR REMOVED (WI*) |         | (MI)                  |  | (MO)             |                |
|               | 26 DAYS                  | 30 DAYS                  |         | 26 DAYS               |  | 49 DAYS          |                |

 plan outage  
 actual outage

# PLANNED OUTAGE FOR RATCHABURI POWER PLANT FOR 2005

| Plant        | JAN. | FEB.           | MAR.          | APR. | MAY | JUN. | JUL.        | AUG.        | SEP. | OCT.        | NOV. | DEC. |
|--------------|------|----------------|---------------|------|-----|------|-------------|-------------|------|-------------|------|------|
| RG CCGT-10   |      |                | 1 MI<br>11 26 |      |     |      |             |             |      |             |      |      |
| CCGT-11      |      |                | 1 CI<br>11 15 |      |     |      |             |             |      |             |      |      |
| CCGT-12      |      |                | 1 CI<br>11 15 |      |     |      |             |             |      |             |      |      |
| RG CCGT-20   |      |                |               |      |     |      |             |             |      | 1 MI<br>26  |      |      |
| CCGT-21      |      |                |               |      |     |      |             |             |      | 1 CI<br>15  |      |      |
| CCGT-22      |      |                |               |      |     |      |             |             |      | 1 CI<br>15  |      |      |
| RG CCGT-30   |      |                |               |      |     |      |             | 1 MI<br>26  |      |             |      |      |
| CCGT-31      |      |                |               |      |     |      | 28 MI<br>26 |             |      |             |      |      |
| CCGT-32      |      |                |               |      |     |      | 1 MI<br>30  |             |      |             |      |      |
| Thermal-1    |      |                |               |      |     |      |             | 21 MI<br>30 |      |             |      |      |
| Thermal-2    |      |                |               |      |     |      |             |             |      | 15 MI<br>24 |      |      |
| TECO CCGT-10 |      |                |               |      |     |      |             |             |      |             |      |      |
| CCGT-11      |      | 19 CI<br>19 27 |               |      |     |      |             |             |      |             |      |      |
| CCGT-12      |      |                | 1 MI<br>3     |      |     |      |             |             |      |             |      |      |

| THERMAL PLANT | MINOR INSPECTION (MI)    |                          | 40 DAYS | MAJOR OVERHAUL (MO)   |  | 57 DAYS          |
|---------------|--------------------------|--------------------------|---------|-----------------------|--|------------------|
| GAS TURBINE   | WARRANTY INSPECTION (WI) |                          |         | COMBUSTION INSPECTION |  | MINOR INSPECTION |
|               | NORMAL (WI)              | GEN. ROTOR REMOVED (WI*) |         | (CI)                  |  | (MI)             |
|               | 26 DAYS                  | 32 DAYS                  |         | 15 DAYS               |  | 30 DAYS          |
| STEAM TURBINE | WARRANTY INSPECTION (WI) |                          |         | MINOR INSPECTION      |  | MAJOR OVERHAUL   |
|               | NORMAL (WI**)            | GEN. ROTOR REMOVED (WI*) |         | (MI)                  |  | (MO)             |
|               | 26 DAYS                  | 30 DAYS                  |         | 26 DAYS               |  | 49 DAYS          |

พลังสร้างสรรค์อนาคต

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Powering the Future

