

| Title            | Tenaga Nasional Berhad Annual report |  |  |
|------------------|--------------------------------------|--|--|
| Call Number      | SER HD 685 .L36 2008                 |  |  |
| Accession Number | 142948                               |  |  |
| Barcode          | 00000142948                          |  |  |
| Year             | 2008                                 |  |  |
| Author           | Universiti Tenaga Nasional (UNITEN)  |  |  |
| Digitized Date   | 07 March 2016                        |  |  |
| Remarks          |                                      |  |  |



25

SER HD

685 .L36 2008



annual report 2008



Consistently use energy saving bulbs for less power consumption.

Conserve energy. The power is in your hands.







Conserve energy. The power is in your hands.





# UNITEN LIBRARY

Property of UNITEN Library.

Action will be taken against any user who underlines words, makes notes in the margins or disfigures or damages books in any way.

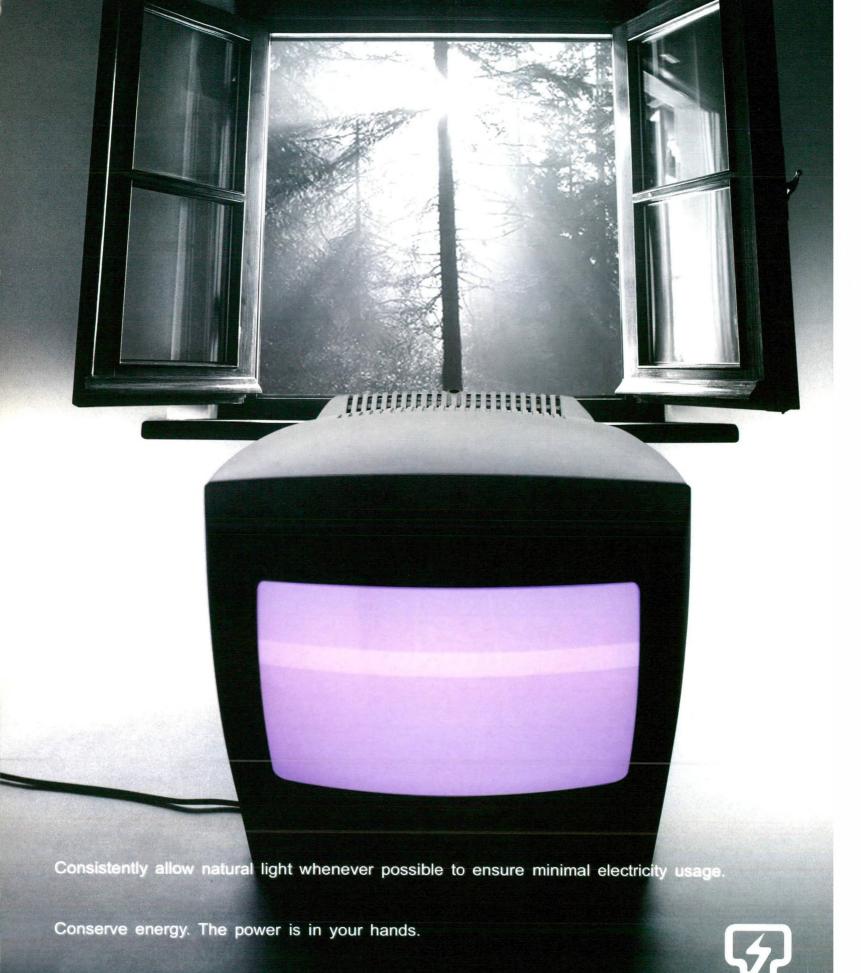
DATE RECEIVED!

04 JUN 2010 142948

ACCESSION NO :

Configure the air conditioner by setting the thermostat at 23-24°C for optimum comfort.

Conserve energy. The power is in your hands.



# Mission

... We are committed to excellence in our products and services

# Vision

To be among the leading corporations in energy and related businesses globally

#### **CONTENTS**

#### POWERING UP

- 5 Mission
- 5 Vision
- 8 About Us
- 9 Key Financial Highlights
- 10 Corporate Award Highlights
- 16 Notice Of Annual General Meeting
- 19 Statement Accompanying Notice Of Annual General Meeting

#### **ENERGIZED PERFORMANCE**

- 20 Key Highlights
- 21 Five-Year Performance Highlights
- 22 Corporate Performance Charts
- 24 FY2008 Core Revenue
- 25 Financial Calendar 2008
- 26 Operational Statistics
- 27 Share Price Tracking

#### **EMPOWERING LEADERSHIP**

- 28 Chairman's Letter To Shareholders
- 34 President/CEO's Review
- 45 Operations Review
  - 46 Generation
  - 56 Transmission
  - 62 Distribution
  - 70 Finance
  - 76 Corporate Affairs
  - 78 Group Human Resource
  - 82 Planning
  - 86 Investment Management
  - 90 ICT Division
  - 96 Procurement
  - 100 Corporate Services
  - 104 Sabah Electricity Sdn Bhd

#### CORPORATE DISCLOSURE

- 114 Corporate Information
- 116 Group Corporate Structure
- 118 Organisational Structure
- 119 Calendar Of Corporate Events
- 124 Media Highlights

#### TRANSMITTING TRANSPARENCY

- 126 Statement Of Corporate Governance
- 138 Enterprise Wide Risk Management
- 142 Statement Of Internal Control
- 145 Board Audit Committee Report
- 148 Terms Of ReferenceOf The Board Audit Committee

#### GENERATING EXCELLENCE

- 152 Board Of Directors
- 154 Profile Of Directors
- 160 Group Executive Council Committee – GECC
- 161 Energy Supply Committee ESC
- 162 Group Executive Management Committee – GEMC

#### CHANNELING OUR ENERGY

- 164 Corporate Social Responsibility
- 170 Other Services Productivity And Quality Management
- 171 Occupational Safety And Health Report
- 172 Statement Of Environment

#### STRENGTH IN NUMBERS

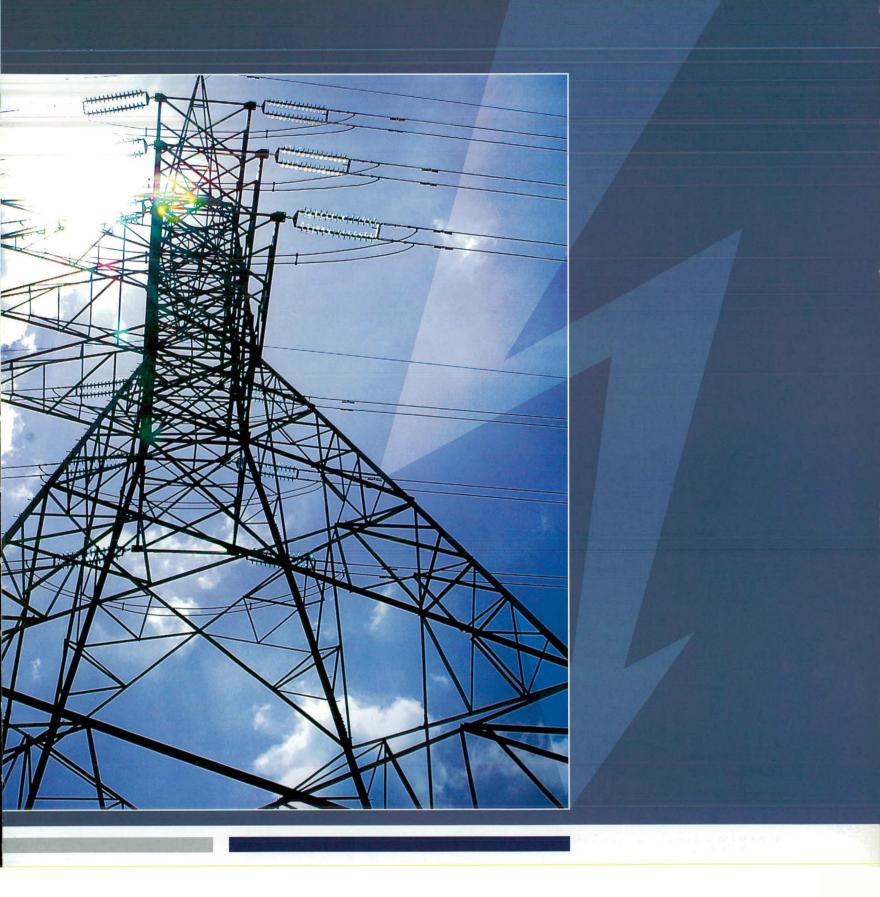
174 Financial Statements

#### **KEY INDICATORS**

- 274 Analysis Of Shareholdings
- 277 Analysis Of Unsecured Convertible Redeemable Income Securities 2004-2009 ("CRIS") Holdings
- 280 Property List
  - Proxy Form

#### Cover Rationale

We are the custodians of our environment and guardians of the future that is inherited by those after us. This responsibility has guided our unwavering efforts in leading sustainability towards our precious resources. The solar panels illustrate Tenaga Nasional Berhad's commitment to powering a green nation and our continuous efforts in merging its development paradigms for our future needs. Moving further, higher and beyond is represented by the skies symbolising infinite heights in contributing to the nation, community and environment.





### About Us



Tenaga Nasional Berhad (TNB) is the largest electricity utility in Malaysia with more than RM69.8 billion in assets. The Company is listed on the main board of Bursa Malaysia and employs approximately 29,210 people (Group) to serve a customer base of over seven million in Peninsular Malaysia and Sabah. TNB plays an integral role in the national, economic and social prosperity of the country by providing reliable and efficient services.

TNB's core businesses are in the generation, transmission and distribution of electricity. In Peninsular Malaysia, TNB is a major contributor to the total industry capacity through six thermal stations and three major hydroelectric schemes. The Company also manages and operates a comprehensive transmission network, the National Grid.

Spanning the peninsular, the grid links TNB power stations and IPPs to the distribution network. The grid is also interconnected to Thailand's transmission system in the North and Singapore's transmission system in the South. TNB's distribution network is managed through a comprehensive distribution system, customer service centres and call management centres.

Today, TNB is also involved in diversified activities linked to the power industry. Through subsidiaries, the Company is in the manufacture of transformers, high voltage switchgears and cables; the provision of professional consultancy services; architectural, civil, and electrical engineering works and services, repair and maintenance; as well as in research and development; property development; and management services.

In advancing human capital, Universiti Tenaga Nasional (UNITEN) has been established to produce well-rounded competent individuals in various fields. A major part of the Company's corporate social responsibility in education, sponsorships and contributions, is channeled through our trust foundation – Yayasan Tenaga Nasional.

To ensure the Company's continued service excellence and to support its strategic vision of global leadership, employee competencies are continuously enhanced through structured programmes. As a responsible corporate citizen, TNB also places great emphasis on its engagement with the community to ensure society gains and benefits from our efforts.

# Key Financial Highlights

|  | Financial Year 2007<br>(RM'mil) | Financial Year 2008<br>(RM'mil) |
|--|---------------------------------|---------------------------------|
| Revenue  | 23,320.4                        | 25,750.6                        |
| Operating Expenses                             | (18,371.4)                      | (22,503.4)                      |
| Other Operating Income                         | 593.7                           | 794.8                           |
| Operating Surplus                              | 5,542.7                         | 4,042.0                         |
| Finance Cost                                   | (1,305.0)                       | (1,095.8)                       |
| Transaction Gain/(Loss)                        | 33.5                            | (19.1)                          |
| Profit Before Tax<br>& Translation Gain/(Loss) | 4,313.6                         | 2,972.0                         |
| Net Profit Before<br>Translation Gain          | 3,608.8                         | 2,540.8                         |
| Translation Gain                               | 452.3                           | 53.2                            |
| Profit for the period                          | 4,067.6                         | 2,600.4                         |
| Profit Attributable to:                        |                                 |                                 |
| Equity Holders                                 | 4,061.1                         | 2,594.0                         |
| Minority Interests                             | 6.5                             | 6.4                             |
|  | 4,067.6                         | 2,600.4                         |

# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

# Corporate Award Highlights



 Prime Minister's Industry Excellence Award (AKIPM) & Quality Management Excellence Award (QMEA)

The FY2008 was most meaningful for TNB as the company was announced the winner of the much coveted Prime Minister's Industry Excellence Award (AKIPM), triumphing over 217 other participating companies; among which were multinational organisations. TNB was also awarded the Quality Management Excellence Award (QMEA), signifying the company's progress and improvement in quality excellence.

The AKIPM is the Government's effort in recognising local companies who have displayed excellence in organisation, innovation and corporate social responsibility. Participating companies are evaluated based on eight key criteria which comprise of Top Management Leadership and Management of Quality, Use of Quality Data and Information, Human Resource Management, Customer Focus, Quality Assurance of External Suppliers, Process Management, Quality and Operational/Business Results and Corporate Social Responsibility.





2. TNB Finalist for Platts 2007 Global Energy Awards for Top Power Company of the Year, Ranked 32nd Among The Top Energy Companies In Asia and 42nd Among The Global Top 250

TNB once again made it to the Platts ranking for top 56 energy companies in Asia in the 2007 survey of world's top 250 Energy Companies conducted by the United States-based Platts. Results of the survey ranked TNB 32nd among the top companies. Globally, Platts ranked TNB to be 42nd among the top Electricity Utility Companies.

The Platts Top 250 recognises outstanding financial performance for the previous year. Each company listed in the Platts Top 250 has distinguished itself through its remarkable performance and outstanding efforts and dedication of its team. Being awarded a ranking in the Platts Top 250 is an accomplishment of prestige and honour for TNB in the energy industry. This recognition is significant to the Company as it is placed in the same league with the world's largest and most successful energy producers. It is indeed a continuous journey of excellence for TNB as it strives to achieve its vision to be among the leading corporations in energy and related businesses globally.

3. TNB wins NAfMA 2007 - BEST PRACTICE AWARD 2007 (Public Listed Company)

TNB was awarded Winner for Best Practice Award 2007 (Public Listed Company) for National Award for Management Accounting (NAfMA) 2007.

This award is for best practices, focusing on fully implemented management accounting systems that set new standards or introduce innovations in the workplace. These systems have been benchmarked and tested, and outcomes have been carefully measured, evaluated and documented. Best practices will generally have broad impact and applicability within a particular organisation.

Being a first time participant, it was pure satisfaction for the team that had worked hard to ensure the Group made it to the Top Ten Final list after the first round of assessments in mid October 2007.

Gold Award for The Best Emerging Contact Centre (Category GLC)
 TNB CareLine 15454 was given recognition by the Contact Centre Association of Malaysia and MSC Malaysia, when it won the Gold Award for The Best Emerging Contact Centre (Category GLC).

The award was held to recognise, promote and encourage Government agencies/ GLCs to increase their customer service capability and efficiency to the community at large through the Call Management Centre services.

5. The BrandLaureate Awards 2008

Tenaga Nasional Berhad was awarded The BrandLaureate Societe Awards 2008 for excellence in corporate social responsibility.

The BrandLaureate Awards is the most coveted branding Award in Malaysia and the Asia Pacific, recognising the best of brands from the Multinationals, Public Listed and Government Linked Companies. The winners are selected based on a 300 point judging criteria formulated to assess the brand's strength and performance.

Winning brands represent the best in their industries and are selected based on various categories. The Societe Awards recognises excellence in the fields of corporate social responsibilities, promotion of green causes and philanthropy as well as promoting the spirit of nobility and altruism amongst organisations and individuals.

- 6. Sultan Iskandar Power Station, Pasir Gudang E.G. WIT Team won Gold Award Runner Up at the Indonesia Quality Convention E.G. WIT Team of Sultan Iskandar Power Station, Pasir Gudang led by Encik Roshidi Khamis won the GOLD AWARD RUNNER UP at the Indonesian Quality Convention held in West Java Indonesia.
- 7. TNB Wins the Top Corporate Award Malaysia 1000
  TNB was given recognition as the winner of Top Corporate Award while TNB Janamanjung Sdn. Bhd. won the Industry Excellence Award at the Launching Ceremony of the Third Edition of the Malaysia 1000 magazine.

It was organised by BASIS Publication House Sdn. Bhd., publisher of the Malaysia 1000 magazine in collaboration with the National News Agency of Malaysia (BERNAMA). The award was in recognition of outstanding companies in Malaysia that have contributed to industry excellence and economic development of the nation.

- 8. TNB bagged Three Awards in conjunction with Workers Day 2008
  - Competitive Employer Award (Large Industry)
  - Associate Professor Dr. Izham Zainal Abidin, Deputy Dean Academic and Quality Assurance, Universiti Tenaga Nasional, received the Outstanding Male Employee Award, Executive Group.
  - Encik Adnan Saidin, Craftsman Senior Grade, Office of the Area Manager, Alor Setar, Kedah received the Outstanding Male Employee Award – Non Executive Group.
- Minister of Human Resources Award 2007
   ILSAS (Training Provider Category)

TNB Integrated Learning Solution Sdn. Bhd. (ILSAS) won the Minister of Human Resources Development Award in the "Training Provider Category" in conjunction with the Human Resources Development Conference 2007.









#### a) MSOSH 2006 Safety Award

The Annual Occupational Safety and Health Award was held by the Malaysia Society for Occupational Safety and Health (MSOSH) to give credit and recognition to organisations that have achieved good track record in occupational safety and health management at their respective work place. The award conferred was based on the points obtained through the audit of documents and the stations conducted by MSO3H auditors. Giving recognition to organisations that have achieved excellance in occupational safety. and health management is part of the Government's affort to make work place in Malaysia safe and healthy and to make safe and healthy work practice a part of culture among Malaysians.

The following power stations had won awards in the respective categories:

#### Gold Class I Award:

- Tuanku Ja'afar Power Station, Port Dickson
- 2. Sultan Ismail Power Station, Paka
- Power Stations at Cameron
  Highlands

#### Gold Class II Award:

- 1. Putrajava Power Station
- 2. Gelugor Power Station
- Sultan Mahmud Power Station, Kenyir

#### Silver Award:

- Sultan Iskandar Power Station, Pasir Gudang
- 2. Connaught Bridge Power Station, Klang
- Sultan Azlan Shah Power Station, Manjung

#### Bronze Medal Award:

- Ismail Petra Power Station, Pergau
- b) MSOSH 2007 Safety Award
  The Malaysian Society of
  Occupational Safety and Health
  (MSOSH) Award 2007 ceremony
  saw the following power stations
  garner MSOSH awards in the
  respective categories:

#### GOLD Class 1

(Very good OSH performance)

- Putrajaya Power Station
- Cameron Highlands Hydro Power Station
- Sultan Ismail Fower Station,

  Pales
- Tuanku Ja'afar Power Station, Port Dickson
- Chenderoh Power Station

#### GOLD Class 2

(Very good OSH performance)

- Sg. Perak Hydro Power Station
- Gelugor Power Station
- Connaught Bridge Power Station, Klang
- Sultan Azlan Shah Power Station, Manjung

#### SILVER (Good OSH performance)

- Sultan Iskandar Power Station, Pasir Gudang
- Sultan Mahmud Power Station, Kenvir

#### **BRONZE**

<u>(Satisfactory\_OSH\_performance)\_</u>

 Sultan Ismail Petra Power Station, Pergau  Chenderch Power Station won Gold Medal First Place at Safety and Health Excellence Award 2007

> Chenderoh Power Station won Gold Award First Place for Electricity Utility Category at the National Safety and Health Excellence Award 2008.

> Chanderoh Power Station was selected for the Electricity Utility Catagory by defeating other TNB and private power stations. Encik Mustaphalismal Yaacob, Manager of Chanderoh Power Station and Encik Lee Kwan Yong, Safety Executive received the award.

The Annual Occupational Safety and Health Award was organised by the National Council for Occupational Safety and Health, Ministry of Human Resource to give credit and recognition to organisations that have achieved good track record in occupational safety and health management at their respective work place. The recognition accorded to organisations that have achieved excellence in occupational safety and health management.

#### 12. Malaysia Productivity Corporation (MPC) Award

#### a) MPC Director General's Award

TNB was given another accolade by winning the MPC Director General's Award at the Official Opening of the National MPC ICC Convention 2008.

The award was given to companies that have shown high level of work force commitment in work improvement (WIT), continuous participation and winning accolades at MPC National and Regional ICC Conventions.

# b) Transmission Division's ICC Group and Gelugor Power Station Received MPC National ICC Convention

Two ICC Groups of the Transmission Division created history when Sinar Group (Senggaraan Aset, Johor Bahru) and Northern Star (Senggaraan Aset, Alor Setar) succeeded in winning 3 Star Gold award at the National ICC Convention organised by the Malaysia Productivity Corporation (MPC) on 21 August 2008. Sinar Group was also adjudged as among the 10 best ICC groups at the convention.

This is the best achievement by Transmission Division since they began participation in the ICC Convention. Sinar Group presented a project on overcoming the problem of maintenance of field light switch and street lights while the Northern Star Group's project was on overcoming the problem of replacing resistor at 132 & 275 kV transmission towers. Winning second place at the convention was Impian Group from Gelugor Power Station.

 Northern Region ICC Competition Convention 2008 organised by Malaysia Productivity Corporation (MPC)

Team 'Missing 2' from the office of the State General Manager Pulau Pinang won the Gold Award.

Wira Senggaraan team from the Bertam Branch Manager's office won the Silver Award.

 d) Universiti Tenaga Nasional (UNITEN) became the first university in Malaysia to secure the Quality Environment Practice Certification from the Malaysia Productivity Corporation (MPC)

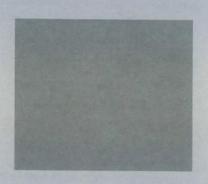
UNITEN was conferred the Quality Environment Certification (QE) on 15 and 16 April 2008, after having met the 5S certification audit objectives. A full-scale audit assessment process was conducted by MPC senior consultant officers cum assessors, Miss Norzirin Ariffin & Mr. Rosmi Abdullah at the Putrajaya Campus and Sultan Haji Ahmad Shah Campus respectively.

- e) SESB Sipitang Succeeded to obtain MPC Certification for 5S Sabah Electricity Sdn. Bhd. (SESB) Sipitang was conferred 5S Practice Certification by the Malaysia Productivity Corporation (MPC).
- f) Distribution Division Head Office, Wisma TNB Jalan Timur Conferred Quality Environment Practice Certification (5S)

The Head Office of TNB Distribution Division was conferred Quality Environment Practice Certification (5S Practice System) by the Malaysia Productivity Corporation (MPC).









at ITEM 2008 Competition
Universiti Tenaga National (UNITEN)
emerged as the Overall Champion
at the ITEX 2008 Competition.

16 participating innovative products by UNITENI researchers representing the Engineering and Information Technology College won five gold medals, sit: ailver and five bronze medals in the categories contest.

UNITED Overall Champion.

 TITE Youth Overall Runner Up in Youth Hockey League 2008

> TNB Youth Hockey Team emerged the Overall Runner Up at the National Youth Hockey League 2008 after putting up a been fight and lost 4-3 to Bukit Jalil Sport School Selection Team in the final match.

 Inaugural Kajang International Six-a-Side Cricket Championship

TNB's Cricket Team emerged as the Champion at the Inaugural Kajang International Six-a-Side Cricket Championship. The championship which was jointly organised by Hajang Cricket Association and Mitrae Promotion also attracted international participation from South Korea, Australia and Singapore.

The TIIB team trounced Hang Mamangam team in the final match by a display of secellent game. In addition, TIIB's Batsman, Encil: Thushara Kodiltara was adjudged the Best Batsman of the Championship by scoring 147 points.

g) Transmission Division's
Human Resource and
Administration Department
conferred 5S Practice
Certification

The Transmission Division's Human Resource and Administration Department succeeded in obtaining the first 5S certification in the Division from the Malaysia Productivity Corporation (MPC).

13. NACRA 2007 Certificate of Merit for TNB

TNB was presented with the Certificate of Merit for its 2005 Annual Report at the National Annual Corporate Report Awards (NACEA) 2007.

HACRA is a manifestation of the joint commitment of the four organising bodies – Bursa Malaysia Barhad, Malaysia Institute of Accountants (MIA), Malaysian Institute of Management (MIM) and The Malaysian Institute of Certified Public Accountants (MICPA) to promote the highest standards in corporate reporting.

 ACCA Malaysia Environmental And Social Reporting Awards (MESRA) 2007

TNB won the Merit Award for Environmental Reporting category at the ACCA Malaysia Environmental and Social Reporting Awards 2007.

 ACM 2007 Best New Services Award

THE participated in the 10th ASEAN Communication & Multimedia (ACM) Expo & Forum 2007.

During the three day exhibition, TNB was selected as the winner for Best New Services for several information technology applications used by THB in its daily business operations and consumer services such as E-CIBS, Remote Mater Reading (RMR), On-Line Vendor Registration (OVR) and Mobile Field Force Automation (MFFA).

16. Team Circle Point Champion of the Innovative & Creative Circle (ICC) Convention

Team Circle Point from TNB Kuantan, Pahang, emerged as the Service Category and Civerall Champion at the National Innovative & Creative Circle (ICC) Convention organised by the National Productivity Centre (IPC).

Tesm Circle Project entitled "Detecting Electricity Theft" succeeded in defeating 160 other participating teams.

17. Winner of the 2007
Corporate Award - Tier 2,
Category 1 by the Institute
of Internal Auditors Malaysia
(IIA Malaysia)

Tenaga Hasional Barhad (THB) was awarded the Winner for the 2007 Corporate Award – Tier 2, Category 1 by the Institute of Internal Auditors Malaysia (IIA Malaysia). This prestigious award is presented to THB for demonstrating strong commitment to Continuous Professional Development for the year 2006.

18. Best Theme Booth' Award at the 50th Merdeka Expo'

IMS\_had\_participated\_in\_the-'50th Merdelia Expo' held at the Putra World Trade Centra. TIJB's Exhibition Booth was selected as the Best Thema Booth at the 4-day exhibition.

# [ Tenaga Nasional Berhad ] [ Annual Report 2003 ]

## Notice Of Annual General Meeting

#### AS ORDINARY BUSINESS:-

 To receive the Audited Financial Statements together with the reports of the Directors and Auditors thereon for the Financial Year ended 31 August 2008.

#### Ordinary Resolution 1

 To approve the declaration of final gross dividend of 10.0 sen per ordinary share less income tax of 25% for the Financial Year ended 31 August 2008.

#### Ordinary Resolution 2

 To approve the payment of Directors' fees of PM628,838.00 for the Financial Year ended 31 August 2008.

#### Ordinary Resolution 3.

- To re-elect the following Directors who retire in accordance with Article 135 of the Company's Articles of Association:-
  - (i) Tan Sri Leo Moggie Ordinary Resolution 4
  - (ii) Tan Sri Dato' Hari Harayanan a/I Govindasamy Ordinary Resolution 5
  - (iii) Dato' Zainal Abidin bin Putih Ordinary Resolution 6
- To re-elect Tan Sri Dato' Seri Siti Horma binti liaahob who retires in accordance with Article 133 of the Company's Articles of Association. Ordinary Resolution 7

NOTICE IS HEREBY GIVEN THAT the Eighteenth Annual General Meeting (18th AGM) of Tenaga Nasional Berhad will be held on Thursday, 11 December 2008, at 10.00 a.m. at Dewan Serbaguna, Kompleks Sukan TNB, Jalan Pantai Baru, 59200 Kuala Lumpur to transact the following businesses:-

5. To re-appoint Mesera PricewaterhouseCoopers, having consented to act as Auditors of the Company, to hold office until the conclusion of the next Annual General Meeting ("AGM") and to authorise the Directors to fix their remuneration.

#### **Ordinary Resolution 8**

#### AS SPECIAL BUSINESS:-

To consider and if thought fit, to pass the following Ordinary Resolutions:-

 Specific authority for the Directors to issue chares pursuant to the Employees' Share Option Scheme II

"THAT pursuant to the TNB Employees' Share Option Scheme II ("ESOS II") as approved at the Extraordinary General Meeting ("EGM") of the Company held on 29 May 2003, approval be and is hareby given to the Directors to issue shares in the Company at any time and in accordance with the terms and conditions of the said scheme."

Ordinary Resolution 9

 General authority for the Directors to issue shares pursuant to Section 132D, Companies Act, 1965

> "THAT pursuant to Section 132D of the Companies Act, 1935 ("Act"), full authority is hereby given to the Directors to issue shares in the capital of the Company at any time until the conclusion of the next AGM and upon such terms and conditions and for such purposes as the Directors may, in their absolute discretion, deam fit provided that the aggregate number of shares to be issued pursuant to this Resolution does not exceed ten percent (10%) of the issued share capital of the Company for the time being, subject to the provision of the Act, Articles of Association of the Company and approval from the Bursa Malaysia Securities Berhad ("Bursa Securities") and all the relavant regulatory bodies where such approval is necessary."

**Ordinary Resolution 10** 

9. Authority for proposed purchase of its own shares by the Company in accordance with Section 67.4 of the Act

> "THAT subject to compliance with the Act, the Company's Memorandum and Articles of Association, the Listing Requirements of Bursa Securities and all other applicable laws, guidelines, rules and regulations for the time being in force or as may be amended from time to time, and the approvals from all relevent kutharities, the Company be and is hereby authorised to purchase such amount of ordinary shares of RM1.00 each in the Company's issued and paid-up ordinary share capital through Bursa Sacurities upon such terms and conditions as the Directors of the Company ("Board") may deem fit and expedient in the interest of the Company provided that:-

- (a) the aggregate number of shares purchased pursuant to this resolution shall not exceed ten percent (10%) of the total issued and paid-up share capital of the Company ("Proposed Share Buy-Back");
- (b) the maximum amount of funds to be utilised for the purpose of the Proposed Share Buy-Back shall not exceed the Company's aggregate retained profits and/or share premium account;

- (c) the authority conferred by this resolution shall commence immediately upon the passing of this resolution and shall continue to be in force until:
  - the conclusion of the next AGM of the Company at which time the authority shall lapse unless by an ordinary resolution passed by the shareholders of the Company in a general meeting, the authority is renewed ermer unconditionally or

subject to conditions;

- the expiry of the period within which the next AGM of the Company is required by law to be held:
- (iii) the authority is revoked or varied by an ordinary resolution passed by the shareholders of the Company at a general meeting,

whichever is the earlier."

"AND THAT authority be and is hereby given to the Board to decide in their discretion to retain the ordinary shares in the Company so purchased by the Company as treasury shares or to cancel them. or a combination of both and/or

to resall them on Bursa Securities and/or to distribute them as share dividends."

"AND THAT the Board be and is hereby suthorized to take such steps to give full effect to the Proposed Share Buy-Back with full power to assent to any conditions, modifications, variations and/or amendments as may be imposed by the relevant authorities and/ or to do all such acts and things as the Board may deem fit and expedient in the best interest of tha Company."

#### Ordinary Resolution 11

To transact any other business of which due notice shall have been given in accordance with the Act.

BY ORDER OF THE BOARD

Nor Zakiah binti Abdul Ghani (LS 0008795) Wan Marzimin bin Wan Muhammad (LS 0009013) Company Secretaries

Kuala Lumpur 48-November-2008 र्टी [ Tenaga Nasional Berhad ] [ Annual Report 2008

#### EXPLANATORY NOTES ON SPECIAL BUSINESS

Ordinary Resolution 9: Power for the Directors to issue shares pursuant to ESOS II.

The proposed Ordinary Resolution, if passed, is to empower the Directors to issue shares in the Company pursuant to the terms and conditions of ESOS II, which was approved at the EGM of the Company held on 29 May 2003.

(ii) Ordinary Resolution 10: Power to issue shares pursuant to Section 132D, of the Act.

The proposed Ordinary Resolution, if passed, is to give the Directors of the Company flexibility to issue and allot chares for such purposes as the Directors in their absolute discretion consider to be in the interest of the Company, without having to convene a general meeting. This authority will expire at the next AGM of the Company.

(iii) Ordinary Resolution 11: Proposed Share Buy-Back.

The proposed Ordinary Resolution, if passed, is to empower the Directors to purchase the Company's shares of up to 10 percent of the issued and paid up capital of the Company by utilising the funds allocated out of the retained profits and the share premium account of the Company. This authority unless revolved or varied at a general meeting, will expire at the next AGM of the Company.

#### NOTES:-

#### Registration of Members/Proxies

Pegistration of Members/Proxies attending the Meeting will be from 7.00 a.m. on the day of the Meeting. Members/Proxies are required to produce identification documents for registration.

#### Proxy

- (i) Any member entitled to attend and vote at this Meeting of the Company is entitled to appoint a proxy to attend and vote in his stead. A proxy need not be a Member of the Company.
- (ii) The instrument appointing a proxy shall be in writing under the hand of the appointer or of his attorney duly appointed under a power of attorney. Where the instrument appointing a proxy/proxies is executed by a corporation, it shall be executed under its common seal or under the hand of any officer or attorney duly appointed under a power of attorney.
- (iii) Pursuant to Article 105(4) of the Company's Articles of Association, a member is entitled to appoint not more than two (2) proxies, and where a member appoints two (2) proxies, the appointment shall be invalid unless the percentage of the holding to be represented by each proxy is specified.
- (iv) A corporation which is a member, may by resolution of its Directors or other governing body authorise auch person as it thinks fit to act as its representative at the Meeting, in accordance with Article 107(3) of the Company's Articles of Association.
- (v) The instrument appointing a proxy/proxies must be deposited at Symphony Share Registrars Sdn. Bhd., Level 26, Menara Multi-Purpose, Capital Square, Mo. 8, Jalan Munshi Abdullah, 50100 Huala Lumpur, Malaysia not less than forty-eight (48) hours before the time set for the Meeting.

Additional Information on Ordinary Resolutions 4 to 7 Additional Information on the Particulars of the retiring Directors, as required under Appendix 8A of the Bursa Malaysia Listing Requirements are detailed out in the Annual Report.

# Statement Accompanying Notice Of Annual General Meeting

Pursuant To Paragraph 8.28 (2) of The Listing Requirements of Bursa Malaysia Securities Berhad

The Directors Who Are Standing For Re-election At The Eighteenth Annual General Meeting

- (a) Directors retiring pursuant to Article 135 of the Company's Articles of Association:-
  - Tan Sri Leo Moggie
  - Tan Sri Dato' Hari Narayanan a/l Govindasamy
  - Dato' Zainal Abidin bin Putih
- (b) Director retiring pursuant to Article 133 of the Company's Articles of Association:-
  - Tan Sri Dato' Sari Siti Norma binti Yaakob

The details of the four (4) Directors seeking re-election are set out in their respective profiles which appear in the Directors' profiles on pages 154 to 159 of this Annual Report.

The details of any interest in the securities of the Company or its subsidiaries (if any) held by the said Directors are stated on page 178 of the Audited Financial Statements of the Annual Report.

20

# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

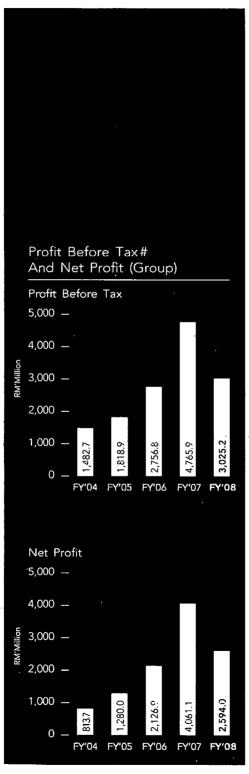
# Five-Year Performance Highlights

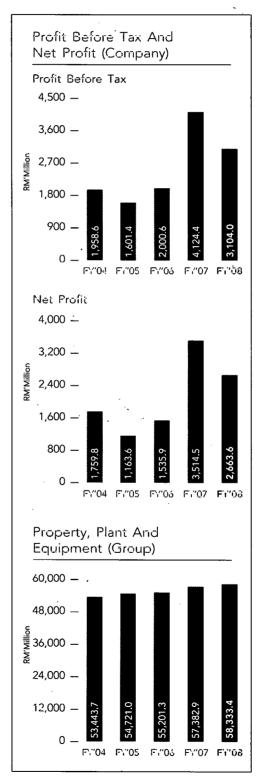
|  | 2008                  | 2007       | 2006      | 2005                                   | 2004      |
|--|-----------------------|------------|-----------|--|-----------|
| GROUP                                      |                       |            |           |  |           |
| Finance (RM' million)                      |                       |            |           |  |           |
| Total Revenue                              | 25,750.6              | 23,320.4   | 20,384.2  | 18,977.5                               | 17,712.1  |
| Profit Before Taxation and Zakat#          | 3,025.2               | 4,765.9    | 2,756.8   | 1,818.9                                | 1,482.7   |
| Property, Plant and Equipment              | 58,333.4              | 57,382.9   | 55,201.3  | 54,721.0                               | 53,443.7  |
| Generation                                 |                       |            | 9 1000    |  |           |
| Group Installed Capacity (MW)              | 11,941.8*             | 11,514.5*  | 11,464.8  | 11,497.8                               | 11,137.5  |
| Sales Of Electricity                       |                       |            | 199       |  |           |
| Total Units Sold (GWh)                     | 90,650.2              | 86,545.0   | 82,214.8  | 78,933.4                               | 72,921.4  |
| Sales Revenue (RM' million)                | 24,190.1              | 22,384.0   | 19,707.4  | 18,326.4                               | 17,219.4  |
| Customers                                  |                       |            |           |  |           |
| Total Number of Customers                  | 7,329,727             | 7,068,329  | 6,814,523 | 6,582,374                              | 6,323,719 |
| Employees (Group)                          | and the second second | Belleville |           |  |           |
| Total Number of Employees                  | 29,210                | 28,822     | 28,067    | 27,727                                 | 26,989    |
| Shareholders                               |                       |            |           |  | NOTE THE  |
| Total Number of Bumiputera                 |                       |            |           |  |           |
| Shareholders                               | 6,177                 | 5,865      | 5,943     | 5,971                                  | 6,526     |
| Total Number of                            |                       |            |           |  |           |
| Non-Bumiputera Shareholders                | 22,467                | 17,516     | 17,318    | 14,935                                 | 15,726    |
| Total Number of Institutional Shareholders | 600                   | 539        | 586       | 577                                    | 497       |
| Total Number of Foreign Shareholders       | 1,116                 | 1.242      | 1.067     | 1,379                                  | 715       |
| Total Number of Government Agency          | 1,110                 |            | 1,007     | 1,077                                  |           |
| Shareholders                               | 24                    | 26         | 28        | 35                                     | 42        |
| Total Number of Nominee Company            |                       |            |           |  |           |
| Shareholders                               | 4,153                 | 3,656      | 3,814     | 6,080                                  | 4,717     |
| Dividends (Gross)                          | 20.0 sen              | 36.3 sen   | 14.8 sen  | 16.2 sen                               | 18.2 sen  |
| Financial Ratios                           |                       |            |           | 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |           |
| Debt-Equity (Net of Cash) Ratio            | 0.68                  | 0.78       | 1.19      | 1.69                                   | 1.94      |
| Earnings Per Share – Basic (sen)           | 59.87                 | 94.92      | 52.52     | 32.01                                  | 26.1      |
| Net Assets Per Share (sen)                 | 592                   | 554        | 470       | 499                                    | 460       |

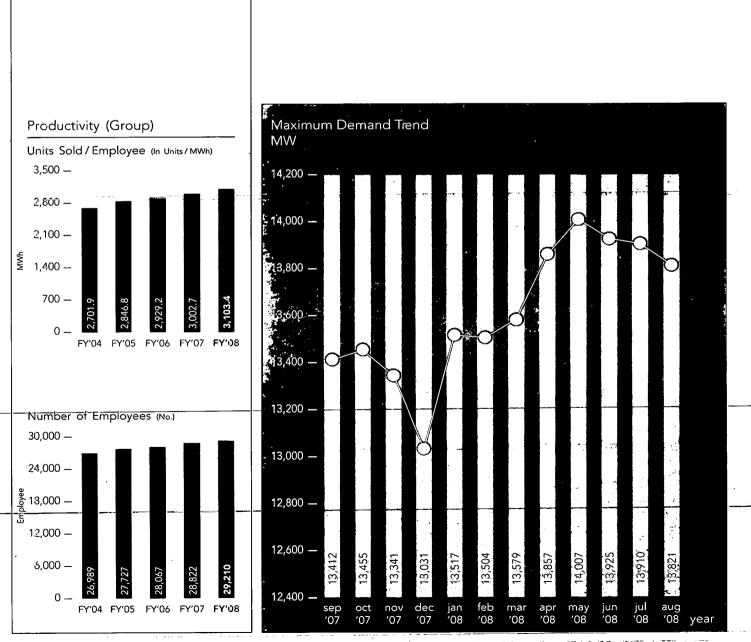
<sup>#</sup> The financials for 2004 to 2005 have not been adjusted for the adoption of FRS 101-Presentation of Financial Statements

<sup>\* (</sup>Figure includes TNB, Sabah Electricity Sdn Bhd and Liberty Power Limited)

# Corporate Performance Charts





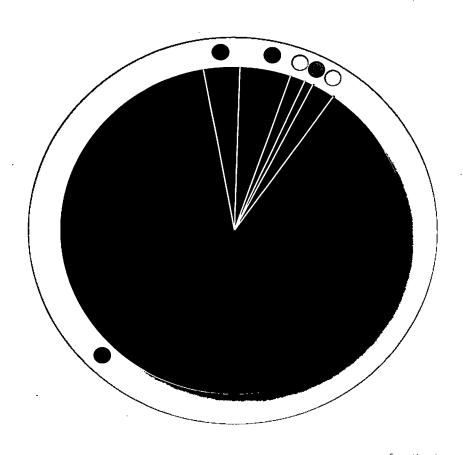


[ Tenaga Nasional Barhad ] [ Annual Report 2008 ]

# FY2008 Core Revenue

### FY2008 Total RM25,750.6 million

FY2007 Total RM23,320.4 million



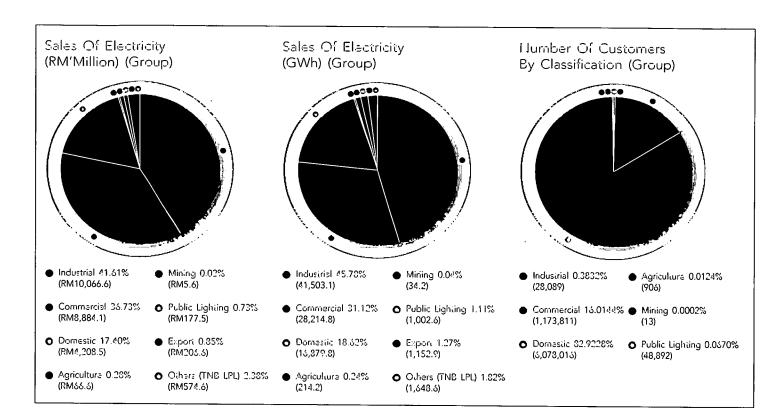
- Peninsular Malaysia 87.6%
- SESB3.3%
- Goods & Services 4.7%

- O Deferred Income 1.4%
- EGAT 0.8%
   LPL 2.2%

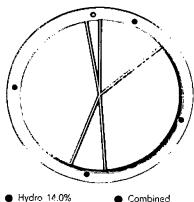
# Financial Calendar 2008

| Quarterly Results                     | Announcement<br>Date |
|---------------------------------------|----------------------|
| First Quarter ended 30 November 2007  | 15 January 2008      |
| Second Quarter ended 29 February 2008 | 14 April 2008        |
| Third Quarter ended 31 May 2008       | 24 July 2008         |
| Fourth Quarter ended 31 August 2008   | 16 October 2008      |
| Distribution of Annual Report         | 18 November 2008     |
| Eighteenth Annual General Meeting     | 11 December 2008     |
|                                       |                      |
|                                       |                      |

## Operational Statistics



#### TNP Generation Mix (Mational Grid)



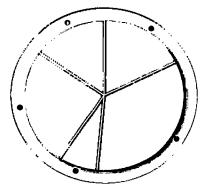
- Hydro 14.0% (6,670.4 GWh)
  - Cycle 41.4% (19,765.5 GWh) Thermal (Coal) 35.0% Gas Turbine 2.7%

(1,312.0 GWh)

Conventional Thermal (Oil & Gas) 6.9% (3,282.6 GWh)

(16,748.3 GWh)

#### TNB Installed Capacity (National Grid)



Combined

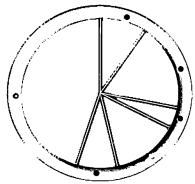
Cycla 25.5%

(2.762 MW)

(1,350 MW)

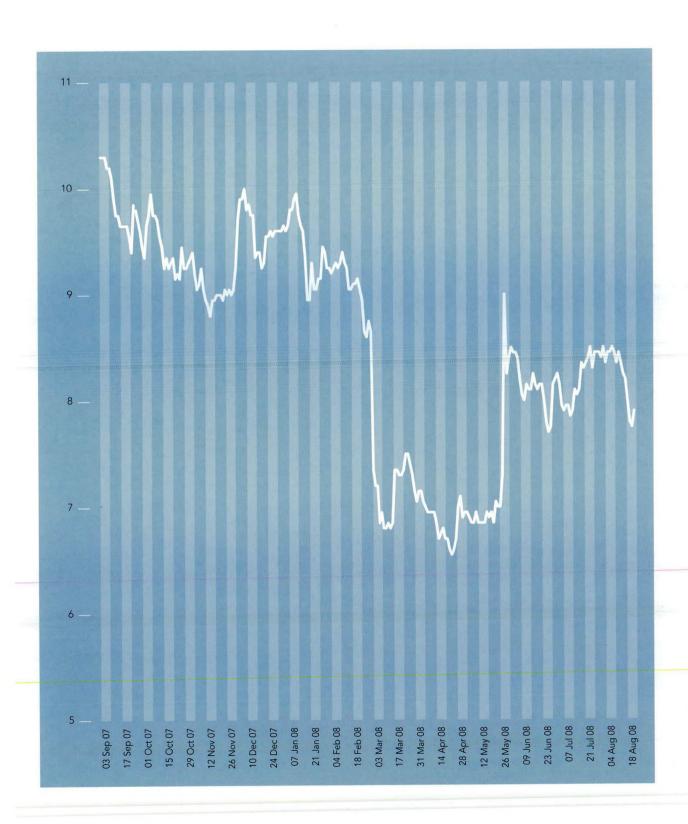
- Hydro 17.6% (1,910.5 MW)
- Conventional Thermal (Coal) 33.9% 👩 Gas Turbine 15.2% (3,670 MW)
- Conventional Thermal (Oil & Gas) 7.8% (840 MW)

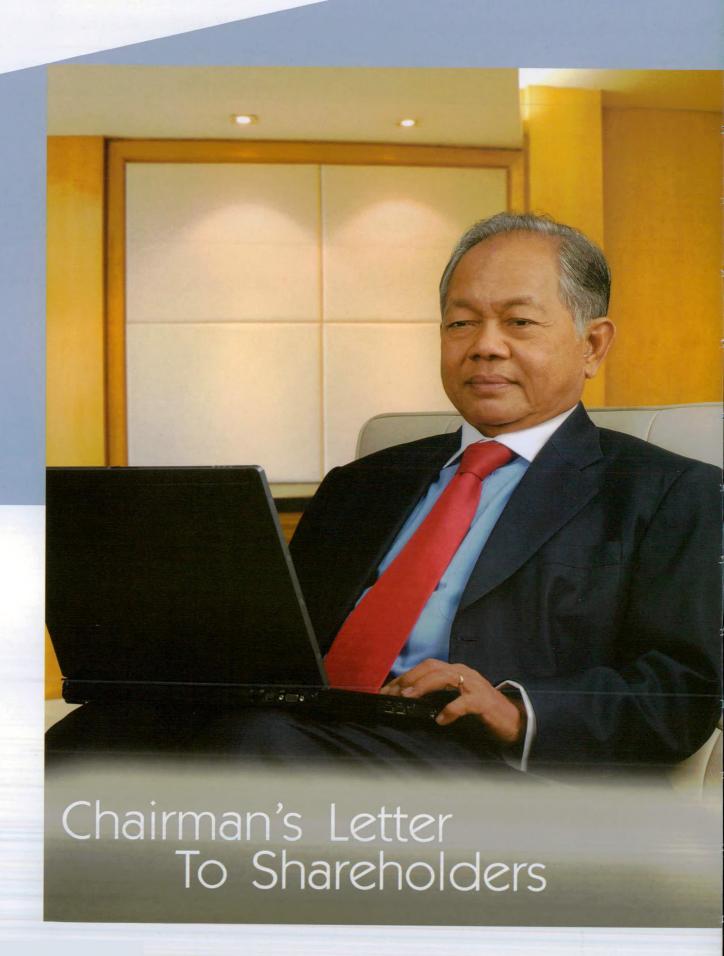
#### TIJE Installed Capacity Including IPPs (National Grid)



- Hydro 9.7% (1,910.5 MW)
- Conventional Thermal (Coal) 18.5% (3,670 MW)
- Conventional Thermal (Oil & Gas) 4.2% (840 MW)
- Combined Cycle 14.0% (2,762 MW)
- Gas Turbina 8.4% (1,653 MW)
- O IPPs 45.1% (8,887.4 MW)

# Share Price Tracking







TAN SRI LEO MOGGIE

#### Dear Shareholders,

On behalf of the Board of Directors, I am pleased to announce that Tenaga Nasional Berhad (TNB), despite the impact of higher fuel prices and rising operational costs, reported a profit for the financial year ended 31 August 2008.

While the Group's profit declined as a result of external cost factors beyond our control, we made good headway in increasing efficiency of our systems and processes. As a result of these efforts, we generated higher revenue, exceeded our Headline Key Performance Indicators (KPIs) on numerous fronts, made strong strides forward on several company-wide initiatives, and put in place the building blocks to secure future growth.

#### Financial Performance

Despite the good start in the first half of the year, TNB was severely hampered by the increase in fuel prices, especially coal, and higher capacity payments to Independent Power Producers (IPPs). These external costs, plus foreign exchange translation losses, forced the Group's performance to deteriorate significantly over FY2008.

While Group revenue grew by 10.4% to RM25,750.6 million in FY2008 against RM23,320.4 million previously, our net profit declined by 36.1% to RM2,600.4 million against net profit of RM4,067.6 million the year before. This significant decline in profitability was attributable to a 22.5% increase in operating expenses that stemmed primarily from higher electricity generation costs (namely IPP and fuel costs which accounted for 60.5% of total operating expenses). As a consequence, TNB's EBITDA margin dropped to 29.5% (FY2007: 37.6%) while our Return on Assets rate declined to 4.6% (FY2007: 6.3%).

#### Dividend Payments

TNB's dividend policy calls for the provision of stable and sustainable returns to shareholders while maintaining an efficient capital structure and ensuring sufficient funding for

future growth. For the financial year ended 31 August 2008, the Board of Directors is recommending a final gross dividend of 10 sen per ordinary share (FY2007: 16.3 sen) less income tax of 25% subject to shareholders' approval at the forthcoming Annual General Meeting. Together with the interim gross dividend of 10 sen amounting to RM320.7 million, the total dividends declared for FY2008 will amount to an estimated RM645.8 million which represents 60.6% of the Company's free cash flow.

#### Enhancing Service Excellence

Service to our customers is the core of our business. Over the course of the year, TNB undertook several initiatives to further enhance service excellence and ensure a reliable and continuous supply of electricity to our approximately 7.0 million customers in Malaysia.

In the year under review, the Group posted an Unplanned Outage Rate of 3.3%, once again surpassing the global industry benchmark of 4.0% and reduced our gearing to 46.9% (FY2007: 49.9%). We brought Transmission & Distribution Losses down to 9.5% (FY2007: 10%) and trimmed down our Transmission System Minutes time to 6.6 minutes (FY2007: 9.3 minutes). We also successfully reduced our Distribution System Average Interruption Duration Index (SAIDI) to 78.0 minutes against 83.0 minutes previously.

New technologies to automate, enhance and simplify various customer-related processes, systems and applications continued to be introduced in FY2008 to ensure better service and for customer convenience. All divisions in TNB successfully renewed their relevant ISO certifications and were focused on following through with their respective continual improvement plans. The Group will continue to work hard to improve on the high standards of operational performance and service excellence that are already in place at TNB.

Fulfilling our customers' demand and expectations for service excellence and a secure and reliable supply of electricity remains our priority. The Board encourages efforts to further engage our customers and stakeholders through various mediums and channels of communications in order to create goodwill and understanding towards service excellence.

#### Industry Issues And Challenges

#### **Energy Supply Security**

Energy supply security is a challenge for the Malaysian Electricity Supply Industry (ESI). Currently, the power sector is faced with limitations on natural gas availability, which have increased our reliance on imported coal. This concern on the country's fuel source and fuel mix, coupled with the present imbalance in the ESI structure and the increasing demand for fuel from China



and India, underlined the urgent need for a comprehensive energy strategy so as not to compromise on our energy supply security.

TNB is working aggressively to identify realistic alternative fuel sources and to diversify our generation mix. We are exploring several options to ensure Malaysia's electricity supply security is sustained in the long run. Hydroelectric power will feature more prominently in the country in the future. In Peninsular Malaysia, approximately 600 MW of the total 1,700 MW hydropower potential is being initiated for development, while the Sarawak Corridor of Renewable Energy (SCORE) has the potential to generate 28,000 MW of electricity for

the country. Other options include tapping renewable energy sources such as solar and biomass. We are also seriously looking at nuclear energy as a source for power generation in the future.

TNB is also committed to increasing energy efficiency in order to reduce wastage. We will continue to engage and educate our customers on the importance of using electricity wisely and efficiently. On the industrial front, we are constantly educating our customers on the intelligent use of energy through the adoption of smart energy systems.



#### Sustainability of the Power Sector

In June 2008, the Government announced an increase in the price of gas to the Malaysian power sector from RM6.40 per mmBTU to RM14.31 per mmBTU and also approved a corresponding adjustment to the electricity tariff. This adjustment allowed TNB to pass the additional cost of gas on to consumers to recover in full the increase in the price of gas, while providing partial relief for the 170% increase in coal price since 2006. However, the tariff adjustment does not reflect the full impact of the higher prices of coal.

Additionally, the imbalance in the allocation of costs in the PPA terms between the IPPs and TNB continues to weigh heavily on the Company.

While we can improve our operational efficiencies through managing the components within our control, these external factors may well impact TNB's sustainability and our ability to provide a reliable and affordable supply of electricity to the people.

We believe energy costs to consumers need to be sensitive to the real cost of supply. In an environment of volatile fuel costs, an automatic fuel cost adjustment mechanism in the tariff structure would better ensure a sustainable electricity supply industry. This, within the context of a National Energy Policy, which is based on long-term perspectives, and a regulatory framework that supports a fair allocation of the cost of supplying power to consumers, would go a long way in meeting the challenges facing the power sector in the years ahead.

#### Corporate Governance

TNB is committed to upholding the tenets of uncompromising integrity, transparency and accountability and to undertaking corporate governance best practices. In facing the challenges and demands of our operating environment, we are continuously reviewing and

enhancing our internal control processes and structures. In FY2008, we established the Corporate Affairs, Planning and Procurement Division to streamline our core business activities and ensure greater focus on strategic issues. The Board also endorsed the setting up of the Fuel Procurement Executive Committee to ensure timely decision-making on fuel procurement, particularly coal.

Three strategic policy documents were also set in place relating to International Business Ventures, Investor Relations and a Treasury Policy, while in August 2008 a toll-free Whistle Blowing Implementation System was launched to further enhance trust and integrity among employees and to ensure that the integrity of the Company and our services is maintained.

The Board was further strengthened with the appointment of an additional independent member with a legal background, and continued to equip its members with relevant knowledge on corporate regulatory and current industry developments through professional advancement programmes.

#### Corporate Social Responsibility

Tenaga Nasional Berhad is committed to undertaking Corporate Social Responsibility best practices that impact positively on all our stakeholders.

Human resource development continues to be our focus and priority in FY2008 through the provision of educational aid and financial contributions. These included educational programmes, such as the PINTAR (Promoting Intelligence, Nurturing Talent and Advocating Responsibility) project for schools in the Northern Corridor Economic Region, Eastern Corridor Economic Region and Iskandar Development Region.



Through our foundation, Yayasan Tenaga Nasional (YTN), the Group also makes an annual contribution of about RM53 million towards helping top and deserving students further their studies in institutions of higher learning locally and abroad. Since its establishment in 1993, YTN has provided educational aid in the form of scholarships and loans to more than 8,000 students.

In FY2008, TNB also invested RM1.32 million in two motivational projects, i.e. "Program Kem Remaja Bestari" and "Program Jejak Kegemilangan" for outstanding students in rural areas. The Group also contributed RM382,500 towards the establishment of an education services centre for children with special needs under the Ministry of Education. Through YTN, the Group also contributed RM200,000 to the National Cancer Council for its mobile cancer screening facility and RM100,000 to welfare homes under the auspices of the Ministry of Welfare.

Meanwhile, TNB's Rural Electrification and "Baiti Jannati" home improvement programmes for the hardcore poor continued to help elevate and improve the standard of living and quality of life of rural communities annually.

The Group's commitment to protecting the environment and environmental conservation initiatives remained strong and continued to be a priority in our policy decisions. Our conservation efforts to date include a bird sanctuary at our power station in Kapar, while our continued involvement with the firefly colony in Kampung Kuantan, Kuala Selangor has helped to conserve the colony and increase the area's tourism potential, indirectly contributing towards improving the economic well-being of the surrounding community. Also, our solar and wind hybrid power plant projects at Pulau Perhentian and Pulau Sibu, among other locations, have had positive impact on communities.

The Group has also been supporting the development of local manufacturers and contractors through our Vendor Development Programme.

#### Awards And Accolades

I am delighted to report that TNB garnered an unprecedented haul of awards and accolades over FY2008. The Company was the proud winner of the coveted Prime Minister's Industry Excellence Award and the Quality Management Excellence Award in FY2008, two years ahead of our initial target. Globally, TNB was placed in the same league as the world's largest and most successful energy producers by the US-based Platts, a leading global provider of energy information, which ranked us 32nd among the top 56 energy companies in Asia and 42nd among the top 250 energy companies in the world.

We also received the Gold Award from the Contact Centre Association of Malaysia and MSC Malaysia in recognition of the TNB CareLine 15454 as the Best Emerging Contact Centre for the GLC Category. Meanwhile, our training institute, TIJB Integrated Learning Solution Sdn. Bhd. (ILSAS), was accorded the Minister of Human Resources Award 2007 in the Training Provider Category. TNB also received the Malaysia Productivity Centre Director General's Award for our commitment to establishing a dynamic workforce.

In recognition of our outstanding occupational safety and health practices, 12 of our power generation stations received awards from the Malaysian Society of Occupational Safety and Health in Fr2007. We bettered Fr2006's performance when the Putrajaya, Cameron Highlands, Sultan Ismail, Tuanku Ja'afar and Chandaroh power stations were accorded Gold Class I Awards, while the Sq. Perak, Galugor, Connaught Bridge and Sultan Azlan Shah power stations were accorded Gold Class II Awards. The Sultan Iskandar and Sultan Mahmud power stations each received a Silver Award, while the Sultan Ismail Petra power station received a Bronze Award.

TNE also received the BrandLaureate Societe Awards 2008 for excellence in corporate social responsibility; the National Award for Management Accounting (NAIMA) Best Practice Award 2007 (Public listed Company); the 2007 Corporate Award (Tier 2, Category 1) by the Institute of Internal Auditors Malaysia; and the Top Corporate Award - Malaysia 1000 from the publisher of the Malaysia 1000 magazine in collaboration with BERNAMA, the National News Agency. The year slap asw TNB winning several other awards for achievements in the areas of quality and technological. innovation - all apt testimonies of our commitment to operational excellence.

#### Going Forward

Tenaga Nasional Berhad expects to face a difficult business environment in the coming year given the volatile global economic climate and the challenges assailing the global energy industry. In tandem with slower economic growth, electricity demand is expected to be lower than the 6.1% growth achieved in FY2008 in Peninsular Malaysia.

The Board of Directors continues to be concerned with these unprecedented challenges, aspecially the volatility of global fuel costs and their impact on the Group's performance. Not withstanding this, the Group is committed to implementing measures that will increase our operational efficiency and mitigate the impact of these external factors to some extent. We will intensify interaction with various stakeholders in order to ensure better appreciation of the costs of providing electricity and of the importance of ensuring that TNB has sufficient income to continue providing reliable and secure supply of electricity to meet future demand for power in the country.

We will also continue to look for new sources of income, including expanding our international footprint and diversifying our earnings base abroad, where appropriate. This, however, will only be undertaken with due diligence and professional assessment of the risks involved.

#### Appreciation

On behalf of the Board of Directors of TNB, I wish to convey my gratitude to our shareholders, affiliates, partners and esteemed customers for their steadfast support and confidence in the Group. My heartfalt thanks to the Government of Malaysia and the various regulatory bodies, in particular the Ministry of Energy, Water and Communications as well as the Energy Commission, for their support and guidance.

To the Managament Team led by Dato' Sri Cha Khalib Mohamad Noh and all TNB amployees, please accept my heartfelt gratitude for your dedication, hard work and the spirit of excellence you have all exhibited. These attributes have helped TNB to maintain its profitability amidst a challenging business environment.

Last but not least, my sincere thenks to my fellow Board Members for your expert guidance and insights. I look forward to your support and continued commitment as we put in place the plans to secure the future growth of the Group. As we focus on steering TNB steadily forward into turbulent yet opportunistic times, I trust that all our stakeholders will continue to give us their steadfast support.

Thank you.

TAN SRI LEO MOGGIE Chairman





In Financial Year 2008 (FY2008), strong demand growth from the industrial and commercial sectors led to a 6.1% increase in electricity demand for Peninsular Malaysia. Against this backdrop, Tenaga Nasional Berhad (TNB or the Group) grew its revenues by 10.4% while making solid improvements on the operational front.

However, the sudden rise in global coal prices, higher capacity payments and inflationary pressures, all led to a drop in the Group's profits. Despite these setbacks, we continued to set our sights on strengthening our financial fundamentals as well as enhancing operational performance to provide a reliable and high quality service to our customers.

### **Exceeding Expectations**

FY2008 saw TNB's business divisions and business units chalking up significant improvements in operational efficiency, with many surpassing their target Key Performance Indicators (KPIs). Our Generation Division successfully achieved an Unplanned Outage Rate of 3.3%, thus beating the industry benchmark of 4% for the third consecutive year. The Transmission Division recorded single-digit Transmission System Minutes time of 6.6 minutes against the KPI target of 7.0 minutes, also for the third year in a row.

The Distribution Division successfully achieved meeting the KPI target of 78 minutes on the Distribution System Average Interruption Duration Index (SAIDI). On top of this, TNB's Transmission & Distribution Losses were successfully reduced to 9.5% against the target KPI of 10%.

Even as we made excellent progress on the operational front in line with our goal of achieving Service Excellence by the year 2010, our efforts did not go unnoticed. We were ranked among the best energy companies in the world on the Platts 250 List for 2007 and attained the prestigious Prime Minister's Industry Excellence Award, two years ahead of our target 2010 date.

# Rising To The Challenge

At the onset of FY2008, the Group had planned to leverage on the previous year's notable achievements (namely record profits, strong operational performance, and value creation initiatives) to optimise our financial and operational performance going forward. With the benefits of these key drivers in place, we had also made preparations to face higher coal prices and absorb the full impact of new IPP Tanjung Bin joining the energy industry bandwagon.

However, despite kicking off to a good start in the first half of the year, our progress in the second half of FY2008 was severely hampered by the sheer weight of volatile global coal prices that surpassed all expectations. Higher capacity payments and inflationary pressures too, impeded the Group's progress. As a result of having to battle these higher external costs plus foreign exchange translation losses due to the weakening of the Ringgit against the US Dollar and Japanese Yen, TNB's performance deteriorated significantly over FY2008.

The effects of volatile fuel prices over the year resulted in us having to give up almost all gains from our efficiency initiatives. The 10.4% increase in revenue to RM25,750.6 million in FY2008 against RM23,320.4 million previously, was not enough to absorb the drastic rise in fuel costs and the resultant 22.5% increase in operating expenses. As a result, TNB's net profit declined by 36.1% to RM2,600.4 million against net profit of RM4,067.6 million the year before. The Group's EBITDA margin too, dropped to 29.5% against 37.6% previously, while our rate of Return on Assets declined to 4.6% against 6.3% previously.

The increase in operating expenses stemmed mainly from higher electricity generation costs, namely IPP and fuel costs which made up some 60.5% of total operating expenses. IPP costs increased 22.4% from RM7,726.0 million in FY2007 to RM9,454.1 million in FY2008; while net fuel costs rose 40.4% from RM2,959.5 million in



FY2007 to RM4,156.6 million in FY2008. TNB's total capacity payments to IPPs increased by 22.0% from RM3,452.5 million in FY2007 to RM4,213.2 million in FY2008.

This is set to increase further to RM4.4 billion in FY2009 once the Jimah coal-fired power plant is commissioned. When the Jimah power plant comes online, our installed capacity will increase by an additional 1,400MW thereby raising the reserve margin to 47% from 40.8% currently. Come FY2009, energy payments to IPPs will also increase by 63.5%, from RM5.2 billion in FY2008 to an amount in excess of RM8.5 billion.

In FY2008, the Group faced the challenge of securing coal prices at the lowest level possible amidst a backdrop of highly volatile global fuel prices. This situation is expected to continue into FY2009 and will add further pressure on the Group's profitability going forward.

The second half of FY2008 also saw the Ringgit weakening against both the US Dollar and Yen which gave rise to a translation loss of RM469.6 million. This resulted in a net translation gain of only RM53.2 million for the full year FY2008. The weaker currency also saw the cost of coal as well as the cost of parts, equipment, services and interest, all rising in the second half of the year.



Over the last four years, our endeavours to provide quality services to our customers while providing value to our shareholders had resulted in the creation of value/savings totalling RM2.6 billion or approximately RM652.8 million on average per annum. Unfortunately, the high volatility in coal prices for FY2008 resulted in a RM1.3 billion increase in TNB's total coal cost which completely negated the gains for this year. Based on the lower operating profit margin posted, TNB registered an economic loss of RM2.0 billion for the year under review compared to an economic loss of RM741.4 million in FY2007.

#### Towards Service Excellence

In the year under review, TNB continued to see through its 20-year Strategic Action Plan (Plan). Developed in 2005, the Plan sets the strategic direction of TNB for the period 2006-2025. Upon the first phase, the T7 Strategy, came to a close in FY2007, the next phase – Service Excellence 10/10 (SE 10/10), is now running smoothly.

Under the SE 10/10 phase which calls for TNB to achieve Service Excellence by the year 2010, TNB will endeavour to be the nation's best run company by 2010 and rank among the region's top companies as well. Our long-term goal is to command global leadership in the relevant business areas by the year 2025, while establishing a reputation as a strong business partner and creator of shareholder value. Ultimately, we aspire to be acknowledged as one of the most admired companies in the world. The SE 10/10 requires our commitment to building customer and stakeholder loyalty, enhancing service excellence and operational effectiveness as well as driving business expansion, locally and globally.

Despite the pressure of external forces upon the Group's operations, we have to date succeeded in achieving many strategic objectives under the SE 10/10. In fact, our efforts in continuously enhancing TNB's efficiency and productivity, has resulted in us winning – two years ahead of our target 2010 date – the nation's highest quality management award, the Prime Minister's Industry Excellence Award.

To ensure that we align with the realities of our operating environment and future business needs, we will review the Plan and reassess the strategies for implementation during the 2011-2015 phase which advocates geographical business expansion. Even as we continue working the Plan, we will focus our efforts on continuously improving ourselves, to move into a position of strength from where we can secure the growth of TNB and create more value for our stakeholders.

# Serving Customers Better

One of the immediate priorities within the SE 10/10 Plan is to continue serving our customers better. The year under review saw us focusing our efforts on refining our delivery system through customer-oriented initiatives that elevated customer satisfaction levels and helped build customer confidence in TNB.

We took our diverse customer convenience efforts up a couple of notches by introducing a diverse range of handy payment channels that included direct debit, phone banking, auto payment (via credit card) and mobile money options. The implementation of the new QMatic queue management system at 40 Kedai Tenaga service outlets helped optimise customer flow and create a more relaxed atmosphere for both customers and staff at these centres. The QMatic system allows TNB to keep better track of the customer waiting time and transaction time for each counter service. More systems will be installed at other centres in due course. Our Kedai Tenaga frontliners were also put through customer orientation training and our "Service with a Smile" Campaign to enhance their customer service skills, all with the aim of making the customer service experience a delightful one.

Enhancements to our TNB Careline 15454 Call Management Centre (CMC) saw the addition of a Short Message Service (SMS) option that allows subscribers of Celcom, Maxis and Digi to text in reports of electricity supply breakdowns and faulty streetlights. New state-ofthe-art technology including Interactive Voice Recording, IP Telephony and CTI equipment were installed at the CMC to better manage customer enquiries. Our efforts bore fruit when TNB CareLine 15454 was voted the Best Emerging Contact Centre in the GLC Category by the Contact Centre Association of Malaysia and MSC Malaysia.

Over FY2008, we also introduced new technologies to automate and enhance various processes. The Electronic Customer Information Billing System (e-CIBS) underwent enhancements, while the e-Application system was launched to simplify the application process and speed up electricity supply to customers. The e-Application service has also helped reduce red tape and our housing developer customers now need only make a single application for a project instead of multiple applications.

Some of the other innovative customerrelated applications that are being tapped include the Customer Feedback System or Sistem Maklumbalas Pelanggan (SMP), the Enterprise Wide Resource Management System (EWRM) and the TNB Outage Management System (TOMS). The SMP enables complaints from different groups to be channelled onto a single platform. To ensure complaints and comments are captured, our customer repository database for all 6.9 million customers enables us to view customer feedback on a single platform. This integration of customer information and the ability to monitor, report and evaluate the feedback goes a long way in helping us take Customer Relationship Management (CRM) service levels to new heights. The Mobile Field Force Automation (MFFA) pilot project launched in Shah Alam in January 2008 has now been implemented throughout all of Selangor and Wilayah Persekutuan. It allows instant feedback on what is happening onsite and customers are updated as to when supply will be restored via the TNB Careline. The MFFA project is expected to be rolled out in Johor and Penang by the end of 2008.

We recognise that the delivery of a reliable power supply to our customers is essential to earning their loyalty. As such, we have gone all out to implement two-way communication to better understand and meet our customers' expectations. A structured and focused data and information gathering exercise has been in place these last 10 years to obtain customer feedback and complaints. It entails the use of a variety of mediums that include a structured Customer Satisfaction Index (CSI) survey, feedback forms at Kedai Tenaga service outlets, and a survey done via the TNB Careline 15454 CMC. The survey is being conducted by an international company that provides independent feedback on TNB's service levels and highlights areas for improvement. The FY2008 survey showed an improvement in TNB's CSI from a scale of 6.8 to 7.1 (based on a scale of 1 to 10), placing us among the top 30% of companies in the world.

From time to time, we engage in dialogue and hold meetings with industry leaders, businesses and representatives from government agencies to gauge their feedback and understand their perspectives. These high-level discussions, which typically involve the Group Senior Management, offer us a platform to better understand customer needs and address complaints in greater depth. Our top 1000 Large Power Customers (LPCs) are managed through a special programme called the PRIME Management Programme whereby TNB executives personally visit the LPCs to listen to their concerns and provide solutions. On 1 December 2007, TNB embarked on Corporate Account Relationship Enhancement or CARE Programme to forge a closer two-way relationship between TNB and our corporate customers. In 2009, we will launch a new customer-centric programme which will result in a marked transformation of the way we are delighting customers.



#### **Ensuring Supply Reliability**

Like any other electric utility company in the world, TNB has the task of ensuring a secure and uninterrupted power supply to its customers. Our steadfast focus on operational excellence in our core electricity generation, transmission and distribution activities enables us to fulfill our obligation of "Keeping the Lights On".

Over the course of the year, our Generation Division embarked on several initiatives to ensure adequate generation capacity and to enhance the availability and reliability of existing generation power plants. These included the repowering of Phase 2 of the 750 MW combined-cycle gas turbine plant at the Tuanku Ja'afar Power Station in Port Dickson and the development of two hydro projects in Peninsular Malaysia. The various measures undertaken by the Generation Division resulted in TNB registering an Equivalent Unplanned Outage Factor (EUOF) of 3.3% thus beating the 4% world class industrial banchmark EUOF for the third consecutive year. This has resulted in several of TNB's power plants being placed together with their paers in the top quartile of the North American Electricity Reliability Corporation database.

TNB's Transmission Division is responsible for making improvements to transmission network reliability which ensures high system reliability, security of supply as well as high system availability and improvements to restoration time. Transmission network: reliability is measured in terms of System Minutes - which measures the supply interruption to consumers due to transmission network failure. Our Transmission Division achieved a System Minutes time of 5.6 minutes for FY2008 - yet another single digit figure for the third time in a row; plus it sustained its zero Major Disturbance record.

The SAIDI is defined as the average interruption (in minutes) for each customer per year and it is an important measure of the performance of our distribution network. In F72008, the Distribution Division recorded a SAIDI of 78 minutes compared to 83 minutes previously.

In March 2005, the Division established a dedicated team called the Special Engagement against Losses (SEAL) team to reduce non-technical losses by eliminating losses of under-billing and preventing piliferage of electricity. The SEAL team originally concentrated their efforts on LPCs and later extended this to Ordinary Power Customers (OPCs). The team has identified a substantial amount of back-billing and collection activities are underway for the outstanding amounts.

Additionally, we have taken steps to enhance our monitoring and detection capabilities by implementing the Remote Meter Reading (RMR) project and by upgrading our existing monitoring and detection systems. The RMR project provides THB and our customers a better understanding of load profiles or usage patterns in order for customers to manage their energy consumption more efficiently. Initially implemented among all high voltage and medium voltage LPCs, RMR implementation has now been extended to low voltage LPCs.

As part of our endeavours to ensure adequate system capacity and supply reliability, we continue to make significant investments in electricity supply systems. At the same time we are ensuring that additional generation capacity is integrated into the system in a timely and efficient manner.

Over the course of 2008, there were several ongoing major generation projects. The Tuenku Js'afar Power Station Rehabilitation Phase 2 (PD2) Project is on course for a combined cycle commercial operation by end of 2008. Once fully commissioned, it will add an additional installed capacity of 750 MW to the existing 750 MW PD1 plant.

A major rehabilitation project in the Cameron Highlands and Batang Padang Hydroelectric Schemes is the Plant Life Extension and Automation Project which is scheduled for completion in early 2009. The Ringlet Reservoir has been substantially restored to its original holding capacity by desilting. The rehabilitation project is expected to extend the operating life of the Cameron Highlands Hydroelectric Scheme by another 30 years after having been in operation for the last 45 years.

With fossil fuel costs on the rise, there is a need to continuously identify and harness all possible hydro power potential in Peninsular Malaysia and Sarawal. Currently two major hydroelactric projects are in the stages of procurement – the Hulu Terengganu Hydroelactric Project (with planned capacity of 250 MW) and the Ulu Jelai Hydroelactric Project (with planned capacity of 372 MW), are targeted for completion by 2013 and 2014 respectively.

The 300 MW coal-fired IPP Project in Sabah, which was awarded to a TNB subsidiary in the last financial year, has had to be relocated to a new site. Approval from the State Government is being sought to start the project.

The year also saw us implementing system improvements to strengthen our network and improve supply security. A total of thirty-eight transmission projects. were fully completed and commissioned during the year in review. The 500 EV transmission lines that connect the Jimah IPP Coal Fired Power Station to the Langgeng Substation and the Olah Lempit Substation were completed in January 2008. The Langgang 500/275 kV substation was commissioned in the same month. In the Eastern region, the Handis 275/132 HV substation that was energised in December 2007 now functions as the alternative supply point from the National Grid to the state of Kalantan, It is also the prime substation. for the development of the Eastern Economic Corridor.

To meet the nation's future electricity needs, TNB signed a Head Of Agreement on 7 May 2008 with Sarawak Energy Berhad (SEB) for the supply of power to Peninsular Malaysia from hydro-electric schemes via High Voltage Direct Current (HVDC) overhead lines and submarine cable, and coal power plants in Sarawak. In this agreement, apart from Bakun, SEB also agrees to supply 3,000 MW of electricity to TNB from 2017 to 2020 and a further 5,000 MW from 2021 to 2030. To mitigate the energy supply security issue, TNB is exploring the viability of nuclear power as an alternative energy resource for the future. We have been working closely with other stakeholders and agencies, in particular the Malaysian Nuclear Agency (Nuclear Malaysia) and Atomic Energy Licensing Board (AELB) on this option. Last but not least, we are also investigating suitable means to increase the penetration of Renewable Energy (RE) and Energy Efficiency (EE) alternatives to supplement our efforts in the conventional fossil and hydro schemes towards ensuring our national energy security for the near future.

# Driving Capacity Building

TNB's greatest asset is its workforce of almost 25,000 employees and we are committed to developing their capabilities. Even as we explore new frontiers globally, we are investing in a talent pool of able leaders that will carry the torch for the Group's long-term growth and ensure we maintain our competitive edge. In line with the Government's call for capacity building, we have embarked on several initiatives to develop a highly competent workforce and leaders of high competency and unwavering integrity.

TNB's Succession Management Programme aims to ensure there is a ready pool of good leaders and professionals with critical skills to sustain our businesses and move TNB forward. The programme incorporates



individual development plans for highpotential executives to prepare them for advancement to higher positions within TNB. To date, we have 288 talents in our talent pool, while there are 254 key leadership positions. Potential successors have been nominated for 85% of these positions.

The Specialist Career Path programme aims to address the imbalance between technical and management skills by retaining and rewarding technical experts in their respective fields of specialisation while teaching them managerial skills. It is implemented as a dual-career path strategy covering both technical and management aspects. The scheme has been in existence for four years and to date two specialists and 24 technical experts have participated in the programme. Two of them even received international recognition for their flashover analysis tool and power quality guidebook initiatives.

In June 2008, the inaugural GLC Talent Exchange initiative amongst GLCs was launched. Two of our top candidates were assigned to Celcom Berhad and Malaysian Building Society Berhad (MBSB) for one year. In return, we accepted two candidates, one each from Malaysia Airports Holdings Berhad and MBSB.

During the period under review, 114 developmental and 1110 mandatory technical and non-technical training programmes were conducted for executives and non-executives respectively. The programmes have been designed to ensure that TNB employees are equipped with competencies that raise organisational efficiency and productivity. On top of this, TNB's training institute, the TNB Integrated Learning Solution Sdn. Bhd. (ILSAS), conducted supplementary programmes to educate staff on the commercial aspects of running an organisation.

In line with the SE 10/10 programme to achieve geographical business expansion, overseas job assignments for selected candidates have been implemented to enhance their knowledge and broaden their exposure in relevant fields. Engineers have been seconded to TNB Liberty Power Limited (TNB LPL) in Pakistan and Shuaibah III Independent Water and Power Project (Shuaibah) in Saudi Arabia.

To support the development of local manufacturers and contractors, we continue to build upon our Vendor Development Programme. We are enabling Bumiputra vendors to manufacture some of the equipment we use by linking them to banks providing financing facilities plus offering them the necessary support from our quality and research units. This win-win situation sees our suppliers getting our business, TNB getting our hands on good quality equipment, and our consumers being assured of continuous supply. Since 1993, 65 types of import substitution products have been developed and RM3.8 billion in contracts have been awarded to companies under the programme. Our commitment to the vendor development programme shows how serious we are about nurturing Bumiputera companies to become global players.

# Prioritising Safety And Health

Safety continues to be a priority at TNB and our comprehensive Occupational Safety and Health (OSH) Management System, aptly known as the Safety Excellence Management System (SEMS), is a tangible reflection of our commitment to keeping our employees safe.

TNB's qualified Safety and Health Officers ensure that the organisation is ready for any crisis or emergency situation. They are backed up by second level Safety Inspectors and third level Safety Representatives who ensure that OSH performance further down the job chain is monitored and reported to the management.

It is mandatory for all TNB staff to be exposed to OSH and to attend training while practitioners are required to impart OSH knowledge. To this end, continuous training programmes, seminars, conferences, symposiums and workshops are held for all levels. All TNB contractors too are educated on the importance of OSH. The NIOSH-TNB Safety Passport developed in collaboration with the National Institute of Occupational Safety and Health (NIOSH) ensures contractors are aware of the basic requirements of occupational safety.

Members of the public too are made aware of electrical safety through educational programmes aimed at schools, non-governmental organisations, industries and various associations. We also carry out safety campaigns in an effort to ensure maximum information dissemination.

FY2008 saw a total of 12 TNB power stations winning Gold Medal Class 1 & 2, Silver and Bronze medals at the Malaysian Society of Occupational Safety and Health (MSOSH) Awards 2007.

# Expanding Our International Footprint

As there are limited opportunities for business growth in Malaysia, we will look at expanding our international footprint to expand our revenue base – be these assets or service opportunities. Diversifying our earnings base abroad, will also help us to spread our business risk and create new sources of income. We will continue to implement a strategy of adding value to TNB's core competencies rather than act as an equity investor. Rest assured that we will undertake due diligence even as we study the feasibility of these markets and the risks involved.

Our wholly-owned subsidiary in Pakistan, TNB LPL, continues to make operational profit, although FY2008 saw TNB LPL experiencing losses due to foreign exchange losses. Despite the political challenges in Pakistan, the plant has successfully improved its operational efficiency and is now one of the most reliable plants in that nation. In FY2008, the annual dependable capacity (ADC) of TNB LPL improved from 211.7 MW to 213.3 MW, exceeding the initial Commercial Operations Date ADC of 212 MW.



Our investment in Saudi Arabia through the consortium Saudi-Malaysia Water and Electricity Company Limited (SAMAWEC) for Shuaibah is also progressing well. The plant's commissioning will take place as scheduled in July 2009.

We are also looking at opportunities in ASEAN in terms of power plants as well as the provision of services and are also exploring more opportunities in the Middle East. We will leverage on the repair and maintenance skills of TNB Repair and Maintenance Sdn Bhd (REMACO) to gain a foothold in these markets. TNB has some 59 years of experience and staff with the relevant expertise and skills to undertake international projects and the export of our expertise will help build our reputation globally. This initiative is also consistent with Khazanah's aspirations of having the GLCs become global players in the long run.

TNB has also been providing training services to personnel from power utility companies in Vietnam, Yemen, Mongolia, Laos, Indonesia, Thailand, Nepal, Egypt and Pakistan through our training institute, ILSAS, and we will be looking to explore new training opportunities via ILSAS.

While we are optimistic about our overseas ventures based on our capabilities, the challenge will be the global economic slowdown and access to funding as new plants require huge capital investment.

The Way Forward

The world economy is expected to face continuing pressure from volatile fuel prices, the global financial meltdown and the resultant economic turmoil that is affecting economies around the world.

While Budget 2009 in August 2008 projected a GDP growth of 5.4%, the Malaysian Institute of Economic Research has more recently forecast a lower GDP of 3.4% for 2009 due to the poor global economic outlook. The current turmoil in the global financial markets, if prolonged, may impact global demand and indirectly slow down regional economic growth including the Malaysian economy. Consequently,

due to a less than promising economic outlook, the growth in electricity demand is expected to be lower than the 6.1% growth achieved in FY2008.

Going forward, concerns over the impact of global energy prices, especially the volatility in coal prices, increase in IPP capacity payments and inflationary pressure will continue to pose the main challenges for TNB. Our results this year are a clear manifestation of this phenomenon.

Moreover, TNB will face significant challenges in FY2009 when the 1,400 MW Jimah Power Plant is commissioned and capacity payments and the reserve margin are raised. Furthermore, weakening of the Ringgit will result in



[ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

higher fuel costs and procurement costs for imported parts, equipment and services; as well as increased interest cost on US Dollar and Yen-denominated loans.

The extent to which increases in electricity generation cost can be recovered will determine the financial condition of TNB and affect our ability to make future investments in a timely manner. While we are not able to change or influence the market forces that are driving fuel costs higher, we will continue improving the efficiency of our operations to lieep costs low and to strengthen our competitive position. We will also focus on strengthening our financial fundamentals and will continue to provide high quality and reliable services to our customers. At the same time we will continue to be a catalyst for the nation's progress and ensure positive economic returns to our shareholders.

Given the volatile global economy, the anticipated lower electricity demand and higher operating costs, the Group's financial outlook for FY2009 remains challenging. Notwithstanding this, TNB is committed to providing all its customers with a reliable supply of electricity and raising the level of service and operational excellence. We will pursue the SE 10/10 value-creation initiatives to secure the Group's growth going forward.

**Admowledgements** 

I would like to accord our sincere appreciation to the Government of Malaysia, the Ministry of Energy, Water and Communications, the Ministry of Finance, the Ministry of International Trade and Industry, the Energy Commission, the Malaysian Industrial Development Authority and other government agencies for their steadfast support of TNB. Our utmost thanks go to our valued shareholders and customers for their unwavering confidence and faith in the Group.

I would like to extend my deepest appreciation to our dedicated employees for their perseverance and the excellent work they have carried out despite a turbulent operating environment. Last but not least, my heartfelt gratitude to the Board of Directors for their wisdom and insight that has kept us going strongly. I look forward to the full support of all our stakeholders as we move forward to secure TNB's growth.

DATO' SRI CHE KHALIB BIN MOHAMAD NOH

President/Chief Executive Officer







Datuk Wira Md Sidek bin Ahmad Senior Vice President (Operations & Technical)





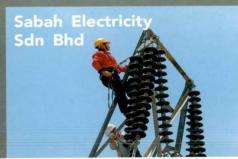








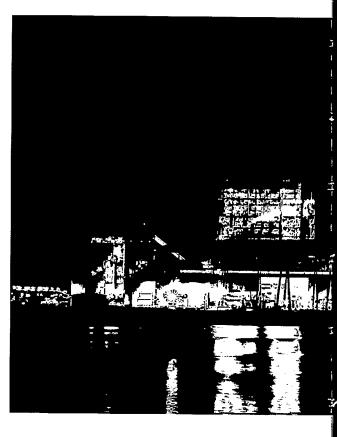






# Generation

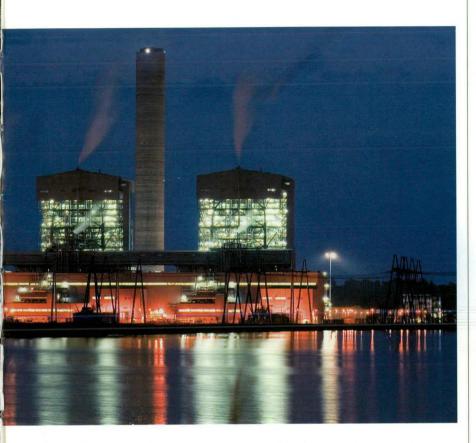
Moving forward, Generation Division is confident that it remains on track in its pursuit of achieving World Class Generation Performance. Our commitment to satisfying our customers and stakeholders remains one of our core focuses. We will continue to optimise our generation asset utilisation and increase our technical competencies. With our experience and track record, we will endeavour to expand our services locally and abroad.



# Highlights of Achievements:

- Equivalent Unplanned Outage Factor maintained better than the World Class industrial benchmark of 4% for 3 consecutive years.
- Thermal Efficiency continues to improve and further improvement is expected to be attained when PD2 comes on-line by end 2008.
- Our engineers are playing major roles in energy-related projects in support of THB's overseas ventures.
- All power stations and Generation Division headquarters are MS ISO 9001:2000 certified. All power stations are MS ISO 14001 certified. Some Power Stations have won national awards such as the Malaysian Society for Occupational Safety and Health (MSOSH) Awards and National Council for Occupational Safety and Health (NCOSH) Award.
- The Division was actively involved in contributing towards TIIB's achievement of the ARIPM award.





Divisional Goals

The Generation Division, one of the core business divisions of TNB, is entrusted to operate and maintain six thermal power stations and three major hydro electric power generating schemes in Peninsular Malaysia. The Generation Division also supports the operations and maintenance of three IPPs, namely the wholly-owned Sultan Azlan Shah Power Station and TNB Liberty Power Limited of Pakistan, and the majorityowned Sultan Salahuddin Abdul Aziz Shah Power Station.

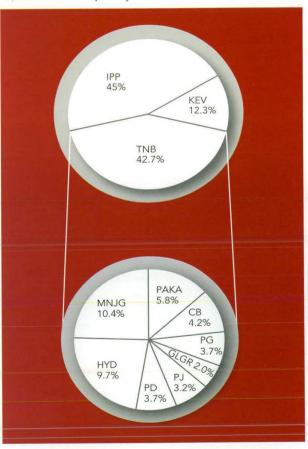
The Division, through its business unit TNB Repair & Maintenance Sdn Bhd (TNB REMACO), also provides repair and maintenance services as well as operations services not only to TNB's fleet of generating plants (including the 3 IPPs) but also to external customers. TNB REMACO has also set up a parts and spares trading unit (BuyCo) to expand its revenue base (to diversify its business).

The Division also provides technical expertise in energy-related projects in support of TNB's overseas ventures.

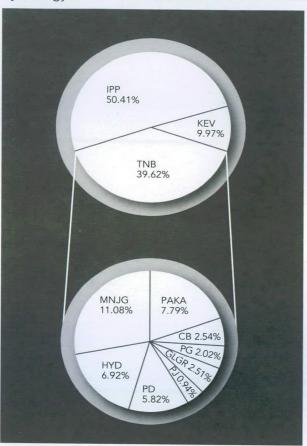


Mohd Nazri bin Shahruddin Vice President

**Graph 1:**Generation Capacity for FY2007/2008



**Graph 2:**Overall Generation Market Share by Energy Sales for FY2007/2008



**Graph 3:**Monthly Comparison of Generation Market Share by Energy Output for FY2007/2008

# Operational Summary

The total installed capacity for TNB Generation Division is 8,416 MW, comprising of 6,505 MW thermal and 1,911 MW hydro plants. The generating capacity will remain the same until end of 2008 when Tuanku Ja'afar Power Station's new 750 MW combined cycle plant comes on stream in December 2008. The capacity market share of TNB is 42.7%. (Please see Graph 1)

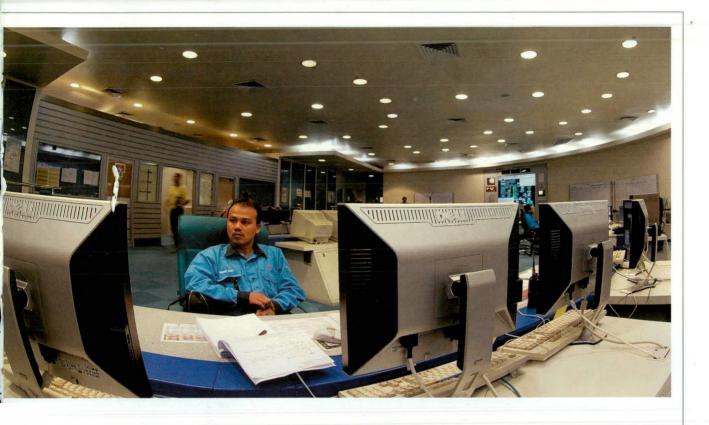
Due to the full commercial operation of Tanjung Bin's 3 x 700 MW coal-fired power plant (an IPP) and marginal increase in system energy demand, TNB's market share decreased to 39.6%, a reduction of 0.1 percentage point year-on-year. Manjung Power Station contributed the highest energy sales of 27.96% to the system for TNB power plants.

**Graph 2** indicates the overall generation market share for FY2008 and **Graph 3** shows a comparison of monthly energy market share for FY2007 and FY2008.

Generation from gas fuel contributed 54.46% of the total energy sales by TNB Generation, followed by coal at 27.96% and hydro at 17.47%. TNB plants' generation fuel mix for the period under review has not changed significantly compared to last financial year. Graph 4 shows the generation fuel mix for TNB Generation for FY2008.



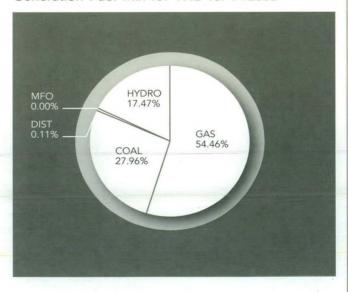




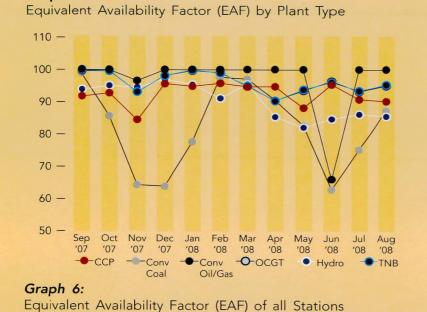
#### Technical Performance Review

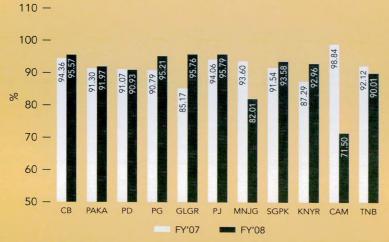
Plant Equivalent Availability Factor (EAF) TNB Generation's EAF for FY2008 is 90.01%, a reduction of 2.14 percentage point compared to FY2007. As shown in *Graph* 5, lowest EAF was recorded in November 2007 at 83.19% due to some planned and unplanned outages during the month. (This was largely due to major overhaul works at Manjung Power Station and the unplanned outages of steam turbines at Paka Power Station). The overall station performances for FY2008 were excellent, with 80% of the stations having exceeded the EAF of more than 90%. *Graph* 6 shows the EAF of all the stations.

**Graph 4:**Generation Fuel Mix for TNB for FY2008

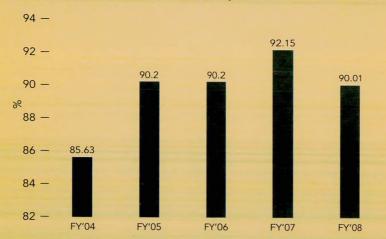


Graph 5:





Graph 7: Trending of Equivalent Availability Factor



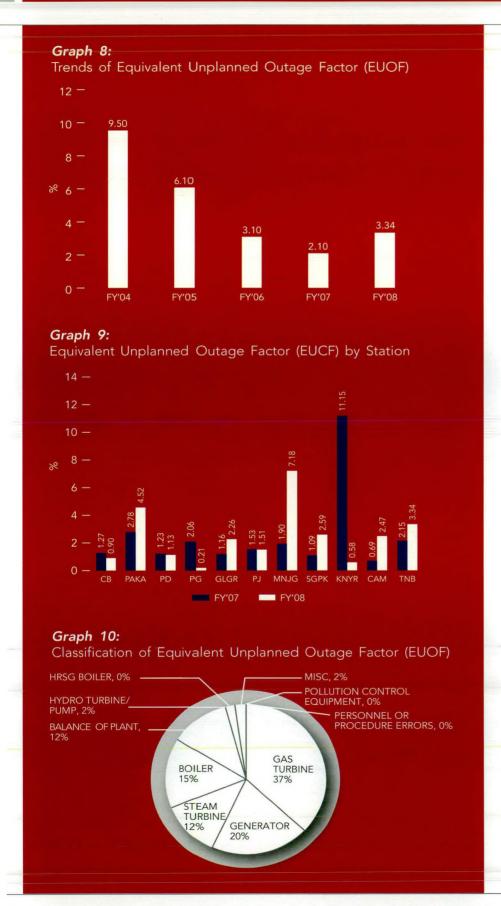
Graph 7 shows the EAF trend since FY2004. For FY2008, the EAF achieved was 90.01%, which is higher than the target value of 88.6%. The main planned outages were Major Overhaul at Manjung Power Station's U1, Turbine Inspection at Tuanku Ja'afar Power Station's GT1A, Inspection at Connaught Bridge Power Station's GT5C and Life Extension Project at Cameron Highlands Power Station.

Among the different plant types, conventional oil/gas thermal plants have achieved an EAF of 96.69% followed by opencycle gas turbines at 96.11%, combined-cycle plants at 92.48%, hydro plants at 90.52% and conventional coal thermal plants at 82.01%.

# Plant Equivalent Unplanned Outage Factor (EUOF)

TNB Generation's EUOF was better than the World Class industrial benchmark of 4% for the last three consecutive financial years. The EUOF achieved for FY2008 was 3.34%. Graph 8 shows the EUOF trends from FY2004 to FY2008.

Overall, EUOF was excellent with 80% of the stations having achieved EUOF of less than 4%. Both Paka and Manjung Power Stations recorded high EUOF due to the mechanical failures of the steam turbines. Graph 9 shows the EUOF achieved by all the power stations for FY2008. Details by cause codes for the unplanned outages are as shown in Graph 10.



# **Energy Unit Sales**

The total energy unit sales for FY2008 were 37,770 GWh, higher than the target value of 32,860 GWh by 14.9%. Manjung Power Station contributed the highest unit sales of 10,562 GWh, followed by Paka Power Station (7,426 GWh) and Tuanku Ja'afar Power Station (5,546 GWh).

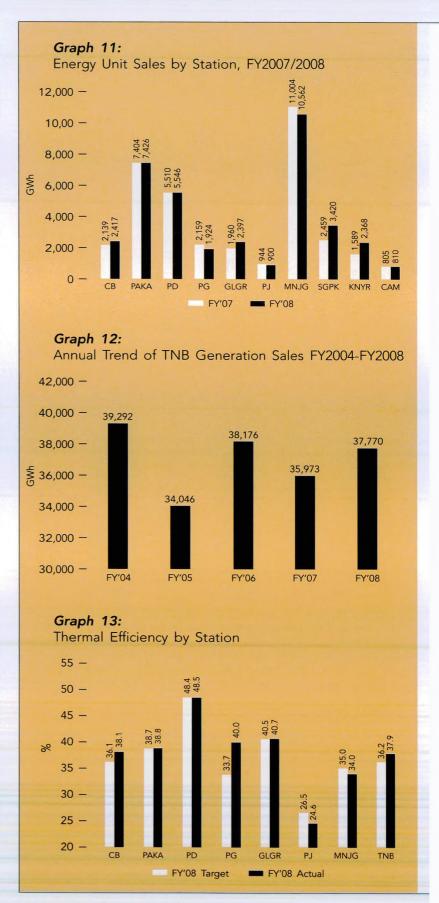
**Graph 11** shows the comparison of energy sales by power stations for FY2007 and FY2008.

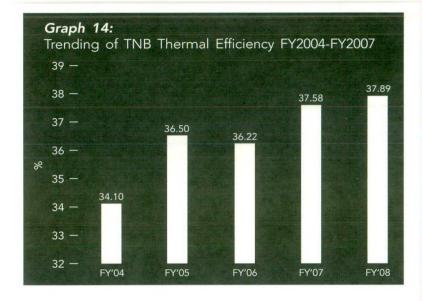
# Thermal Efficiency

Generation Division's overall net thermal efficiency was 37.9%, an improvement of 1.7% compared to the target of 36.2%. Most of the thermal plants exceeded their targets. They were achieved mainly due to higher load factor of the plants. *Graph 13* shows the comparison between actual and targeted value of the thermal efficiency for FY2008. Over the years the thermal efficiency has improved from as low as 34.1% in FY2004 to 37.9% in FY2008 as indicated in *Graph 14*.

### Major Projects

The Tuanku Ja'afar Power Station Rehabilitation Phase 2 (PD2) Project is on course for a combined cycle commercial operation by end of 2008. The individual gas turbine had successfully reached their base loads on 17 July and 22 July 2008 respectively. The Steam Turbine Generator Synchronisation milestone was achieved on 5 August 2008. As of August 2008, the project is 98% completed. Once commissioned, it will add an additional installed capacity of 750 MW to the existing 750 MW PD1 plant.





A major rehabilitation project in the Cameron Highland and Batang Padang Hydroelectric Schemes is the Plant Life Extension and Automation Project which is scheduled for completion in early 2009. The Ringlet Reservoir has been substantially restored to its original holding capacity by desilting. The rehabilitation project is expected to extend the operating life of the Cameron Highlands Hydroelectric Scheme by another 30 years after having been in operation for the last 45 years.

Two major hydroelectric projects are now in the early stage of procurement. They are the Hulu-Terengganu Hydroelectric Project (planned capacity of 250 MW) and the Ulu Jelai Hydroelectric Project (planned capacity of 372 MW). These projects are targeted for completion by 2013 and 2014 respectively.

The 300 MW coal-fired IPP Project in Sabah, which was awarded to TNB in the last financial year, has to be relocated to a new site. Approval from the State Government is being sought to start the project.

TNB is seeking approval from the relevant authorities to redevelop the Prai Power Station. If successful, a 220 MW Open Cycle Gas Turbine (OCGT) power plant will be constructed.

# Quality Improvement Initiatives

As a follow-up to the success of its implementation of the T7 strategy, the Generation Division has formulated the following four initiatives which embody its focus to the year 2010 in support of TNB's Service Excellence 10/10 (SE10/10) programme:

- Optimisation of true life cost
- 2. Development of human capital for global growth
- 3. Positioning TNB REMACO for overseas business
- Establish customer/stakeholder management programme

#### 1. Optimisation of true life cost

The Division intends to optimise its power plants' true life-cycle cost on a continual basis to minimise the long-term total cost of ownership. Activities identified include:

- a. Enhance Project Development and Control.
- Optimise Generation Marginal Cost.
  - Install Generation Plant Management System (GPMS) to analyse Plant Performance in Real Time and decide on the overall operation regime.
  - Improve plants Tested Annual Available Capacity (TAAC) and heat rate.
  - Reduce cost of spare parts.
- c. Improve plant reliability.
  - Implement Risk Based Inspection (RBI) and Reliability Centred Maintenance (RCM).

# 2. Development of human capital for global growth

The Division has identified the availability of highly competent workforce and leaders as one of its critical success factors. In this regard, several programmes have been developed by the Division's HR:

- Provide core leadership training to the relevant target groups through identified courses in Executive Development Programmes, Succession Management and advanced leadership courses.
- Provide technical training as per staff job function through mandatory courses, certification training and public courses.
- Training for compliance with Regulators and Environmental Standard.

# 3. Positioning TNE REMACO

TNB Repair and Maintenance Sdn. Bhd. (TNB REMACO), is a wholly owned subsidiary of THB. It provides repair and maintenance services to THE group core activities especially in power plants and distribution transformer maintenance. It has also established a repair shop with capability to refurbish various components of power plants. It has strived vigorously to fulfil its functions efficiently and effectively, building a national reputation of angineering excellence.

THE is positioning THB REMACO to bring in extra revenue to THB by actively marketing its services in power generation sector and energy-related industries to external customers locally and abroad. To date, THB REMACO has succeeded in securing works with several Independent Power Producers including Petronas CUF in Kerteh and Gebeng for scheduled maintenance of gas turbine. THB REMACO has also provided repair and maintenance services to ASEAN countries.

# 4. Establish customer/ stakeholder management programme

The Division is fully committed to not only meeting but exceeding all customers and stakeholders expectations. In this regard, it fully supports TNB's newly established Corporate Affairs Division and its activities to enhance all stakeholder interaction, especially with the regulators and customers.

# Implementation of Process Standardisation and Improvement (PSI)

The Process Standardisation and Improvement (PSI) initiative, based on ISO 9001:2000 certification framework, has been implemented in all power stations, departments and subsidiaries under the Generation Division since 2005. All the areas mentioned above have been certified by SIRIM UKAS to the ISO 9001:2000 Quality Management System.

The Division had also established Customer Feedback Management System as part of its ISO 9001 Quality Management System to manage customer feedbacks and complaints through surveys and other channels.

# Human Resource Capacity Building

The Generation Division has drawn up various training programmes to further enhance the technical and business competencies of its workforce so as to enable them to contribute positively towards achieving its business objectives which among others, also include the new initiatives of expanding its non-tariff revenue and overseas bidding for new power plant projects. It is also part of the strategic initiative to achieve TIIB's SE10/10 target. Staffa were also being sent to quality training programmes organised by SIRIM, NIOSH and MPC to be accredited as auditors and system implementers.

The Division's in-house experts had been rigorously implementing Reliability Centred Maintenance (RCM) and Reliability Based Inspection (RBI) as part of the effort towards 0% EUOR. In addition, Total Productive Maintenance (TPM) is being introduced to enhance the above effort.

#### **Awards**

In beeping with its track record as an award-winning Division, the power stations under the Generation Division listed below had won various accolades and awards during the period under review.

### MALAYSIAN SOCIETY FOR OCCUPATIONAL SAFETY AND HEALTH (MSOSH) AWARDS 2007

#### GOLD CLASS 1

- Cameron Highlands
   Hydroelactric Scheme
- Sultan Ismail, Paka Power Station
- Chandaroh Power Station
- Putrajaya Power Station
- Tuanku Ja'afar, Port Dickson Power Station

#### GOLD CLASS 2

- Jambatan Connaught, Kelang Power Station
- Sg. Paral: Hydroalactric Scheme
- Gelugor Power Station
- Sultan Adlan Shah, Manjung Power Station

#### SILVER

- Sultan Mahmud, Kenyir Power Station
- Sultan Iskandar, Pasir Gudang Power Station

#### **BRONZE**

Sultan Ismail Petra, Pergau
 Power Station

GOLD

· Chenderoh Power Station

In addition, the Division's ICC teams from various stations had garnered Gold Medals and 3-star Gold Medals awards at the Regional and National ICC Convention organised by the Malaysian Productivity Corporation (MPC). Several stations had also received 5S certification over the same period.

# Challenges and Prospects

Moving forward, the Generation Division is confident that it remains on track in its pursuit of achieving World Class Generation Performance. It will leverage on its high technical experience to increase technical competencies while at the same time actively increasing the reliability of merit order plant. Plant reliability will be improved to meet the growth in electricity demand in the country. In this regard, several key initiatives including Generation Plant Management System (GPMS) to analyse plant performance in real time and Total Productive Maintenance (TPM) are being implemented. TNB Generation will also ensure that the Equivalent Availability Factor (EAF) will maintain its upward trend of consistently exceeding the target value.

TNB REMACO, a wholly-owned subsidiary of TNB, which has been providing repair and maintenance services in power generation sector and energy-related services in Malaysia and the ASEAN region, will continue to widen its marketing initiatives to other foreign countries.

In terms of prudence in budgetary management, the Division has instituted pooling of high value spare parts and just-in-time spare part purchase to mitigate the high inventory level. Monthly monitoring and review will continue to be conducted to ensure stringent budget utilisation.

The rising fuel cost driven by scarcity and price volatility will remain a major concern. The Division has been working towards reduction in fuel consumption by improving current plant efficiency through the GPMS project. In the meantime, it is fully engaged in the effort to optimise generation energy mix of its power plants by maximising hydro resources while actively identifying new fuel types such as wind power, bio-fuel, LNG, geothermal, solar and others.









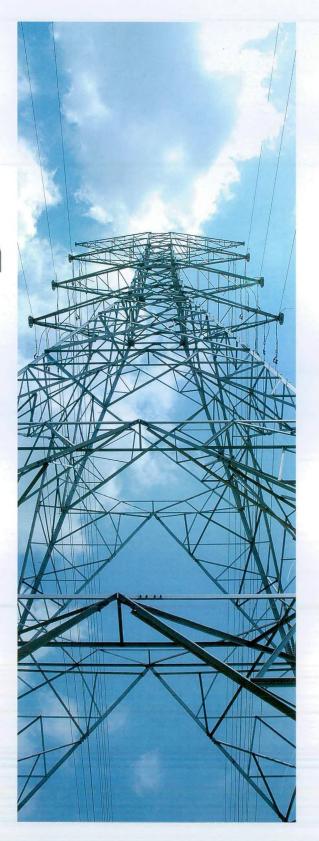
Ir. Ab'llah bin Haji Mohd Salleh Vice President

# Transmission

In the present context, the biggest challenge facing us in realtime operation of the National Grid is one on safe, secure, reliable and optimal economic operations... more so in meeting stakeholders' expectations.

# Highlights of Achievements:

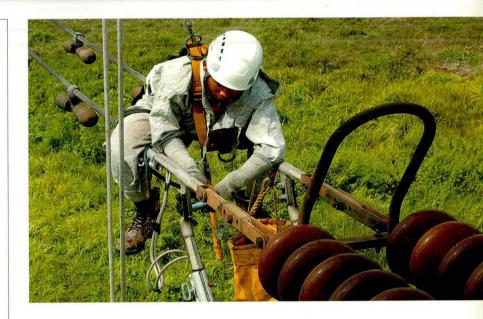
- Achieved 6.56 System Minutes thus maintaining single digit System Minutes for three (3) consecutive years.
- Reduced transmission system losses from 2.32% to 2.17%.
- Maintains Zero Major Disturbance for three (3) consecutive years.
- Added 6,840 MVA transformer capacity and 480 MVar capacitor banks into the system through commissioning of 40 new projects.



**Table 1:**Transmission System Equipment Database as at 31 August 2008

| Types of Lines                    | Length/Capacity/<br>No. |  |
|-----------------------------------|-------------------------|--|
| 500 kV                            | 638                     |  |
| Overhead Lines                    | (circuit-km)            |  |
| 275 kV                            | 7,565                   |  |
| Overhead Lines                    | (circuit-km)            |  |
| 132 kV<br>Overhead Lines          | 10,609<br>(circuit-km)  |  |
| Total Overhead                    | 18,812                  |  |
| Lines Length                      | (circuit-km)            |  |
| 275 kV                            | 51                      |  |
| Underground Cable                 | (circuit-km)            |  |
| 132 kV                            | 689                     |  |
| Underground Cable                 | (circuit-km)            |  |
| Total Underground<br>Cable Length | 740<br>(circuit-km)     |  |
| 500 kV Transformer                | 10,500 MVA              |  |
| 275 kV Transformer                | 29,193 MVA              |  |
| 132 kV Transformer                | 44,115 MVA              |  |
| Total Transformer Capacity        | 83,808 MVA              |  |
| 500 kV Substation                 | 7                       |  |
| 275 kV Substation                 | 69                      |  |
| 132 kV Substation                 | 310                     |  |
| Total Number of<br>TNB Substation | 386                     |  |





#### Divisional Goals

The Transmission Division is entrusted to manage and operate the 500 kV, 275 kV and 132 kV Transmission Grid of Peninsular Malaysia, known as the National Grid. The National Grid consists of approximately 18,812 circuit-km of overhead transmission lines, 740 circuit-km of underground transmission cables and 386 substations with transformation capacity of 83,808 MVA. During the period under review, thirty-two (32) power stations, made up of TNB power stations and Independent Power Producers (IPPs), are connected to the grid with 19,723 MW installed capacity and a maximum electricity demand of 14,007 MW recorded on 21 May 2008. (Please see Table 1)

The National Grid is interconnected to Thailand's transmission system operated by Electricity Generating Authority of Thailand (EGAT) in the North via a HVDC interconnection with a transmission capacity of ±300 MW and a 132 kV asynchronous HVAC overhead line with maximum transmission capacity of 90 MW. In the South, the National Grid is connected to Singapore Power's transmission system at Senoko via two 230 kV submarine cables with a transmission capacity of 450 MW.

The National Grid allows electricity generated at various power stations to be transmitted to main intake substations located at load centers. The objective of Transmission is towards "safe, reliable and economic" operation of the Electricity Supply. It plays an important role in ensuring reliable and sustainable electricity supply which is priced competitively as compared with other utilities in the Region.



Moving forward, the Transmission Division is committed to be the region's leading transmission entity and the center of ASEAN Power Grid. All our efforts are geared towards achieving these goals.

# Operational Summary

The Transmission Division had taken initiatives to ensure that transmission projects are completed on time and within budget. These initiatives include improving procurement approach and practices, project specifications and Bill of Quantities (BQ) as well as ensuring accurate project scoping together with a stringent QA/QC process.

A total of forty (40) projects were fully completed and commissioned during the year in review. Substation projects contributed an additional 6,840 MVA transformer capacity in the system. Out of these projects, eight (8) were capacitor bank installation that contributed to an additional 480 MVar capacitive power into the 132 kV system leading to better voltage regulation and power quality.

The 500 kV transmission lines that connect the Jimah IPP Coal Fired Power Station to Lenggeng



and Olak Lempit Substations were completed in January 2008. The Lenggeng 500/275 kV substation was commissioned in the same month.

In the Eastern region, the Kandis 275/132 kV substation was energised on 31 December 2007. The project strengthens the supply from the National Grid to the state of Kelantan and acts as a prime substation for the development of the Eastern Economic Corridor.

The Division embarked on "Zero Tripping with Load Loss" initiative in early 2007 with an objective to reduce the total number of trippings with load loss. A specific short term action plan consisting of 25 initiatives were implemented by all Regional maintenance offices. At the end of Financial Year 2007/08, 10 initiatives were completed and helped contribute in the reduction of the System

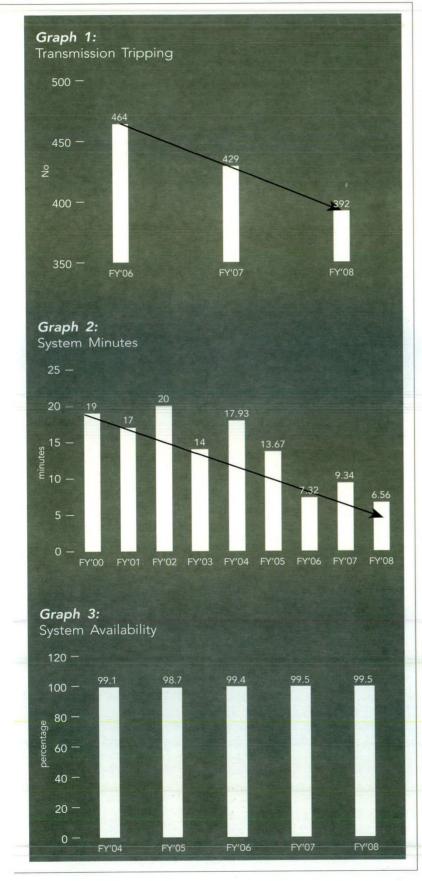
Minutes with a 15% reduction of transmission-initiated tripping as compared to Financial Year 2007 (*Please see Graph 1*).

The upgrading of the National Load Despatch Center (NLDC) project is in progress and scheduled for completion in early 2009. The National Grid will be equipped with a realtime state-of-the-art SCADA/EMS system that helps facilitate in providing a secure, safe and reliable operation.

### Operational Improvements

#### **Key Performance Indicators**

The Transmission Division applied the Balanced ScoreCard approach in developing the Key Performance Indicators (KPIs). Technical performance was captured under the Customer and Internal Process perspectives. From the Customer perspective, the Division has achieved



a positively lower index in its "Headline KPI", the System Minutes. During the period under review, the System Minutes stand at 6.56 minutes compared with 9.34 minutes last year. (*Please see Graph 2*) This is the third consecutive year single-digit System Minutes was recorded. Also for the third consecutive year the Division has maintained Zero Major Disturbance.

For the Internal Processes, System Availability is maintained at 99.5% (*Please see Graph 3*).

The division is committed to ensuring high standards of supply reliability through improvement of equipment availability and fast response to transmission equipment tripping. The response time is monitored through the System Average Response Index (SARI) which has recorded an improvement from 85 minutes last year to 71 minutes during the period under review.

The 500 kV transmission lines in the Central Region have improved the system's load-flow whilst installation of capacitor banks at specific substations has provided better voltage regulation. Overall transmission system losses have improved to 2.17% compared to 2.32% recorded last year.

# Implementation of Process Standardisation Improvement (PSI)

The Transmission Division is fully committed in ensuring Service Excellence through initiatives such as Process Standardisation Improvement (PSI) and ISO certification. In this regard, the Transmission Division had maintained its MS ISO 9001:2000 certification for the third consecutive year after having successfully complied with the surveillance audit by SIRIM QAS International in April 2008.

#### Quality Management and Initiatives

During the period under review, 154 teams took part in various WIT-ICC (Work Improvement Teams-Innovative & Creative Circle) projects at Departmental/Divisional level. Selected teams were then sent to participate at the Regional level Malaysian Productivity Center (MPC) Convention where 3 out of 3 teams won gold medals. Two WIT-ICC teams, Sinar from Johor Bahru and Northern Star from Alor Star, won their place to participate in the National Level MPC convention and won 3-star Gold Medal. Sinar emerged to be among the top 10 of the 155 participating teams from the various companies in Malaysia. This is the highest achievement for Transmission Division since the start of the WIT-ICC quality initiative. Some units in the Division are also awarded WIT-5S certification in August/September 2008.

The Division believes in training and developing its workforce to ensure that they have the required competencies to perform their duties, thus contributing towards achieving its business objectives. Through the TNA/TNI exercise, competency based training programmes were implemented. The specialist/ technical expert development programme continued to be expanded with the appointment of specialists/experts in the areas of switchgear, transformer and power system analysis. The Division is proud to report that one of its technical experts, Associate Professor Ir. Sazali P. Abdul Karim was accorded world recognition when his research entitled "Flashover Analysis Tool" was published in the World Intellectual Properties Organisation on 29 May 2008 under the Patent Cooperation Treaty.

Employee engagement had improved significantly by the deployment of the Gung Ho! concept which underpins the Division's work culture in strengthening staff commitment and morale through empowerment and team motivation and active involvement and employee participation through cross functional teams throughout the division.

#### Organisational Structure

The TNB strategic structural realignment in December 2007 saw the System Planning Department being hived out of the Transmission Division to form the new Planning Division starting 1 January 2008. Within Transmission, the National Load Despatch Center and the Operations Planning units were merged to become the System Operations Department. The Division also introduced the Central Warehouse Management Unit to improve management of warehouse and logistic needs. The new concept of mobile

SSO (Substation Switching Operator) through hub-and-satellite scheme was employed to shorten restoration time.

#### Partnership with Stakeholders

For the fifth consecutive year, the Division conducted the Electrical Safety Awareness Campaigns for school teachers throughout the Peninsula. For the period under review, the Division conducted a large scale "Kempen Kesedaran Keselamatan Elektrik TNB" in collaboration with the Ministry of Education in 10 states, attended by approximately 3000 school teachers. It was officially launched by the Honorable Minister of Education in Kluang, Johor Darul Takzim on 18 February 2008. This was part of an ongoing effort to educate the public, starting with young school children, on the safe use of electrical equipment. Forums were also conducted to educate the public and thus avoid endangering themselves when conducting activities near TNB installations.



60







Dato' Ir. Aishah binti Dato' Haji Abdul Rauf Vice President

# Distribution

We strive to improve the technical efficiency of the system network operations and in resolving Power Quality concerns with the aim of providing high quality power supply to relevant customers.



# Highlights of Achievements:

Distribution Division's main achievements throughout Financial Year 2007/2008 are:

- Completed 50% of the Remote Meter Reading (RMR) on schedule for 60,000 LV LPCs.
- Commissioned the first wind-solar hybrid Renewable Energy plant at Pulau Perhentian, Terengganu on 6 November 2007 in collaboration with TNB subsidiary, TNB Energy Services Sdn Bhd (TNB-ES). The project was jointly funded by TNB/Akaun Amanah Industri Bekalan Elektrik (AAIBE)/Terengganu State Government.
- Commissioned the Metro Southern Regional Control Centre (MSRCC) on 22 August 2008 and Northern Eastern Regional Control Centre (NERCC) on 20 August 2007.
- Certification Of ISO 9001:2000 Surveillance Audit by SIRIM.
- Distribution Losses has been reduced from 9.29% to 8.69%.
- Certification of 5S Audit by MPC.
- Collection of back billing on theft of electricity (TOE) amounting to RM43.70 million for the period from September 2007 until August 2008.
- Launching of E-Application for individual customer, contractors and developers on 28 August 2008 by the Deputy Minister of Energy, Water and Communications.
- System Average Interruption Duration Index (SAIDI) has improved further to 78 minutes and Average Collection Period (ACP) to 25 days.
- Customer Satisfaction Index (CSI) Score of 7.1, the first time TNB exceeds 7.0 the highest over the last 10 years and a major improvement over the 6.8 figure achieved in the previous CSI survey.







To focus on its core business activities of distribution network operations and electricity retailing, Distribution, being the biggest Division and face of TNB to customers, fully supports TNB mission and translates it as follows:

"To provide timely and continuous supply of electricity and related products and services that meet customers' expectations, and effectively act as key agent for national developments, whilst meeting our shareholders' expectations"

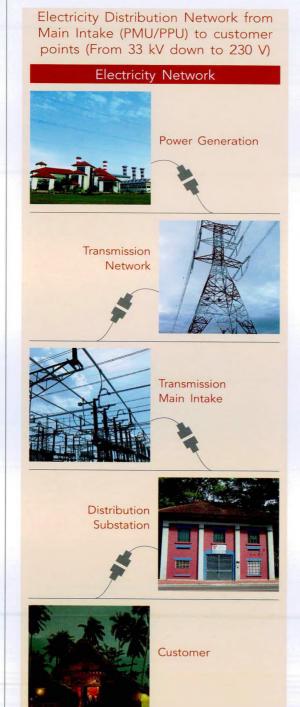
The Distribution Network Operations component of the Division plans, designs, constructs, operates and maintains the system that delivers electricity supply to the customers. Distribution Division connects all the 6.9 million customers from the National Grid through a distribution system network at voltage levels of 33 kV, 22 kV, 11 kV, 6.6 kV and 400/230 V. In FY2007/2008, Distribution Division completed 3,515 number of supply and system improvement projects at 11 kV with a capex of approximately RM2 billion and completed 49 projects of 33/11 kV Distribution Main Intake Project with a capex of approximately RM526 million.

To date, the Distribution Division has 61,238 number of substations supported by a wide network of 191,714 km of overhead lines ranging from Low Voltage (<1 kV), 11 kV, 22 kV to 33 kV across the Peninsular. In addition, the Division laid a total of 357,267 km of underground

cables comprising Low Voltage (<1 kV), 6.6 kV, 11 kV, 22 kV and 33 kV cable systems. Both the underground and overhead systems totalling 548,981 km, help to strengthen the reliability of the distribution network.

To ensure secure and reliable supply, TNB is currently undertaking system improvement programmes to replace and upgrade the distribution system i.e. replacement of old switchgears and transformers across the Peninsular.

The retail aspect of the business conducted through a network of 13 States and 40 Area offices, markets and sells electricity, connects new supply, provides counter services through Kedai Tenaga, collects revenues, operates Call Management Centres (TNB Careline 15454), handles customer enquiries/complaints and cultivates strong customer and government relationship.



The Network Operations component of the Division plans, designs, constructs, operates and maintains the system that delivers supply of electricity to the customers. Distribution Division connects all the 6.9 million customers from the National Grid through a distribution system web at voltage levels of 33 kV, 22 kV, 11 kV, 6.6 kV and 400/230 V.

#### Shared Values

As part of TNB's organisation, our shared values are:

- Customer First
- Integrity
- Business Excellence
- Caring

# Operational Improvements

For the initiative to improve Connect Supply on Time, TNB Distribution has developed a new project monitoring system called Distribution Project Monitoring System (DPMS) to assist our project personnel to manage and improve their project implementation in meeting customer needs.

TNB has expanded the use of Remote Meter Reading (RMR) technology for Low Voltage Large Power Customers (LV-LPC). Up to 31 August 2008, there are 37,000 LV-LPC out of 60,000 LV-LPC that had been installed with RMR. (All High Voltage & Medium Voltage Large Power Customer (3,800) had been equipped & monitored with RMR). RMR provides TNB and the customer better understanding of the load profile or usage pattern in order for the customer to manage their energy consumption more efficiently.

Metering Services Unit is implementing RMR for all of TNB's HV (high voltage), MV (medium voltage) and LV (low voltage) large power customers, the Unit will also be embarking on RF (radio frequency) meter reading pilot project for OPC (Ordinary Power Customer) in Klang Valley.

TNB has also embarked on plans to improve the strength and competency of the Special Engagement Against Losses (SEAL) team. This includes developing new Theft of Electricity (TOE) software in automating the pre-raid analysis for higher hit-rate and productivity and developing TOE Module in identifying and curbing theft. The enhanced module will be based on the latest TOE techniques and effective approaches.

Another means of information gathering/sharing with customers is through the Power Quality (PQ) survey conducted for all LPCs. This enables TNB to assess the LPC's knowledge on PQ, sensitive loads within their premises and requirements for PQ solutions. Apart from that, TNB has also implemented several new initiatives such as the PQ Monitoring System which monitors PQ of the supply system, outsourcing PQ services to TNB Energy Services Sdn Bhd (TNB-ES) to assist PRIME customers who encounter PQ problems and the PQ



Commercial Package which assist LPCs looking for financing to mitigate PQ problems at their factory site.

Besides that, PQ Seminars are being organised to continuously update our customers on the latest development on PQ. We have also launched a PQ Guidebook which is distributed to PRIME Customers for their reference. PQ training for all LPCs, consultants and contractors associations such as FMM, ACEM & TEEAM is also being planned. PQMS (PQ Monitoring System) meanwhile identify real time power quality incidents on the system and the information are accessible by Distribution nationwide to allow for remedial action as and when it is required. All these initiatives to improve the quality of supply are in line with the government agencies through MIDA/MITI to attract more high tech industries to Malaysia where PQ is a critical issue to some of the manufacturing processes.

Quality Management And Initiatives

Anugerah Kualiti Presiden (AKP) The AKP assessment is conducted once every two years to inculcate a "Business Excellence" culture throughout the Division. The AKP assessment, is modeled after the Malcolm Baldridge framework to raise our quality standards and business performance. The Division has also initiated a "Distribution League Table" Award to promote internal benchmarking amongst its 13 state operations.

In the effort to improve employees' performance, the Division has also encouraged Work Improvement Team - Innovative Creative Circle (WIT-ICC) - programmes during the 2007/2008 Financial Year. This includes eight (8) sessions of WIT-ICC Management Presentations which were organised at state level in the Division; one (1) WIT-ICC session for Management Presentations was organised at Divisional level during which 27 WIT-ICC with high potential for standardisation projects was presented. By the end of the financial year, four (4) projects from last year's Management Presentations were approved for standardisation throughout TNB.

Distribution Division has embarked on 5S programme as part of its continuous quality initiatives and has achieved some major achievements throughout the states. The Distribution Division HQ received its 5S certification on 24 July 2008 and all states offices received their 5S certification by August 2008.

# Summary Of Operations

Ordinary Power Customers (OPCs) constitute the majority of our almost 6.9 million customers which are mainly Malaysian households. Large Power Customers (LPCs), while small in number, account for almost 80% of the total sales of electricity in the country. LPCs are also further categorised into the commercial and industrial categories, with the industrial customers being further classified into different industries. The direct undertaking for the customers' needs and expectations fall within the jurisdiction of Distribution Division.

Delighting customers is a key priority in TNB. Hence it is imperative for TNB to identify these needs and expectations through a structured and focused data and information gathering exercise. Feedbacks from customers are obtained through a combination of a structured Customer Satisfaction Index (CSI) survey, feedback forms available at TNB retail outlets - the Kedai Tenaga and survey done through TNB Careline 15454 (Call Management Centre). CSI survey has been conducted for the past ten years by an international independent company to provide feedback on TNB's service level and also areas for improvement.



At intervals, the Distribution management meets up with industry leaders and representatives from both Government agencies like MITI and MIDA and private sectors such as FOMCA, FMM and REHDA. These dialogues and meetings are high-level discussions that also include the participation of the Company's President/CEO in providing a platform to understand the customer needs in greater depth.

Seminars and dialogues with leaders and representatives of industries, businesses and Government Agencies, also form part of the whole process in managing customer queries. By managing the three different channels of customer queries via in-house developed software called Sistem Maklumbalas Pelanggan (SMP), we are able to track, escalate, monitor reports and evaluate the feedbacks. Integrating customer information and queries on a single platform is a step towards achieving a comprehensive Customer Relationship Management (CRM) programme.

To ensure complaints and comments are captured, TNB has developed a customer repository database for all its 6.9 million customers. It allows TNB to view its customer feedback on a single platform. The customer

repository is developed to enhance customers' experience when dealing with TNB.

Additionally, PRIME customers, i.e. a list of TNB top 1,000 LPCs are managed through a special programme called PRIME Management Programme. Through the Prime Management Programme, TNB executives routinely touch base with the LPCs by personal visits to listen to our valued customers' opinion and providing solutions to their concerns.

# Care Programme

As a customer oriented division. the Distribution Division always strives to ensure that TNB reflects an entity that has great concern on customer service and customers' satisfaction. Thus, on 1 December 2007. TNB has embarked on a special programme known as CARE Programme or Corporate Account Relationship Enhancement Programme. The programme aims at creating a closer twoway relationship between TNB and corporate accounts. All the corporate accounts have been assigned a CARE Manager who are responsible as the contact persons in creating continuous interaction to understand and satisfy their needs.

In its preliminary stage of implementation, the programme has identified the following 8 segments of corporate accounts:

- Banks/Financial Institutions
- Business Complexes
- Utilities
- Fast Food Chains
- Telecommunications
- Hotels
- Transports
- Petroleum

Distribution Division continuously improve its products and services and some of the programmes and activities undertaken over recent months include enhanced awareness programme on Power Quality, street lighting, renewable energy and energy efficiency. Apart from the new integrated software developed to integrate the processes between the call centres, field service and control centre into a seamless platform, TNB has also introduced the use of Mobile Field Force Automation (MFFA), piloted in Shah Alam in January 2008 and now rolled out for entire Selangor and Wilayah Persekutuan Kuala Lumpur. It allows instant feedback on what is happening on site to be informed to the customers via TNB Careline Call Centre thus improving the efficiency in providing updated information on restoration of supply. We would be further embarking to include Johor and Penang by end 2008.

CMC services have also been experiencing another wave of enhancement as Short Message Service (SMS) are now added into Distribution's TNB Careline 15454. The SMS service now allows subscribers of Celcom, Maxis and Digi to report on electricity and streetlights breakdown via SMS to 15454. The centralised Call Centre is also equipped with Interactive



Voice Recorder (IVR) and IP Telephony and CTI (integration of computer and the telephone) with the latest state-of-the -art technology in managing customer enquiry on electricity supply.

A FAQ booklet has also been developed to assist frontliners and counter staff in responding to customer enquiries in a proper and consistent manner. TNB has also developed a customer information package for its new customers to brief them about TNB's services and what to do if they require assistance.

TNB is always striving to provide the highest quality service to its customers. As such, Kedai Tenaga centres are equipped with a new QMatic queue management system to facilitate better tracking and monitoring of counter services. 40 Kedai Tenaga have been installed with the QMatic system which optimises customer flow, improves customer service and creates a more relaxed atmosphere for both customers and staff. The system also allows for better tracking of performance such as customer waiting time and transaction time for each counter service. For FY2008/2009, the QMatic system will be expanded to other services/outlets. Front liners were also put through customer orientation training and a Smile Campaign launched for Kedai Tenaga.

Another initiative to enhance its services. TNB embarks on the 3 Phase promotional scheme from 1 June 2007 until 31 May 2008 for all domestic and commercial customers. In the promotional scheme, customers were given 50% discount on connection charges. The objective of the promotional scheme was to encourage single phase users of electricity to upgrade their supply to a 3 Phase supply, to facilitate the additional electrical load in the home as well as to ensure better reliability of supply.

Materials availability and quality is given high importance to TNB's infrastructure development. This has been identified as a key initiative to boost TNB's service delivery. TNB is committed in this effort to ensure on-time completion of all supply projects and longer lifespan of street lighting through better quality products.

The highest TNB management council Executive Management Committee spearheaded by the President/CEO meets regularly to ensure participation and commitment from all Divisions and support services to our customers. Furthermore, at Distribution Division, department heads and executives organise regular meetings, cross functional initiatives, continuous and close monitoring of projects and implement service level agreements between departments to obtain regular feedback on pertinent issues.

Serious attention is being given to minimise product defects and improve supply delivery performance through close monitoring of manufacturers and suppliers.



In support of Government Renewable Energy (RE) Programme

The Malaysian Government is striving to intensify the development of Renewable Energy (RE) under the Ninth Malaysia Plan. In supporting the Government's effort, TNB continues its commitment to achieve the Government's target of 350 MW electricity generation from RE by 2010. TNB is offering a new purchase price of electricity generated from biomass-based RE plant of up to 21 sen/kWh (previously 14 to 17 sen/kWh, then up to 19 sen/kWh). Apart from this support, TNB is also actively involved in formalising RE support mechanism which includes simplifying Renewable Energy Power Purchase Agreement (REPPA) for very small RE plants and also facilitating entrepreneurs in developing RE projects.

The signing of the additional three (3) new REPPAs in the FY2007/2008 indicates TNB's continuous support for the

Government SREP Programme (Small Renewable Energy Power Programme). This brings the total number of REPPAs signed by TNB in Peninsular Malaysia since the launching of the SREP Programme to 11, with a combined capacity of 54.5 MW.

Under this Financial Year, TNB has carried out more than ten preliminary technical studies to encourage and ensure that small renewable energy power plant can be connected to TNB distribution network.

TNB has also signed a Memorandum of Understanding with Felda Palm Industries Sdn Bhd and Japan's J-Power to develop a 10 MW biomass power plant in Jengka, Pahang which utilises palm oil waste as fuel for the power generation.

TNB will continuously provide guidance and assistance to RE developers to ensure the success of renewable energy power plant connection to TNB distribution network.

The solar hybrid projects constructed by TNB consist of a technology that generates electricity through the combination of solar energy, diesel engine and battery. Functioning as a stand-alone, the system is able to provide continuous electricity supply 24 hours a day. The system's ability to be remotely monitored makes it highly suitable for installation at remote areas and islands which are far from the mainland.

Funded by Akaun Amanah Industri Bekalan Elektrik (AAIBE), these projects are monitored and coordinated by the Ministry of Rural and Regional Development. To date, among the islands in Malaysia that has benefited from the implementation of such technology include Pulau Sibu, Pulau Aur, Pulau Besar, Pulau Tinggi and Pulau Pemanggil off the coastal of Mersing, Johor, Pulau Kapas and Pulau Perhentian in Terengganu. A commercial solar hybrid project to cater for chalets in Pulau Kapas was done through the SEDC of Terengganu while Pulau Perhentian solar hybrid project was jointly funded by the state of Terengganu besides AAIBE & TNB.



In the past TNB has actively participated in the Rural Electrification project promoted by the Government. To date TNB has reached 99.9% electrification in populated areas as compared to about 30% in 1957.

During FY2007/2008, TNB implemented 55 AAIBE-funded Rural Electrification Projects costing RM39.6 million, which provides electricity supply to 1,619 households in rural areas throughout the country. As part of TNB's social obligation, TNB



continues to carry out operations and maintenance activities for the customers located in remote rural areas, including those accessible only via river or sea routes. TNB is also responsible for the maintenance and operations of 12 and 24-hour diesel stations in rural areas as well as offshore islands. TNB has also carried out, among others, the installation of 25,000 streetlights in rural areas under the "Lampu Jalan Kampung" project under the Ministry of Rural and Regional Development programme.

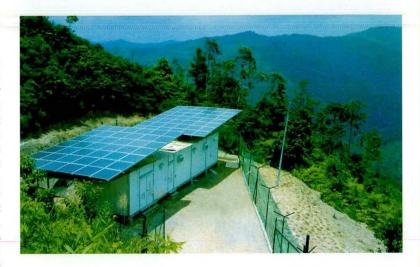
The following is the list of solar hybrid projects that have been completed by TNB for the last financial year (2007/2008).

| No. | Projects                            | Cost           |
|-----|-------------------------------------|----------------|
| 1   | Pos Pulat, Gua Musang               | RM1,769,484.46 |
| 2   | Kg. Orang Asli Pos Aring 5          | RM1,580,384.46 |
| 3   | Kg. Org Asli Pos Blau, Gua Musang   | RM2,003,819.79 |
| 4   | Kg. Org Asli Ganuh, Rompin          | RM1,516,175.54 |
| 5   | Kg. Orang Asli Sg Peroh, Kluang     | RM1,282,726    |
| 6   | Kg. Punan, Mersing                  | RM2,691,300    |
| 7   | Kg. Peta, Mersing                   | RM2,126,314.00 |
| 8   | Kg. Orang Asli Tanah Abang, Mersing | RM2,079,247.00 |
| 9   | Kg. Orang Asli Tg Tuan, Mersing     | RM1,596,723.81 |

# Tariff Rebalancing – Looking Beyond Profits

TNB tariff is designed to minimise the impact on customers, especially the lower income group. Therefore during last year's tariff revision, it has resulted in no increase in electricity bills for consumers whose monthly consumption is less than 200 kWh (or RM43.60). This group comprises three million households or 59 percent of total Domestic Customers. The Special Industry Tariff is maintained for those industrial customers who qualify. The 10 percent discount for government schools, government institutions of higher learning, welfare homes and places of worship is also retained.

Customers registered under the categories of universities, government schools, welfare homes and houses of worship also enjoy a 10 percent discount on their monthly bills. In line with



the Government's development objective, TNB introduced the Agriculture Tariff to promote the agro-based sector. This tariff covers key activities such as poultry, animal rearing, vegetable and fruit farming, fish rearing and paddy farming.

In the financial year 2007/2008, TNB spent approximately RM348 million (as at July 2008) on Special Industrial Tariffs, RM188 million on life line tariffs, RM86 million for providing discounted street lighting and RM38 million on discounts to the special groups (including welfare homes, place of worship and government schools/higher institution of learning).





Dato' Izzaddin Idris Chief Financial Officer/ Senior Vice President (Group Finance)

# Finance

The Group Finance Division as a business partner to the core divisions and subsidiary companies of TNB extends a comprehensive range of services to support and ensure the smooth operations of the enterprise. These cover the primary accounting and finance functions as well as risk management and business development responsibilities all of which are to be aligned with the overall business strategies and enhancing shareholder value.

During the year under review, the Division had also focused on several key initiatives identified last year which included the following:-

- Reviewing and reformulation of key policies namely the Investment Policy and Strategy, Investor Relations Policy and Treasury Policy as well as several other general financial policies and procedures
- Enhancing the resource capability of the Business Development in terms of headcount and skills
- Initiation of the process to implement the Share Buy-Back programme
- Commencement of the conversion process of certain debt obligations into Gulf Cooperation Council (GCC) Syariah compliant financing instruments
- Investigating and evaluating the mechanics of coal hedging tools and activities to complement the coal supply management activities of TNB Fuel Services Sdn Bhd

Emphasis on playing its role as a "business strategist" with the vision to achieve "financial excellence" by optimising financial processes, managing operating costs, driving business performance and mitigating risk.



# SUMMARY OF OPERATIONS

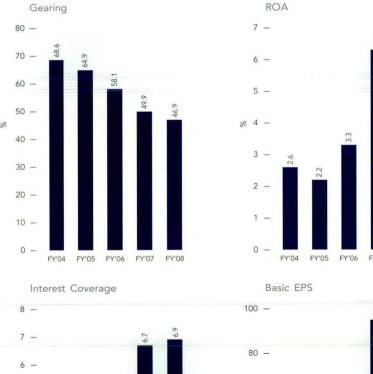
# Financial Performance - FY2008 vs FY2007

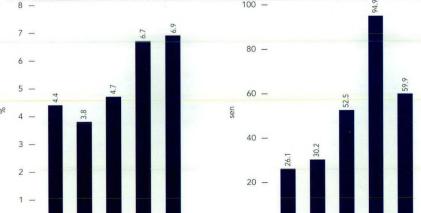
By all standards, FY2007 was an exceptional year with several notable achievements with record profits of RM4.1 billion, much improved technical performance, recoveries and value creation initiatives. Armed with these successes as well as additional key drivers in place for a better performance, TNB prepared itself for the challenges it had anticipated in FY2008, the main element being the expected higher cost of generation.

FY2008 surpassed all expectations by any measure as the higher coal prices and IPP payments far exceeded operational cost savings and demand growth recorded of 6.1%. While total Group revenue increased by 10.4%, operating expenses increased by 22.5% resulting in EBITDA margin being squeezed down to 29.5% compared to 37.6% reported in FY2007. The Group's performance for the financial year under review was also affected by the rapid weakening of the Ringgit against both the US Dollar and Japanese Yen in the second half of the financial year.

The financial performance of the Group over the years is best illustrated by the following charts.

# **Key Financial Metrics**





FY'04 FY'05 FY'06 FY'07 FY'08

### Notes:-

FY'07 FY'08

FY'04

FY'05 FY'06

- Gearing is calculated as total debt as a percentage of total capital
- ROA is determined as Group net profit (before forex and FRS 119 provisions) as a percentage of Group total assets
  - Interest coverage represents EBITDA over interest expense
- Basic EPS is computed by taking total profit attributable to equity holders divided by the weighted average number of ordinary shares issued

# Key Initiatives in FY2008

With continuing regulatory scrutiny, exceptionally difficult market conditions, and ongoing shareholders' expectations, the Group Finance Division has placed more emphasis on playing its role as a "business strategist" with the vision to achieve "financial excellence" by optimising financial processes, managing operational costs, driving business performance and mitigating risk.

Whilst several key drivers can be ordinarily considered "business as usual", the measures and targets that had been set were aggressive so as to ensure continuous improvement.

# Driving Business Performance

Group Finance Division continued to hone its skills and applied the tools developed and implemented to monitor the performance of the business. TNB's 20-year cashflow-driven Dynamic Strategic Planning Model developed in 2005 was further enhanced with additional features allowing complex tariff simulation, M&A analytics and cash requirement scenario planning. The full implementation and rollout of the Divisional Accounts now enables the core

business units (including each power station (for the Generation Division) and State (for the Distribution Division)) to measure internal efficiencies, monitor performance as well as identify areas for improvement. Traditional budget planning activities have also been fine tuned with automated budgetary control mechanism to instill discipline whilst time-control (estures willbe introduced soon to monitor. progress. This is also coupled with the Investment Evaluation Framework for Budget Planning methodology.

The ability for business units to benchmarl: against best practices and targets is a step towards improving efficiencies & productivity in order to realise the vision of becoming one of the leading corporations in the energy and related businesses globally.

Advances in IT, in particular internet technology, has rapidly enabled business operations to be conducted over the internet and become new platform for entities to interact. At TNB, an earlier initiative to adopt Maybanl:2e.net has been now extended to third parties with non Maybanl: accounts. It is the intention to also migrate all payments and transactions on

older e-platforms to Maybank2e. net with the aim of maintaining only one electronic payment processing system.

During the year under review, an asset valuation was conducted on the Group's key operating assets to ensure proper and adequate insurance coverage. Whilst the exercise resulted in an increase in asset valuation for assets to be insured, by 87% for TNB and 79% for TNB Janamanjung Sdn. Bhd., the total insurance pramium only increased by 15% as the rates for premium were reduced. The reduction in insurance rates was achieved as a result of prudent insurance renewal processes, lower loss ratio for most of the policies and improved risk management through creating awareness and sharing of information/knowledge on risk management. Subsequent to this exercise, similar asset valuations were carried out for major subsidiaries.

# Debt Liability & Capital Management

The active management of the debts and obligations continued to provide the foundation of TNB's financial strength with the year-end ratios at arguably, a much improved position as tabulated below.

| Financial Ratios   | Financial Year |       |       |              |         |        |
|--|----------------|-------|-------|--------------|---------|--------|
|  | 2003           | 2004  | 2005  | 2003         | 8007    | 2009   |
| Self-Financing Gento                                       | 40:50          | 25:75 | 51:49 | <b>38:32</b> | 118:-18 | 76:24  |
| diffective Watginted Average<br>Cost of Funds <sup>a</sup> | 4.9%           | 5.3%  | 5.4%  | 5.9%         | 5.9%    | 5.5%   |
| Currency Min (RMNForeign)                                  | 49:51          | 51:49 | 50:50 | 52:48"       | 55:45"  | 53:47° |
| Delat Service Cover Reito                                  | 2.0%           | 1.6x  | 1.4%  | 1.8x         | 2.5x    | 2.3x   |
| Delat-Equity (Net of Cash) Ratio                           | 2.11           | 1.94  | 1.69  | 1.19         | 0.78    | 0.68   |

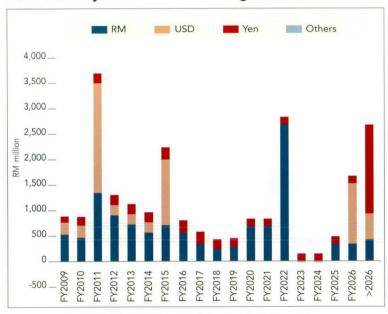
<sup>\*</sup> Raflective of RM aquivalent of currency exposure

<sup>#</sup> In accordance with FRS 132

The Division actively monitored the exchange rates, bond prices and funding costs during the year and notwithstanding that there was no new funds raised, TNB applied its cash balances to prepay several foreign currency loans denominated in Swiss Francs and Euro in June and September 2008 respectively.

As at 31 August 2008, the debt maturity profile of TNB is as depicted below:-

# Debt Maturity Profile as at 31 August 2008



Underlying Long Term Loans & Derivatives



Clearly, the debts maturing in FY09 and FY10 will be met from the current cash balance as well as from operations although the possibility of refinancing these with new borrowings, subject to terms. The refinancing risk posed in FY11 with debts of RM3.7 billion maturing will require TNB to consider alternative strategies such as prepayment and/or bond buyback. This will also address the perennial feature of TNB's loans where foreign currency debt is in excess of 25% of the total debt portfolio, clearly a mismatch of the predominantly Ringgit-denominated revenue base.

It is also TNB's intention that any new funding raised will be structured to be in compliance with GCC Syariah principles so as to allow TNB shares to be recognised as an Islamic stock hence diversifying the investor base available.

Subsequent to the year-end, on 10 October 2008, TNB entered into an interest rate swap for USD384.7 million of its floating rate loans to a fixed rate at 3.76%. With the completion of the transaction, TNB's fixed rate loan position stands at 98.8% of the total debt portfolio whilst the average cost of debt rose marginally from 5.49% to 5.54%.

The Board of Directors of TNB had also approved for TNB to undertake a share buy-back of up to ten percent (10%) of the issued and paid up share capital. This proposal will be subject to the stipulated Bursa Securities listing requirements and provisions of the Companies Act as well as Securities Commission Act. TNB plans to seek its shareholders' approval for the proposed share buy-back during the extraordinary general meeting scheduled to coincide with the AGM in December 2008.

# Tenaga Nasional Berhad ] [ Annual Report 2008 ]

# **Business Strategy**

During the year, 3 key policies were reviewed and reformulated to be aligned with TNB's 20-Year Strategic Plan and for improved internal controls. The Treasury Policy was updated with recent developments in electronic banking functions, new policies for counterparties and enhanced with better controls whilst the Investor Relations Policy was developed to identify specific owners, a structured approach in the communications strategy, as well as documenting the need to ensure a transparent, timely and fair dissemination of information/ news to the investing community, research analysts, rating agencies and the public at large.

Of significance is the new Investment Policy & Strategy which sets out the broad principles under which Business Development will identify, explore and support new business opportunities both locally and abroad. The foundation of the policy and strategy is the 20-Year Strategic Plan but always dependent on the financial position of TNB. In brief:-

- TNB as a "technical investor" will pursue "Greenfield" and "Brownfield" generation projects which meets the investment threshold of the weighted average cost of capital plus the appropriate risk premium for risks such as sovereign, exchange rate and development.
- Investments shall be limited to between 10%-25% of the equity share capital with flexibility if funding is structured as non-recourse and/or credible counterparties as partners but always subject to the cashflow position.

- TNB will focus on countries within ASEAN, the Middle East, and the Indian subcontinent with limitations driven by country ratings.
- Emphasis is also given to the operations and maintenance aspect of each investment opportunity to grow the business of TNB Repair & Maintenance Sdn Bhd.

During the year, 2 M&A opportunities were evaluated and TNB was pre-qualified for several greenfield projects in the Gulf Cooperation Council region. Whilst the M&A opportunities would have provided TNB with an immediate international footprint with the capability to further expand existing capacity as well as a window into a "pooling" industry in a developed market, the valuations would have posed a strain on TNB's future cashflow. TNB has also agreed to partner with the Saudi Binladin Group to bid for the 1700MW and 150,000 m3/day independent water and power plant project in the industrial city of Yanbu in the Kingdom of Saudi Arabia. Notwithstanding the current challenges in the EPC and financial markets, the bid is expected to close in mid-December 2008.

On the existing Shuaibah III water desalination and power project, the overall construction is progressing well with commercial operations targeted for mid-2009.

# Proactive Investor Relations

Investor Relations role in TNB is a strategic management tool, providing a platform for regular communications between the Group and the financial community which includes its current and potential investors as well as research analysts. The major focus rests in the consistent communication and dissemination of accurate, reliable and timely information to investors and analysts which portrays the Group's performance and prospects. The IR communication channel is also a means of acquiring feedback from the investment community which is then channeled back to Management and Board of Directors.



As in previous years, TNB participated in several investor conferences and meetings arranged by leading investment banks to provide an update on the company's performance, and address issues and concerns raised by fund managers and investors alike. Aside from the conferences and meetings attended outside of TNB premises, Management and IR frequently have fund managers and analysts requesting for meetings at TNB offices. During the year under review, TNB had approximately 120 meetings (excluding Quarterly announcement of financial results) with analysts and fund managers at TNB.

Outlook & The Way Forward – FY2009

# TNB's Challenges

The Finance Division will continue on its journey "towards financial excellence." Given that the economic and financial climate in the near term is expected to remain volatile and that demand growth will be lower than the year before, the ability to drive down costs remains a critical factor for success.

Under this scenario, the role of Group Finance for the ending 31 August 2009 will bring renewed focus to the important aspects of drivers of revenue and cost as well as drivers to creating value. Key challenges for FY2009 include the following:-

- The need to further develop strategic partnerships with EPC contractors, key consultants and business partners to enable TNB compete better under the present environment to succeed in developing new businesses internationally
- Higher fuel prices will have a knock-on effect on cost of services and materials related to asset development, asset management and maintenance
- Volatility in foreign exchange markets vis-à-vis the RM will impact TNB's foreign currency debt exposure and coal purchases

- The ability to raise funds at competitive rates in view of the global financial turmoil affecting credit availability and the expectation of an economic slowdown worldwide
- To implement a transparent and objective electricity pricing mechanism for endcustomers incorporating a fuel cost pass through mechanism and rectify the imbalance in the "inputoutput" value chain of the business





Dato' Abdul Razak bin Abdul Majid Senior Vice President

# Corporate Affairs

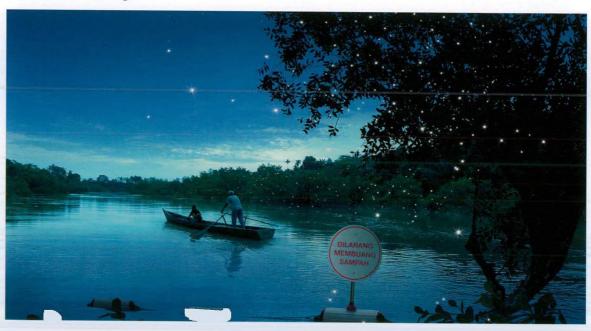
# Divisional Goals

The Corporate Affairs Division was established in January 2008, following a resolution on the need to reorganise the corporate functions of TNB. It consists of five (5) departments, namely:-

- 1. Company Secretary;
- 2. Yayasan Tenaga Nasional;
- 3. Regulatory and Relations Management Department;
- 4. Legal Services Department; and
- 5. Corporate Communications Department

During the year under review, the Division has continuously assisted the TNB core businesses by providing corporate secretarial and corporate advisory services; legal and litigation management, regulatory and relations management, and valuable communications with internal and external stakeholders. In addition, the Division continues to provide educational and welfare aid through Yayasan Tenaga Nasional (YTN).

The Division's goal is to ensure attainment and compliance with best practices of corporate governance through fostering of an open and collegial approach on business and corporate affairs and towards enhancing relationships with TNB stakeholders, government agencies, non-governmental organisations and customers at large.



# Operational Summary

# Regulatory and Relations Management Department

The Department focuses on developing and enhancing close relationships and linkages between TNB and the Regulators, Government Agencies, individuals, organisations and associations that may exercise influence over matters relating to TNB in particular and the power industry in general.

# ii. Legal Services Department

The Department provides Corporate legal & litigation advisory on operational matters, as well as ensuring compliance with Acts of Parliament, especially the Electricity Supply Act 1990, relevant rules, regulations and by-laws, as well as the Terms and Conditions of Licencing for TNB and its subsidiaries.

# iii. Corporate Communications Department

The Department is responsible for managing stakeholders' perceptions through effective internal and external communications in media relations, community affairs and corporate responsibility, corporate branding, events and sports management, publications, website, and internal relations. In addition, the Department is responsible for Galeri Tenaga, which houses the much acclaimed and highly valued TNB corporate art collection.

# iv. Company Secretary Services

The office of the Company Secretary is responsible for compliance with Statutory and Regulatory requirements and the effective functioning of the Board with respect

to policy making and other fiduciary duties to the TNB Group within the ambit of company laws, securities law, Securities Commission guidelines and Bursa Malaysia listing requirements. Its other key function is to assist the Board of Directors in adopting corporate governance principles and practices as essential elements to Company performance and integrity. The Office is also responsible for administration matters related to registration of public, as well as eligible employee shareholders.

# v. Yayasan Tenaga Nasional (YTN)

Yayasan Tenaga Nasional (YTN), established as a trust body for TNB, ensures that the company's corporate social responsibility initiatives and efforts are continuously met through scholarships and loans to deserving students.

# Operational Improvements

In the year under review, the Corporate Affairs Division has implemented various initiatives to continuously enhance the efficiency and effectiveness of its programmed activities. These include:

- Development of a Legal Management System for litigation management and monitoring.
- Installation of an internal Corporate Communications Information System (CCIS) for documentation and sharing of information on calendar of corporate activities, media news clippings, document library and assignment of tasks.
- Operationalisation of a Loan Monitoring System to keep track of loan repayments by students.

- Revamping of "Livewire", TNB's intranet system, for easier accessibility and information sharing in TNB.
- Launching of a new TNB-wide information sharing channel called "TNB NewsTube" which emulates features similar to corporate-wide broadcast.

# Human Resource Management

Recognising that the workforce is one of its most valuable assets in driving the success of its operational objectives, the Division placed great emphasis in building the capacity of its human resource through training programmes to suit the diverse requirements of the various professional disciplines within the Division.

# Customer Focus and Stakeholders Management

The Division is fully committed to the Company's SE 10/10 Service Excellence initiative. Various systems, activities and programmes were undertaken to raise the proficiency levels consistent with the Corporate Objectives on service excellence. These include the setting up of the Pusat Aduan Korporat and Corporate Communications Information System (CCIS), analyses of the Customer Survey Index (CSI) and Employee Survey Index (ESI) as yardsticks and feedback to improve on customer satisfaction, organising Community Leader Outreach Programmes (CLOP), Corporate Branding initiatives, creating TNB talks - an internet-based source of reference on TNB issues for the Malaysian media, and facilitating TNB Media Workshops, as well as hosting regular sessions with stakeholders.



# Group Human Resource

Dato' Kamaruzzaman bin Jusoh Vice President

Nowadays, there is an increasing pressure for HR to demonstrate value to businesses and HR to contribute to the overall performance of the organisation. Virtually, this dictates HR taking the role of partnering the business/line management. Inevitably, this translate to giving focus to strategic people issues such as nurturing the leadership pipeline, building high performance workforce etc, as opposed to concentrating resources to the traditional administrative and transactional HR service provision.

# Highlights of Achievements:

### Succession/Talent Management

Current Talent pool strength stands at 288. There are 254 Key Leadership Positions (KLPs) and potential successors have been nominated for 85% of these positions.

### Talent Exchange Programme

The inaugural GLC Talent Exchange initiative amongst GLCs was launched in June 2008. Two top talents (selected from the talent pool) from TNB have been assigned to Celcom Berhad and MBSB (Malaysian Building Society Berhad) for one year. In return, TNB has accepted two talents, one each from Malaysia Airports Holdings Berhad (MAHB) and MBSB.

# Leadership Development Audit (LDA)

TNB's company-wide adequacy in terms of framework, policy, processes and practices to meet its leadership recruitment, development, readiness and retention requirements were audited by an external consultant in April 2008. The overall results were commendable. Out of the 7 elements audited, 5 were found to be of good practice while the other 2 were adequate.

### Blue Book Implementation

TNB was rated as being amongst the top two GLCs in Blue Book Implementation by an external consultant.

### Specialist Career Path

This scheme had been in existence for 4 years. To date two Specialists and 24 Technical Experts had been appointed. Two of them had received international recognition for their respective achievement in Flashover Analysis Tool and Power Quality Guidebook.



# Operational Summary

In order to meet its current and future business needs, TNB has to ensure that its leadership pipeline is able to supply capable and competent leaders. Towards achieving this goal, the Group's talent pool size had been increased to 288 candidates as a result of continued focus on talent identification and their development. More importantly the search for potential talent has delved deeper into the lower level hierarchy of TNB executives. In the mean time, the Division continued to adopt formal development programmes such as Progem (Programme for General Managers) conducted by the National University of Singapore.

The short term and long term development plans and placement in the Talent Review Process have been made a permanent agenda at the Management Breakout, TNB's biannual management retreat. The Leadership Development Audit conducted by an external consultant had rated TNB as having a commendable standard of talent management.

The Specialist Career Path Scheme continues to create opportunities for aspiring and deserving candidates. To date the number of specialists and technical experts has increased to two and twenty four respectively. This alternative career path for engineers has partly contributed to the retention of technical excellence in TNB.



Ir. Sazali P. Abdul Karim Flashover Analysis Tool which is his brain child has been patented and put in display at World Intellectual Property Organization (WIPO)



Mohamed Fuad Faisal Author of Power Quality Guidebook "I was impressed with the Power Quality Guidebook subtitled Voltage Sag Solutions for industrial Customers" Alex Mc Eachern - Power Standards Lab, USA. (No. 1 Power Quality Guru in the world)

An external consultant was commissioned by Khazanah Nasional to conduct an audit on the implementation of the Blue Book guidelines on Intensifying Performance Management based on the following 3 key elements:

- · Organisational Performance,
- Programs, policies and Systems
- Benefits to Labour Force

The audit had rated TIJB as one of the top practitioners among the GLCs.

# CAPACITY BUILDING

One of the key attributes of a world-class organisation is its concern for the standard of professionalism in the workforce. Among the Division's objectives, therefore, is to ensure that TNB has a capable and professional work-force to meet, if not exceed customer expectations through quality delivery. During the period under review, 114 developmental and 1,110 mandatory technical and non-technical training programmes were conducted for executives and non-executives respectively. The programmes were designed to ensure that TNB amployees are aquipped with competencies that would meet its business requiréments and raise organisational efficiency and productivity.

In addition, supplementary programmes such as Strategic Business Leadership, FIDIC Green Book and FIDIC Yellow Book were also conducted by TNB Training Institute, ILSAS to educate and train staff in the commercial aspect of running an organisation.

Moving forward and in line with the Second Phase of TIJB's 20 Year Strategic Action Plan to achieve geographical business expansion, overseas job assignments for selected . candidates to enhance their I:nowledge and broaden their exposure in the relevant fields have been implemented. Five members of TNB's workforce were seconded to TNB Liberty Power Limited in Pakistan and six others to Shuaibah III. Independent Water and Power Project (Shuaibah), Saudi Arabia under this initiative.

As part of long term capacity building initiative, two engineers were sent to the Korean Advanced Institute of Science & Technology and University of Michigan in preparation for nuclear power option eventualities.

# Process Improvement

To enhance efficiency in service delivery to internal customers, 86 procedures, and 118 work instructions relating to Human Resource Management had been declared for MS ISO 9000:2001 process compared to only 65 procedures and 82 work instructions in the previous financial year.

The Whistle Blowing Procedure Toll Free line 1800-888-862 was launched in August 2008 to enable customers and staff to report any violation or abuse of procedures, rules or regulations.

The Human Resource Client Charter was established in June 2008 to support the HR SE 10/10 initiative of 'Enhancing HR Professionalism'. 27 HR core processes were declared to ensure services provided were compliant to the standard of quality promised.

# INTERNAL AFFAIRS

# Highlights of Achievements:

- Establishment of Caught Red-Handed Procedure.
- Launching of the Whistle Blowing Information System (WBIS) and Toll Free Line.
- Introduced Customer Charter for the IAD.

### Divisional Goals

The IAD strives to be a department of high professionalism and integrity in disciplinary management not only in TNB but among the Government Linked Companies (GLCs). The department's major objective is to reduce the number of cases of misconduct in TNB through education and prevention programmes as well as providing excellent services.

# Operational Summary

The IAD is responsible in managing, conducting and monitoring disciplinary actions against the employees including formulating a Disciplinary Policy for TNB. Functionally, the department reports to the Board of Directors' Disciplinary Committee while operationally it reports to Vice President (Human Resource). The main functions of IAD include investigation, prosecution, conciliation, handling and managing cases at Industrial/Labour Court, research & development as wellas aducating the employees through training & awareness programmes.

# Operational Improvements

# Efficiency Improvement

The introduction of the Whistle Blowing Information System (WBIS) and Toll Free Line will helped to enhance the level of integrity among TNB staff which would heighten staff discipline, improve efficiency and productivity. Improved integrity would also lead to cost savings and proper budgetary utilisation. All these would create value add to TNB.

# Major Projects

- Adopt a Station Programme (Program Stesen Angkat).
- Audit Station Programme & Kursus Kemahiran for the Disciplinary Machinery.

# Key Performance Indicators

- Reduction in disciplinary cases from 158 (FY2006) to 102 (FY2007) and 66 (as at June FY2008).
- Investigation conducted within 1½ months.
- As at July 2008, the Department had charted Customer Satisfaction Index (CSI) of 85%.

# Challenges and Prospects

The key challenge faced by the Department is to contribute in the development of a TNB work force with high performance and integrity as well as upholding the Group's Shared Values to achieving TNB. To develop human capital with high performance and integrity and upholding the company Shared Value towards achieving its Vision.





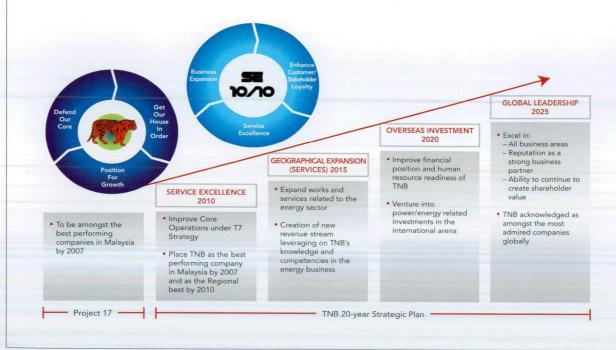
Zainab binti Abdullah Vice President

# Highlights of Achievements:

- Review of Division Business Plan and Top Management Key Performance Indicators (KPIs).
- Clean Development Mechanism (CDM) initiatives in TNB.
- Major Strategic Issue Coordination; Gas Pricing and Tariff, Cogeneration and Malaysian Electricity Supply Industry (ESI) Structure.
- Sealing power supply agreement with Sarawak Electricity Berhad (SEB).
- Involvement with Sarawak Peninsular Malaysia (SARPEN) Interconnection.
- Study on the Development of Nuclear Power Generation.
- Execution of Service Level Agreement for TNB thermal power stations under the custody of Generation Division.

# Planning

The Division's key roles and functions include formulating and reviewing TNB's long term strategic plan that will position the organisation towards attaining its desired future state, planning of the long-term power system development to ensure safe, reliable and economic power supply to meet the electricity demand and supply needs of the nation.



# Divisional Goals

The Planning Division which was operationalised in January of 2008, comprises three departments namely Strategic Planning Department, System Planning and Development Department and Energy Procurement Department. The Strategic Planning Department was previously under the Group Finance Division, while both the System Planning and Development, and Energy Procurement Departments were formerly operating under the Transmission Division.

The Division's key roles and functions include formulating and reviewing TNB's long term strategic plan that will position the organisation towards attaining its desired future state, planning of the long-term power system development to ensure safe, reliable and economic power supply to meet the electricity demand and supply needs of the nation. In addition, the Division is also responsible for managing all activities related to energy procurement, operationalisation and settlement of energy and capacity procured from power producers and cross border trading.

# Formulation and Implementation of Corporate Strategies

The Planning Division is actively involved in the coordination and communication of the TNB 20year Strategic Plan to facilitate an effective implementation of strategies and initiatives throughout the Group. This includes the coordination of all Divisions' 5-year Business Plans mid-term review to ensure alignment with TNB long term strategic direction. Communication, coordination and implementation activities of the 20-year Strategic Plan are implemented in conjunction with other relevant divisions.

The Strategic Planning Department acts as the secretariat for the biannual management retreat known as the Management Breakout, which is a forum for the top leadership of TNB to deliberate and resolve strategic issues. The Division also conducted the Strategic Planners Forum in 2008 with the objective of creating a platform for a strategic discourse on strategies and implementation thus contributing towards the alignment of corporate and division strategies and objectives. In addition, the forum also served as a useful platform for the dissemination of strategies and policy information.

# Management of Strategic Issues

# Implementation of Clean Development Mechanism (CDM) Projects

TNB is fully supportive of the Government's efforts in placing the Clean Development Mechanism (CDM) as an important complementary mechanism to facilitate the implementation of sustainable energy projects (with emphasis on Renewable Energy (RE) and Energy Efficiency (EE) projects), thus resulting in overall improvement and protection of the environment.

The Clean Development Mechanism (CDM) is an arrangement under the Kyoto Protocol allowing developed countries with a Green House Gas (GHG) reduction commitment (known as Annex 1 countries) to invest in projects that reduce CO<sub>2</sub> emissions in developing countries (such as Malaysia) as an alternative to more expensive emission reductions in their own countries.

The Division plays the role of the secretariat for CDM projects in TNB. Currently two generation projects are being pursued for the deployment of CDM - i.e. the Ulu Terengganu and Ulu Jelai hydroelectric projects. In addition, several potential CDM projects were also identified in a study conducted with TNB Research. These included rehabilitation of small hydros, Small Renewable Energy Power Programme (SREP), Bio-mass Renewable Energy (RE) and the recycling of SF<sub>6</sub> gases in TNB's substations.

# Gas Pricing and Tariff Adjustment

The Division was actively involved in the recent tariff adjustment due to the review of the gas price for the power sector. The tariff adjustment in July 2008 is strictly to recover the additional fuel cost incurred mainly due to the gas price increase. However, the tariff adjustment does not take into consideration the recent high increase in coal price.

# Cogeneration

In support of the Government's initiatives towards efficient utilisation of energy resources, the Division has recently commissioned a Cross-Divisional Task Group to review the Cogeneration policy with the view towards encouraging efficient utlisation of energy in the business sector. The Task Group has proposed several immediate term measures related to the scheme of rates and conditions to facilitate development of Cogeneration.

# Management of TNB Business Performance

The Planning Division had completed the development of top management Key Performance Indicators (KPIs) for Financial Year 2009. In addition, the Division is also responsible for monitoring the TNB Headline KPIs (Please see Table 1) which are tracked by Khazanah Nasional under the Government Linked Companies (GLC) Transformation Programme.

Table 1: TNB Headline Key Performance Indicators

| Key Performance Indicators                        | Financial Year |                |                |                |                |                |  |  |
|---|----------------|----------------|----------------|----------------|----------------|----------------|--|--|
|   | Actual<br>2004 | Actual<br>2005 | Actual<br>2006 | Actual<br>2007 | Target<br>2008 | Actual<br>2008 |  |  |
| Return on Assets (ROA)                            | 2.6%           | 2.2%           | 3.3%           | 6.3%           | 5.5%           | 4.6%           |  |  |
| Gearing   | 68.6%          | 64.9%          | 58.1%          | 49.9%          | 55%-60%        | 46.9%          |  |  |
| Unplanned Outage Rate (UOR)                       | 9.4%           | 6.1%           | 4.7%           | 2.2%           | < 3%           | 3.3%           |  |  |
| T&D Losses  | 10.8%          | 10.5%          | 11.0%          | 10.0%          | < 9.5%         | 9.5%           |  |  |
| Transmission System Minutes (minutes)             | 18.0           | 14.0           | 7.3            | 9.3            | < 7            | 6.6            |  |  |
| Distribution SAIDI <sup>1</sup> Minutes (minutes) | 152.0          | 148.0          | 101.6          | 83.0           | 78.0           | 78.0           |  |  |

<sup>&</sup>lt;sup>1</sup> SAIDI refers to System Average Interruption Index.

# Long Term System Planning and Development

The Planning Division carries out long-term power system development planning to ensure safe, reliable and economic power supply to meet the electricity demand of the nation. Major initiatives conducted by the System Planning and Development Department included:

# Power Supply Agreement With Sarawak Energy Berhad (SEB)

Tenaga Nasional Berhad (TNB) and Sarawak Energy Berhad (SEB) signed a Head Of Agreement on 7 May 2008 for supply of power to Peninsular Malaysia from hydro-electric, and, or coal power plants in Sarawak. In this agreement, apart from Bakun, SEB also agrees to supply 3,000 Megawatts of electricity to TNB from 2017 to 2020 and further 5000 MW from 2021 to 2030.

# Sarawak – Peninsular Malaysia Interconnection

During the period under review, the Division was involved in two major activities related to the development of the interconnection between Sarawak (Bakun Hydropower Station) and the Peninsular Malaysia Grid namely the Technical System Study and preparation of Technical Specifications for the interconnection.

The Planning Division worked hand-in-hand with the initial project developer and the appointed consultants in the Technical System Study. The roles of the two parties were to ensure high reliability and performance of the interconnection based on the criteria set out in the Transmission System Reliability Standards and Malaysian Grid Code. The study had produced a key report entitled "Basis for Functional Performance

Specifications (BFS)", which outlines the functional technical requirements of the interconnection. It was finalised in December 2007. Subsequent to the Technical System Study, the Planning Division was involved in the preparation of the Technical Specifications package.

# Study on the Development of Nuclear Power Generation in Malaysia

The Peninsular Malaysia power sector could be facing energy (fuel) supply security and constraints due to the depletion of indigenous gas reserves and over reliance on imported coal. It could also face the prospects of pressure in supply increase due to high and volatile energy prices. The fossil fuel prices have been escalating due to increasing demand accentuated by the limited and depleting supply. In addition, the high usage of fossil fuel for power generation

could pose environmental issue as a result of emission of greenhouse gas. For the sustainable development of the nation's electricity and energy sector and to mitigate the energy supply security issue, nuclear power plant should be seriously considered as a viable alternative for the future. TNB has been working closely with other stakeholders and agencies in particular The Malaysian Nuclear Agency (Nuclear Malaysia) on the nuclear option.

Execution of Service Level Agreements (SLA's) with thermal power stations operated by Generation Division

In our effort to ensure that all power generators operate under similar business environment, the Planning Division has developed and implemented SLAs on all thermal power plants operated by the Generation Division. All technical, commercial and legal terms of the Agreements are adapted from the most recent Power Purchase Agreement (PPA). To date, six individual SLAs had been duly signed.

# Challenges and Prospects

The power supply industry will be facing increasing challenges attributable to volatile fuel prices, energy supply security issue, current global economic downturn and deteriorating financial condition. In this regard the Planning Division will undertake various initiatives to mitigate the risks associated with these challenges:

# Sustaining Long Term Energy Security

Energy supply security due to depleting energy resources (gas), high and volatile international energy price (coal) and constraints in the international coal supply chain (both the coal supply sources and infrastructure) are posing major challenges to Malaysia's power sector.

In order to ensure the sector's long term sustainability in particular mitigation of the energy supply security risk, the Planning Division is entrusted to implement the following initiatives:

- Harness hydro power in Peninsular Malaysia and Sarawak (Bakun etc)
- Promote the use of Demand Side Management, Energy Efficiency, Renewable Energy and other nonfossil power sources.
- Plan the development of more efficient generating plants.
- Assist in preparatory work for possible use of nuclear energy. The project would demand much efforts in the formulation of policy, identification of sites, conduct of pre-feasibility and feasibility studies, instituting the regulation, conduct manpower planning.
- Work closely with stakeholders such as Ministry of Energy, Water and Communications and the Economic Planning Unit (EPU), Prime Minister
   Department on national energy policy studies for sustainable energy development.

# Review of TNB 20 Year Strategic Plan

The Strategic Plan which was developed in 2005 sets the strategic direction of TNB for the period of 2006 -2025. The first phase which commenced in 2006 sets to achieve Service

Excellence by 2010. TNB has succeeded to achieve many strategic objectives under this phase despite the impact of many external challenges and environmental pressures. To align TNB with the current and future business environment, the Plan will be reviewed and suitable strategies reassessed for implementation during its second phase (2011-2015) which focuses on geographical business expansion.

# Addressing Major Strategic Risks

In this regard, the Division will provide an active and supporting role to address major strategic risks in particular the tariff review, fuel pass-through mechanism and pricing study, and Malaysian Electricity Supply Industry (ESI) structure analysis to ensure the successful implementation of the Identification of Strategic Risks and the Associated Risks Mitigation Plan.

# TNB Strategic Planners Forum and Technical Planners Forum

These biannual forums will involve discussion of strategic and technical issues impacting TNB in the medium and long term by the Group's strategic or technical planners and related executives. It also serves as the platform for staff to be updated on major strategic and technical issues/initiatives as well as TNB policies.

# Hydro PPAs with TNBG

The Planning Division is currently conducting negotiations and development of SLAs for TNB Hydro power plants. These include Kenyir, Temenggor, Pergau and Cameron Highlands hydro Power Stations.



Dato' Nik Ibrahim bin Nik Mohamed Vice President



# Investment Management

# Divisional Goals

The Investment Management Division manages an extensive portfolio of equity investments of the Company and the Group with the objective of ensuring positive value addition to TNB Group as a whole. The Division is currently monitoring equity investments in 68 subsidiaries and associate companies and other long-term investments in core and non-core businesses with a market value of approximately RM4.949 billion.

# Operational Summary

The Division assumes the role of setting strategic direction for the subsidiaries and streamlining their operations within the Group. It also formulates long term and short term investment strategies for the equity investments within the Group. The Division also plays the leading role in overseeing and monitoring the performances of the 68 companies while administratively overseeing 10 subsidiaries involved in such sectors as manufacturing, services and consultancy, education, mining and utility. 83% of these companies are locally registered.

### Management of Major Equity Investment

Among the subsidiaries in which TNB has equity participation and which are under the management of the Division are highlighted below:

1. Malaysia Transformer Manufacturing Sdn. Bhd. (MTM) Malaysia Transformer Manufacturing Sdn. Bhd. (MTM) became a wholly-owned subsidiary of the Group following the successfully acquisition of 27 percent of its equity by TNB from ABB in 2007. MTM continues to maintain its identity to leverage on its long history in the region, while strengthening its corporate governance and improving its business orientation.

MTM's strategy is to maintain its leading role as a manufacturer of transformers such as Distribution System Transformers from 300 kVA to 3000 kVA 11 kV to 33 kV, and Transmission System Transformers from 7.5 to 90 MVA 33 kV to 132 kV and to increase its presence as a service provider in Remanufacturing and Transformer Life Management Services and Project, Installation, Testing and Commissioning in Malaysia and the region.

The company's turnover rose by 17.8% to RM227.0 million and contributes a profit after tax of RM21.8 million, attributed mainly to the increase in demand for Distribution System Transformers from 300 kVA to 3000 kVA 11 kV to 33 kV.

As it moves forward to a new era, MTM is highly enthusiastic in fulfilling its vision "To Become A World Class Leader In Transformer Business Globally by 2020".

# 2. Tenaga Cable Industries Sdn. Bhd. (TCI)

Tenaga Cable Industries Sdn. Bhd. (TCI) a 76%-owned subsidiary of TNB had recorded a solid performance in manufacturing and distribution of power cables such as XLPE Cables up to 33 kV, Optical Ground Wires (OPGW), low voltage general cables, aluminium conductors (ACSR), aluminium/aluminium alloy rods and sales of OPGW accessories. As a leader in cable manufacturing TCI sets benchmark for cables quality and prices.

During the period under review, TCI succeeded in reducing its borrowing by 53.7% from RM54.5 million to RM25.2 million. As a result, its Net Tangible Asset (NTA) increased from RM0.72 to RM0.84, Current Ratio (CR) from 115 percent to 146 percent, and Gearing Ratio from 0.92 times to 0.48 times.

The key features of TCI business model required close monitoring of prices on the London Metal Exchange (LME). Its diligence had paid off when it realised savings of RM0.65 million for aluminum and RM0.79 million for copper after having successfully locked in on LME contract price or lower for the metals. TCI had also implemented Aluminium Recycle Management (ARM) project with a total recycled value of RM4.79 million with a cost saving amounting to RM1.61 million.

Mindful of the challenges ahead, including those associated with the industry, TCI is confident that it can implement its business strategy in Malaysia and in the region successfully in line with its vision "To Be A Global Leader In Cabling Solutions And Energy Related Business By 2020".

# 3. Tenaga Switchgear Sdn. Bhd. (TSG)

As a 60%-owned subsidiary, Tenaga Switchgear Sdn. Bhd. (TSG) had delivered a robust set of results as it continued to build on its consistent and well-executed strategy. During the period under review, TSG charted total sales of RM52.17 million which generated profit before tax of RM4.4 million, and return on investment (ROI) of 13 percent.

TSG's success in its core business of assembling and manufacturing high voltage switchgears offers customers a wide range of competitively priced products and services. It had also differentiated itself from the competitors through its service excellence. During the same period, TSG had successfully completed Turnkey 132 kV GIS projects such as PMU Shah Alam West, TNB Central, PMU Melaka 275 kV GIS, TNB Major Project, SSU 33 kV MAHA, and SSU 33 kV MOX, TNBD Selangor and PMU 132 kV Kuantan, TNB East. It also completed the supply of its products such as PMU TG Langsat, PMU Ulu Repah, PMU Masjid Tanah, PMU Kuala Pilah, PMU Putra Jaya and PMU KL Pavilion. It is now setting its eyes to penetrate overseas market. The 170 kV GCB and DS project which is 80% completed has been developed to meet the requirements of the Indonesian market.

TSG is fully aware of the economic changes affecting the region and has identified appropriate strategies to mitigate the impact. The Division is confident of TSG's strengths and ability to deliver success in the true spirit of its vision "To Be the Leader and Quality Symbol in the High Voltage Switchgear Industry".

# 4. TNB Engineering Corporation Sdn. Bhd. (TNEC)

TNB Engineering Corporation Sdn. Bhd. (TNEC) a whollyowned subsidiary of TNB had undergone a very active year. Since its inception in 1996, TNEC was the Project Manager and Project Developer, Engineering Procurement Construction, Operations and Maintenance of projects and Equity Owner. A quality review of its functions has led to the restructuring of its roles and responsibilities that could better serve the needs of the Group and its customers in its capacity as the leading provider of District Cooling System in major buildings in Malaysia.

The company had succeeded in securing projects in Engineering Procurement Construction with main focus in 30,000RT District Cooling System in Abu Dhabi, UAE, District Cooling System project at 1 Borneo Hypermall, Sabah, District Cooling System project for IJN, Main Infrastructure Works Project Phase 1, UITM, Achi Jaya Plantations Gas Engine Project, and District Cooling System project at UITM Medical Training Centre, Sg. Buloh.

Amidst the increasingly competitive global landscape in particular the competition from well-established local contracting firms, TNEC had persevered in pursuing its passions to reach new heights of excellence by open and aggressive marketing for district cooling system projects, formulating new project packaging strategy for competitiveness in tendering, expanding the district cooling system business internationally and establish strategic partnerships.

Spurred on by the vision "To be amongst the Leading Service Provider in the Regional Energy Business", TNEC is moving forward to distinguish itself in the global arena.

# TNB Energy Services Sdn. Bhd. (TNBES)

As a wholly-owned subsidiary, TNB Energy Services Sdn. Bhd. (TNBES) was granted full operational autonomy since 1997. TNBES specialises in providing quality and reliable energy solutions and services to the customers. It offers a complete package for energy-related services including engineering, procurement and consultancy and advisory

services for the development, operations and maintenance of Renewable Energy related projects such as wind and solar hybrid, biomass and mini hydro, Power Quality Mitigation and Monitoring, Energy Efficiency Audit and Implementation and Air conditioning and Mechanical Ventilation Systems services and maintenance.

TNBES had initiated a broad strategy review to ensure that its strategic intent and policies remain, relevant, building on the opportunities presented by the changing environment and meeting the rising expectations of the various stakeholders.

TNBES is proud to have participated in Engineering, Procurement and Contracting of 2MW Landfill Gas Power Station in Puchong, Salangor, Operations and Maintenance and Rehabilitation of TNB Mini Hydro Stations, Renewable Energy (Wind/Solar Hybrid) power stations for supply of up to 300kW per station at various locations, Renewable Energy of mini hydro for Langkawi Cable Car Middle Station for LADA, the islands off Marsing, Johore, Orang Asli Sattlementa in Peninsular Malaysia, Pulau Perhentian (wind/solar) off Terengganu and Remote Areas in Sabah for the Ministry of Rural and Regional Development and Pulau Kapas for Terangganu State-owned PERMINT.

It enjoyed a prestigious recognition from ASEAN as the winner of The Landfill Gas (Biomass) Project in the ASEAN Renewable Energy Project Competition in 2005 under Grid Category as well as being the First Runner-up for Solar Hybrid Project off Mersing under Off-Grid Category in 2008.

The year ahead will be an especially challenging one as TNBES prepares for the increased competition in the energy service sector. It will work with the management of the Division as well as leveraging on its expertise towards realising its vision of being "A Leader in Energy Service Company of

Choice in Malaysis by 2010 and the Region by 2015".

# 6. TNB Fuel Services Sdn. Bhd. (TNBF)

As a purchaser and supplier of fuel, including coal for power generation in Malaysia since 1998, TNB Fuel Services Sdn. Bhd. (TNBF), wholly-owned by TNB, continues to face new and greater challenges in the face of volatila fuel markst. TNBF plays a key role in monitoring coal and freight markets. The Fuel Produrament Executive Committee and Coal Hedging Committee, established to study the fuel market have since extended its activities to cover other critical commodities such as copper and aluminium required by other subsidiaries.

TMBF is optimistic that its vision "To Be a Reputable International Fuel Trader and Fuel Services Provider" would be fulfilled given its tradt record and experience in the field.

# 7. Universiti Tenaga Nasional (UNITEN)

Since its inception in 1997, the university has emerged as one of the most sought after higher learning institutions in the country in just 10 years. Favourable remarks have been constantly received about UNITEN's strategic location, first-class infrastructure and highly marketable graduates: but what stands it in good stead is its corporate credo - vision and mission statements - and the undivided support of its staff at every level. Our university has five main colleges which cater to the educational and research activities of 7100 students. Although relatively small, the university's ability to perform at par or better in research and teaching compared to more established higher learning institutions are seen by a number of achievements in the national and international arena.

UNITEN's principal activities are to provide higher education and training. Its main sources of income are derived from tuition fees, accommodation, rantal of facilities, consultancy and training fees. Total revenue in

the last three financial years has increased, from RM77.4 million in financial year 2004/2005 (FY05) to RM82.3 million in financial year 2006/2007 (FY07) to RM98.3 million in financial year 2007/08 (FY08). The bulk of the revenue is generated from tuition fees.

Research is one of the key agenda of UNITEN and this is seen in the quality of its researchers as clearly worded in its mission statement. UNITEN's commitment in promoting research activities is avident from the number of research undertaken that continues to increase year after year. UNITEN has won 38 local awards and 3 international awards and has acquired Ministry of Science, Technology and Innovation (MOSTI) research grants amounting to over RM10 million. UNITEN has been placed in the 7th position, and is the highest among the Private Higher Education Institutions (HEIs) to receive the MOSTI Fund.

As a pioneer among private universities in Malaysia and is wholly-owned by TNB, UNITEN focuses on three niche areas; engineering, information technology and business. Most of the programmes are accredited by professional bodies such as Institution of Mechanical Engineers (UE), Institution of Civil Engineers (UE), Engineering Accreditation Councils (EAC), Malaysia Institute of Accountants (MIA), Malaysia Institute of Certified Public Accounts (MICPA), and Institute of Chartered Accountants of England and Wales (ICAEW). The programmes are also recognised by international countries such as United Arab Emirates (UAE), Kingdom of Saudi Arabia, Republic of Iraq and Republic of Yemen.

Evidence on the quality of our students and graduates is their success in obtaining recognitions and winning various competitions at national and international levels. UNITEN graduates are highly sought after by the industry and are employed by reputable national and international companies.

Corporation (MPC). UNITEN was also awarded the ISO 9001:2000 certification from SIRIM. Besides that, UNITEN has initiated an effort to share the knowledge of the world to the masses by the Tun Mahathir Lecture series programme. This lecture series is held every year at UNITEN and is open to public on complimentary basis. Its main objective is to create a sharing platform for distinguished personalities who have made their mark in the world and to share their achievements that will inspire people especially the younger generation to be high achievers. Key Performance Indicators

In preparation for stiffer

competition and challenges

in the globalisation era, and in becoming a benchmarked

university by 2010, UNITEN has

established a comprehensive

quality framework - UNITEN 10 which is in line with TNB's

SE 10/10 for service excellence.

We earned our first success

when UNITEN became the first

university in the country to receive the award for Quality

Environment Practices (5S)

from Malaysia Productivity

The Division's Key Performance Indicators (KPIs) is determined by its success in sustaining stable performance, highest asset quality, strong structural liquidity, positive performance ratios and minimum risk exposure of the subsidiaries under its management. These are achieved by constant assessment and monitoring of the subsidiaries and by using the standard Group KPIs that covered several aspects such as:

- Sustainable Profitability - Average Service Cost, Grows New Business -Earning Before Interest, Tax, Depreciation and Amortisation (EBITDA) and Return On Investment (ROI),
- Improve Customer/ Stakeholder Satisfaction -Internal Customer Satisfaction Index (CSI),

- Achieve Operational Excellence - Audit Action Plan completed based on audit findings, completion of Strategic Plan Development, and completion of subsidiaries products/services delivery based on Agreement (Internal), completion process for costing and pricing for services/products supplied
- Improve Capital/Asset Management - Average Project Delay (Month),
- Achieve Highly Competent Workforce - Organisation Competency Index and ensure succession readiness and sustainability - Employee Engagement Score (EES).

Process Standardisation and Improvement (PSI)

Since the TNB as a Group was conferred MS ISO 9001:2000 certification in January 2006, the Division had strengthened its control of the system for documented quality management by continuously improving the quality of their business processes.

# Developing Human Resource Capacity

The Investment Management Division has about 4,220 employees serving TNB Corporate Office and all subsidiaries. During the period under review, the Division had increased its focus on customer service and financial performance while proceeding with operational restructuring and rationalisation. Among others this involved the centralisation of selected business functions and back office support. During the period under review, the Division continued to invest in developing the capacity of its work force with special focus on teamwork, competency and skill enhancement and customer service. On average each employee had undergone 5 training days.

Annual review for employees focused on managing by objectives which are linked to the Division's strategic goals. Mobility of management staff across the Division was encouraged to promote transfer of knowledge and experience while fostering the inculcation of a uniform organisational culture.

# Customer Focus

The Division had decentralised its functions to the subsidiaries in order to build stronger relationship as well as to provide more efficient services. This service model had also enabled it to be actively involved in the development of business strategies and plans for customers.

In order to achieve 'Improving Customer Satisfaction' under the SE10/10 initiative, the Division conducted and formulated comprehensive training and development programmes, held regular meetings and established a tracking and monitoring mechanism on customer complaints relating to the Division's jurisdiction. The Sistem Maklumbalas Pelanggan (SMP) was adopted as the tracking and monitoring mechanism to investigate customer complaints and to plan and implement corrective action within a specified time frame. Customers will be duly informed of the proposed corrective actions once their complaints were resolved.

A customer satisfaction survey covering the subsidiaries. divisions and units of the Group as well as associates and investment companies while showing a general customer satisfaction had also revealed opportunities for improving the quality and range of services offered. The results show that all segments are satisfied with the customer service approach of the Division's employees, especially the discretion, reliability and accuracy of customer service delivered.

ICT is continuously innovating its ways to implement ICT requirements in TNB to support TNB's overall vision and mission.

# ICT Division

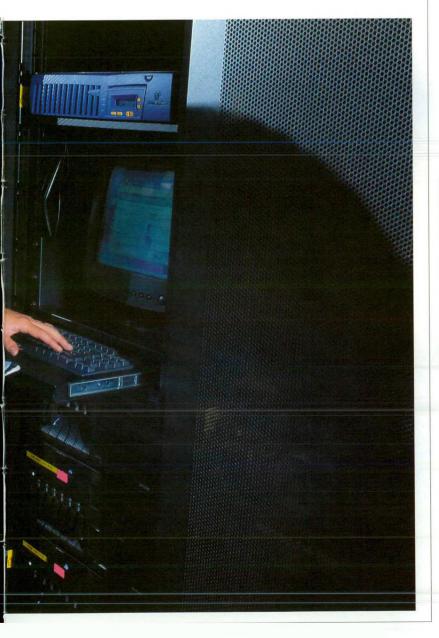
# Highlights of Achievements:

- Completed 'Mobile Field Force Automation Project' to improve communication and breakdown response time between TNB's Call Management Centre and its field crew.
- Completed TNB's 10-Year GIS Masterplan Study aimed to formulate a long term GIS roadmap and implementation strategy for a comprehensive Corporate Geographical Information System (CGIS) covering all divisions within the Group.
- Developed TNB's E-Application, a web-based system that allows housing developers and individual customers to apply for electricity supply online.
- Technical upgrading of TNB Enterprise Systems which include ERMS, EHRMS and eCIBS to a higher platform version. With the completion of SAP upgrade, users can expect better functionalities and a more user-friendly system interface in future.
- Upgraded and expanded the Division's data center to host critical TNB ICT services and applications. TNB Data Center 2 was established early this year to provide hot backup to TNB's Data Center 1. The additional facility is critical as it enabled TNB to provide the necessary security assurance to TNB stakeholders in terms of safeguarding important data.
- Undertook the revamping of TNB Intranet to provide a user-friendly interface and encourage collaboration and sharing of information on a single platform.





Razali bin Awang Chief Information Officer



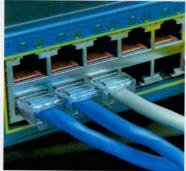


# Divisional Goals

The ICT Division continues to subscribe to four main objectives towards supporting TNB's overall vision and mission namely to effectively govern and consolidate the use of ICT in TNB, e-enabling critical business and technical processes, providing reliable digital infrastructure and network connectivity as well as maximising returns from ICT infrastructures and expertise.

It is also committed to contribute effectively to the business goals and growth of TNB through value creation, service and efficiency improvement, organisation excellence and diversification.





# Core Focus

The ICT Division had continued to enforce ICT Policies, Codes of Practice and Guidelines in its effort to govern and consolidate the use of ICT in TNB.

Its core operational focus is to meet TNB's Service Level Availability for TNB's ICT Systems and Telecommunication Network which will directly assist TNB's core operations in providing a secure, reliable and always available electricity supply to the customers.

In addition, the Division has implemented security upgrades in critical areas to ensure that data integrity within its ICT systems is not compromised. ICT has also invested time and effort to

enhance productivity within TNB through a range of internally-developed systems to support TNB's Customer Relationship Management framework, Supply Chain Management and communication strategy.

# Operational Improvements

# **Major Projects**

During the period under review, the Integrated Fleet Management System (IFMS) was implemented in Selangor, Wilayah Persekutuan Kuala Lumpur and Putrajaya for efficient maintenance management of all TNB fleet vehicles as well as effective monitoring of performance and service quality provided by TNB appointed workshops.

The Division had also contributed its expertise towards the development of the Online Vendor Registration (OVR) System. The efforts had been well-rewarded when TNB was honored with the "Best New Services" Award for its reputable IT applications such as OVR, eCIBS and MFFA during the 10th ASEAN Communication & Multimedia (ACM) Expo & Forum 2007 in Kuala Lumpur.

ICT also contributed in the development of an online Whistle Blowing System together with Internal Affairs Department as part of TNB's effort to improve internal or external complaint channel related to employee misconduct and power abuse.

The Division had implemented an internal Customer Management System (CMS) that enabled online request and tracking of ICT incidents and change requests. This system was implemented in accordance with the principles of IT Infrastructure Library (ITIL), the industry best practice for IT Service Management.

Several projects to improve in-house operations had been instituted during the period under review. Enhancement of the cbPMS had enabled TNB to monitor the Key Performance Indicators and competencies of all staff, thus contributing to better performance management. Other projects implemented were the enterprise-wide Electronic Document Management System (EDMS) to manage TNB's records and files and the TNB Storage Virtualisation project which involved consolidation of various storage platforms to improve ERP performance that led to simplification of storage management as well as reduction of total cost of ownership.

The Division had also undertaken continuous upgrading of infrastructure to enhance the resiliency, reliability and availability of the TNB telecommunication network as well as to provide for robust and reliable channels for teleprotection, telecontrol and SCADA.

The in-house development of these systems coupled with prudent project management discipline had enabled TNB to realise cost savings in the long term.

# Key Performance Indicators

The ICT Division's Key Performance Indicators are evaluated based on the four main thrusts formulated to support TNB's overall goals, namely prudent spending and maximising value from ICT investments, improving customer efficiency through excellent and industry standard ICT products and services delivery, operational excellence through e-processes and leveraging on human capital for continuous growth.

Overall, the Division had managed to reduce capital expenditure through innovative project implementation which succeeded in meeting all deliverables while optimising cost.

In line with industry practice, the Division's services to the core divisions were measured by the Telecommunication Network Availability and System Availability indicators. In this respect, the Division had succeeded not only in meeting the targets but had surpassed the industry benchmark. Its internal Customer Satisfaction Index score had also shown improvement.

At the same time, the Server Utilisation Key Performance Index had indicated optimal utilisation of ICT Division's infrastructure by the Group.

Implementation of Process Standardisation and Improvement (PSI)

The ICT Division heavily utilises the PSI platform to improve its internal services. Through the PSI, the Division is able to study and propose system improvement in line with its main objective of E-enabling critical business and technical processes for higher efficiency.

During the period under review, the Division had undertaken a review of its operational process to simplify and better manage its services. The new processes would include the application of the entire Plan, Do, Check and Act cycle in accordance with the IT Infrastructure Library (ITIL) to ensure the effectiveness of services delivered. Apart from this, the Division has also implemented parts of the Control Objectives for Information and Related Technology (COBIT) to effectively govern ICT operations in its processes.

In the meantime, the Division had reduced the number of processes from the initial 38 to 23 following process consolidation in Project Implementation, Service Desk Escalation, Data Centre Monitoring and Customer Management systems. The reduction to the number of processes signifies lesser red tape and provides a more seamless and systematic process in delivery of ICT products and services.

# Quality Management and Initiatives

The ICT Division's quality management was implemented through improvements in the Enterprise Resource Planning System, establishing Work Improvement Teams (WIT), implementation of 5S and conducting Safety and Environment Management System (SEMS) baseline audit.

Four (4) Work Improvement Teams (WIT) had implemented projects to improve their day-to-day work which included the management of Data Center Access and Inventory. SEMS baseline audit was conducted to determine the safety level of all operational units in the four regions of Peninsular Malaysia.

# Capability Building

The ICT Division strongly believes that building capability of its work force is fundamental to enhancing performance and the pursuit of the journey for excellence. Various initiatives were taken to improve staff competencies and motivation including knowledge sharing sessions with staff, job attachment, Face2Face

communication programme to discuss staff aspirations, identify gaps and development needs, KPI cascading sessions, and reward and recognition programmes such as ICT's Quarterly/Annual Anugerah Khidmat Cemerlang (AKC) Award and Monthly Top 5 CMS Implementers.

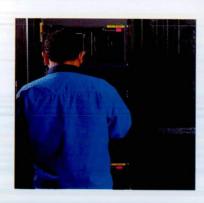
# Relationship Management

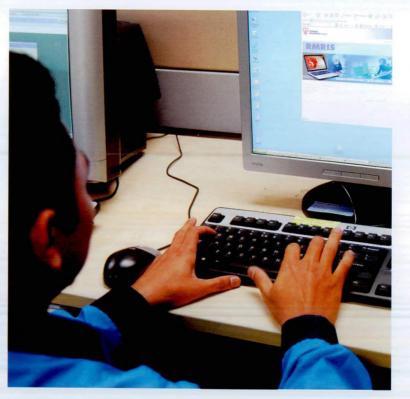
Through its partnership with stakeholders, the Division was able to implement the following strategic alliance programmes for TNB:

Expansion of the strategic sourcing scheme introduced in 2004/2005 to include purchases of other IT equipment such as scanners, projectors, printers and toners as well as telecommunications equipment

The Division had successfully organised the ICT Office Productivity Day to promote ICT products and services including tools and tips to improve work productivity to TNB staff. Through the event, staff had benefited from affordable IT products offered by TNB third party vendors. In response to encouraging staff feedback, ICT Office Productivity Day will be organised as an annual event.

The ICT Division has always been proactive in supporting and participating in welfare programmes. Contributions in cash and in-kind have been made to the needy such as PC donation to schools.





# Awards and Accolades

ICT Chief Information Officer, Encik Razali Awang has been given recognition nationally as a visionary and charismatic leader by MIMOS as reported in the Business Today magazine.

# Prospects and Challenges

The ICT Division will continue to face a challenging year ahead to meet the ever increasing demands for ICT services in the Group. Our past performance has earned the confidence of TNB's three core businesses divisions of Generation, Transmission and Distribution in enhancing operational maintenance to ensure efficient supply of energy.

Moving forward, the MFFA (Mobile Field Force Automation) project scope will be expanded to include Distribution Division teams located in other parts of Peninsular Malaysia such as Johor and Penang. This project will be extended to the Transmission Division in the near future.

The foundation project phase of Corporate GIS is set to commence in FY08/09 and would span over the next four years. The ICT Division has been entrusted by TNB Management to drive and coordinate the GIS corporate-wide initiative. This includes managing internal TNB fibre optic network, property management, security and logistics. A Service Oriented Architecture (SOA)

solution will be included in the implementation scope to optimise the functionality of the Corporate GIS project and sharing of information between various TNB applications.







Nor Azmi bin Ramli Chief Procurement Officer

# Procurement

Procurement is a strategic function that drives value creation in supply chain for the Company

Highlights of Achievements:

- Significant Value Creation in the Financial Year amounting to RM118 million.
- Continued and sturdy progress in the 2nd year of Procurement Transformation Plan implementation.
- Launching of the nationwide On-line Vandor Registration in October 2007.
- Hosting of the "Anugerah Usahawan/Vendor Cemerlang" event in February 2008.
- Launching of the TNB Product Quality Assurance Policy and Procedures in July 2008.
- The first revision of the BVDP Policy and Procedures was approved in August 2008.
- Implementation of e-bidding for products and services resulting in savings of more than RM15 million.

# Divisional Goals

TNB has restructured and strengthened its procurement organisation and has given the Procurement Division the mandata to play a greater strategic role in driving value creation and enhancing procurement process transparency, integrity and efficiency.

The Division is an important driver of business performance with responsibilities in formulating TNB's procurement policy, driving procurement strategies in-line with corporate atrategic directions, providing advisory services, enforcing compliance and promoting national development priorities, including the development of a more compatitive and resilient Bumiputra enterprise community.

Driven by its vision and mission, the Procurement Division aspires to be the leader amongst regional utilities in Supply Chain Management. It is also committed to create value through innovation and adoption of procurement best practices.

# Operational Summary

During the period under review, various activities and initiatives were successfully carried out to address the five key focus areas in the Procurement Transformation Plan, i.e. the promotion of use of local content and ensuring Burniputra equity shares; realising value creation; anhancing procurement process transparency, integrity and effectiveness; enhancing supplier management and strengthening procurement organisation by transforming it into a more strategic function. The value creation levers that were effectively employed in achieving the significant total savings include spend consolidation, strategic sourcing, tax exemption, contract management and e-Bidding.

### · e-Bidding

Eight e-Bidding sessions for products and services were successfully conducted with more than RM15 million savings being realised.

# On-line Vendor Registration (OVR)

OVR was implemented in October 2007 to replace the manual vendor registration system. The objective is to shorten the vendor registration process and improve efficiency. There has been an increase in the number of renewals and new registration of vendors following the implementation OVR. As the system is shared with other divisions through the intranet, it has enabled the verification of vendor status by the divisions during

divisional tender evaluations. The enhancement of the system is on-going to meet current and future requirements.

# Procurement Appraisal

The Division continues its efforts in enhancing process integrity and transparency by conducting 44 procurement appraisals on selected stations throughout Malaysia. The objective is to ensure the adequacy, compliance and effectiveness of procurement process, policy and procedures.

# Human Resource Capacity Development

The Division is structured around 4 key departments namely Sourcing Controller, Strategic Supplier Management, Best Practice and Policies and Shared Purchasing. Staffs with diversified skills and disciplines are continuously being developed to support the enhanced strategic function of procurement.

# Partnership with Stakeholders

# Heads of ASEAN Power Utilities/Authorities (HAPUA)

The HAPUA Procurement Circle was established in February 2007 to serve as a platform for ASEAN member countries to share best practices, provide alternative sources of information for market intelligence and price benchmarks via the HAPUA Procurement Portal and create opportunities for collaborative procurement activities and benchmarking for performance improvements. TNB had successfully hosted the 2nd HAPUA Procurement Circle meeting in March 2008 which was attended by representatives from eight ASEAN countries. Amongst others, the meeting resolved that the HAPUA Procurement Circle must continue to exist as a platform for HAPUA members to interact in the sharing of information and procurement best practices. A benchmarking visit to PT PLN (Persero), Indonesia was conducted to share and compare procurement best practices adopted by TNB's counterpart in Jakarta. The visit was also part of procurement regional networking initiative to establish relationship and to create a platform for benchmarking and comparative study activities.







# GLCs Procurement Circle

On the local scene, TNB is part of the GLCs Procurement Circle which is facilitated by the Putrajaya committee on GLC high performance. Several meetings held during the year had enabled TNB to compare current procurement best practices among the members.

# • Info Perolehan

As one of the shared values, Procurement Division always ensures that our customers (both internal & external) are our top priority. In order to ensure that information is well disseminated, Procurement Division has set up a platform known as "Info perolehan" for internal customers to post any queries on procurement matters.

# Government Ministries

Procurement Division regularly meets with relevant Ministries which include among others the Ministry of Finance (MOF), Ministry of Entrepreneur and Cooperative Development (MECD), and Ministry of Energy, Water and Communications (KTAK) to align TNB business objectives with Government's expectations.

# Quality Management and Initiatives

# Product Quality Assurance Policy & Procedures

To ensure efficient, continuous and reliable electricity supply networks, the Product Quality Assurance Policy & Procedures was launched in July 2008 to guide TNB in the procurement of high quality products through effective and transparent processes. The Policy which consists of 24 procedures also acts as a catalyst in improving and enhancing the quality of



# Excellence Award for Entrepreneurs/Vendors

Since the introduction of the Entrepreneur Development Programme in 1993, TNB through the Procurement Division has been consistently nurturing and developing its entrepreneurs thus paving the way for them to emerge as global players. The Entrepreneurs/Vendors Excellence Award was introduced for the first time in February 2008 to serve as testimony to TNB's success in implementing the Entrepreneur Development Programme. Salutary Avenue Manufacturing Sdn. Bhd. was the winner of the Entrepreneurs/ Vendors Excellence Award 2008 for their consistent achievements in the local, regional and international markets. The event was held at One World Hotel, Kuala Lumpur.

# Marketing & Promotional Programmes

The Strategic Supplier Management Department of the Division had jointly participated in local and international marketing and promotional programmes with the vendors. Participation in these programmes helps the vendors leverage on TNB brand name to penetrate the local and overseas markets. The Division had participated in, among others, the Ministry of Entrepreneur and Cooperative Development (MECD) EXPO held in May 2008 at the Putra World Trade Centre (PWTC) and the international marketing mission to Cambodia & Vietnam in July 2008.

# Awards and Accolades

The Procurement Division was entrusted to contribute to the "Quality Assurance of External Suppliers" criteria which is one of the criteria in the Prime Minister's Industry Excellence Award 2007 (AKIPM). The assignment was based on the Division's close relationship with TNB Groupwide suppliers. The Division ensures the quality of TNB products and services through its consistent quality assurance efforts which encompasses supplier selection, supplier certification and recognition.

# Division Challenges

The escalating price of raw materials including the cost of fuel has a direct impact on TNB's procurement operational costs. Value creation initiatives including the adoption of procurement best practices particularly the Total Cost of Ownership (TCO) is crucial in order to sustain TNB's profitability.





Md. Jailani bin Abas Senior General Manager

# Corporate Services

The Corporate Services Division provides support services to TNB Group in areas it specialises in i.e. logistics, properties, security and intelligence services.

# Highlights of Achievements:

Among the highlights of achievement of Departments and Units under the Division are:

# Security Services & Intelligence Department (SSID)

- Formation of National Taskforce on metal theft with relevant enforcement agencies to combat intrusion and theft at TNB installations with participation from GTD.
- Formation of SSID National Control Room.
- Effective 1 May 2008, SSID enforced rigid KPI and penalty in the contract with private security companies. The Department also took the initiative to provide training to private security personnel as stipulated in the same contract.
- Conducted Cyber Crisis Drill in coordination with EWRM, Cyber Security & National Security
- Held dialogue session with Malaysian Indian Metal Traders & Recyclers Association (MIMTA).
- Investigation & Intelligence Unit's success include uncovering syndicated crime involving TNB
  personnel against TNB assets, syndicates involved in theft of transformers, electricity, TNB fuse
  link, cables and padlocks at installations. Four members of the syndicate involved in theft of
  padlocks at installations were arrested. Also uncovered was a syndicate involved in forgery of
  cheques for payment of electricity bills.

# Property Services Department

- Successfully implemented projects and maintenance job requested by the Division.
- Realised annual savings of RM600,000 on TNB OPEX attributable to reduction in quit rent payment to Majlis Perbandaran Port Dickson following reassessment on Tuanku Ja'afar Power Station Port Dickson.

# Logistic Services Department

- Migration of all Shell's petrol card to Petronas.
- Completed tagging of 4708 Group vehicles. This is an on-going exercise and tagging of new vehicles and current vehicle status would be carried out annually.
- · Increased savings on Customs duty and Sales Tax after gaining exemption for imported items.
- Rolled out PERFEKTO system group-wide (peninsular Malaysia).



### Divisional Goals

Following a major restructuring in early 2008, the Corporate Services Division's functions and responsibilities have been scaled down to cover four main areas namely logistics, properties, security and intelligence as well as support services including human resource and administration, finance and planning and performance. The Division's core operational focus is to be the leading division in supporting TNB's vision and mission and provides excellent support services within TNB.

# Operational Summary

The Security Services & Intelligence Department (SSID) is one of the important support services providing and delivering effective & efficient core security services to TNB to ensure uninterrupted power supply.

It aims to achieve operational excellence by reducing breach of security to prevent losses to TNB. SSID aspires to be among the leading security services provider in the region by 2010.

The Department has three operational units namely Operation, Planning & Crisis Management and Investigation & Intelligence Units. SSID's main focus is to safeguard TNB's key installations from damage, vandalism and theft. Its personnel are stationed at various critical locations such as power stations, substations and regional warehouse and offices throughout Peninsular Malaysia.

The Property Services Department provides property support services to the core businesses of TNB by enhancing the Group's assets values through excellent discipline in planning and development, project management, management and land procurement. The Department's mission is achieve excellence in the management of property, products and services.

The Logistic Services Department provides cost-effective logistic services to customers and to seek new services that could add value to the Group. The Department's objective is to manage total logistics requirements to meet customer expectation.

For the period under review, the Department had provided costefficient and effective logistic services with high customer satisfaction. These included freight, fleet and generator set services to support TNB's core businesses. Major assignments handled during the period included vehicle repair and maintenance, vehicles inspection by PUSPAKOM, supply of generator sets, repair of feeder

pillar, freight management (importation and exportation of TNB cargoes), customs clearance, application for Customs duty & Sales Tax exemption, transportation of general cargo & heavy lift, office removal, management of fuel card and mobile phone billings.

The Support Services Department, comprising the Planning and Performance Department, Human Resource and Administration Department and Finance Department assists the Senior General Manager in planning, formulating and implementing the Division's objectives and strategies towards achieving TNB's overall corporate objectives. The department also serves as the central body serving the needs of the other departments/subsidiaries in the Division in business planning, human resource management, administration and finance.

# Major Projects

The SSID has been entrusted with the implementation of Integrated Security Management System (ISMS) within five (5) years beginning FY2006/2007. This system consolidates different Security Solutions into one Control System. An annual budget of RM10 million has been allocated for this project.

The Property Services Department is responsible for the management of TNB maga projects such as TNB Tower and other TNB buildings.

During the period under review, major projects undertaken by the Logistical Services Department included the following:

- Major refurbishment of six (6) units of 500 kW mobile generator sets.
- Built skild tanks for Generator set operating bases at Gong Badak, Malim Nawar, Musdeam Shah and Chain Ferry.

- Built used oil storage at Melana Jaya and Malim Mawar.
- Rolled out PERFETTO system group-wide especially the Distribution and Transmission Divisions.
- Vehicle tagging project.

The Planning and Performance Department had initiated the Integrated Security Management System for all critical assets of TNB.

# Operational Improvements

Various programmes were initiated and implemented in the Division to improve operational efficiency. These included conducting staff training, development and certification programmes, motivation talks, knowledge and information sharing meetings, dialogues with customers and vendors to resolve operational issues and the Vandor Parformance Evaluation. In addition, the Division had also implemented staff award and recognition programmes, monthly reporting by units for performance tracking and centralisation of customer complaints for effective resolution.

# Key Performance Indicators (KPIs)

The Division's Kay Performance Indicators are grouped under four main categories as follows:

### **Financial**

- Effective OPEX Budget Management (exclusive uncontrollable project requirement & expenses).
- Effective CAPEX Budget Management (exclusive uncontrollable project requirement & expenses).

# Customers

 Internal Customer Service Score.

- Improve Project Delivery on Property's project.
- Improve Project Delivery on Security's project.

### Internal Processes

- Value creation/savings from Integrated Fleet Management and Gen Set operations.
- Reclude Breach of security.
- Value Creation from Idle Assets.

# Learning and Growth

- Improve Competency Index.
- Conduct PMS.

# Process Standardisation and Improvement

There are currently four procedures and eight Work Instructions under the Security Services & Intelligence Department (SSID). Several more procedures will be developed and uploaded in the system after discussions with asset owners and approval by Senior General Manager of the Division.

The Property Services Department has developed 15 procedures and 20 work instructions which are subject to quarterly review at the department level.

Ten procedures in the Division were registered under the ISO system. These procedures were audited during Internal Quality Audit (IQA). No non-compliance was discovered except for minor observations for improvements (OFIs). Three procedures for fleet management would be registered.

The Division's Internal Quality Audit was conducted on 27 June to 8 July 2008. It plans to review its Action Plans on SIRIM NCR and OFI by mid September 2008. The ISO concepts, process and procedure will be disseminated to staff the Division in the next Financial Year.

# Human Resource Management

Apart from recruiting qualified and competent personnel, the Division has placed great emphasis on continuous capacity building of its human resource. As at end August 2008, the Corporate Services Division has a staff strength of about 1500 with many areas of specialisation. To enhance their skills and competencies, the number of training days attended by staff, in particular the executives, has been included as one of their KPIs. Suitable internal and external training programmes would continued to be identified and proposed to the management.

# Customer Focus

The Corporate Services Division identifies its customer needs and expectations through the Annual Customer Satisfaction Index (CSI). Each year all departments under the Division are required to distribute questionnaires to their customers. The final analysis of the results of the survey will be reported by the Performance & Planning Department. The scores and findings will serve as the basis for all departments will take appropriate corrective measures which include:

- Identifing areas for improvement.
- Organising formal and informal meetings with customers to understand their needs and expectations and problems encountered with the services offered.
- Meeting customer needs is set as one of the KPIs of staff.
- Develop and implement Customer Relationship Management Plan.

# Quality Management and Initiatives

The Division had conducted various quality management and initiatives which included:

- Though there was AKP assessment during the period under review, activities under AKP were implemented as planned.
- 26 WIT teams were actively involved in formulating ways to improve quality of products and services to customers.
   Team members are drawn from the same units as projects are designed to improve processes of their respective units.
- The 5S activities conducted had considerably improved the office work environment Currently more than 90% of the staff Had taken part in 5S programmes through weekly observations, monthly meetings and quarterly audit.
- Risks were monitored from TNB
  Risk Information System (TRIS)
  to maintain strong internal
  control with the objective to
  minimise, if not eliminate, the
  impact and likelihood of the
  Division/Departments failing
  to achieve their objectives
  and to reduce uncertainty of
  undesirable events occurring.

# Stakeholder/Relationship Management

The Division had established good rapport and networking with many stakeholders directly related to its daily operations. Among these are the Ministry of Finance (MOF), the Malaysian Industrial Development Authority (MIDA), the Royal Customs Department, the Ministry of Domestic Trade & Consumer Affairs, the Ministry of International Trade and Industry, the Road Transport Department, the Royal Malaysian Police and PUSPAKOM.

The Division also managed various categories of vendors comprising among others panel workshops, panel transporters, panel Multimodal Transport Operators (MTOs), Petronas, CELCOM, private security agencies, building contractors, general vendors for supply of materials.

# Challenges and Prospects

As TNB-owned assets are gazetted as National Critical Infrastructure, Security Services & Intelligence Department (SSID) needs to be proactive in ensuring the proper protection for the assets. Among initiatives taken included the formulation of strategies and mechanisms that promote vigilance as well as building networking with various security agencies.

The fight against sabotage and threats of terrorism require comprehensive and multifaceted strategies. Raising awareness and educating TNB staff of the threats, undertaking strict compliance measures, adopting and implementing necessary legislation and the effective sharing of information and intelligence at bilateral, multilateral levels multilateral and regional levels are among some of the pertinent initiatives.

Among the main challenges faced by the Property Services Department is the appropriate outsourcing of its roles and functions in property management in particular property maintenance services and project management.

# Tenaga Nasional Berhad ] [ Annual Report 2008 ]

# Sabah Electricity Sdn Bhd

# Highlights of Achievements:

- The sales of electricity in the financial year amounted to RM854 million compared to previous years sales of RM807 million showing a favourable increase of 5.8%. Total units sold for the year amounted to kWh3,384.74 million compared to kWh3,221.34 in FY2006, an increase of 5.07%.
- The total reported operating expenses for the financial year amounted to RM977.96 million compared to RM909.22 million reported in FY2007 (net of subsidy). The Company receives significant amounts of diesel and medium fuel oil subsidies from the Government of Malaysia and is presented net of Energy Costs.
- Total operating expenditure exceeded total income (revenue plus other operating income) resulting in an operating loss of RM16.44 million compared to an operating loss of RM3.24 million in FY2007. Total finance costs and foreign exchange losses for the financial year of RM65.03 million in FY2008 (RM59.50 million in FY2007) resulted in a net loss after finance costs of RM81.47 million (RM62.75 million in FY2007).





# Human Resources Division

With a manpower strength of 2,289 staff, SESB continues to develop the competency and capability of its employees as part of key strategy to enhance the productivity and efficiency of the company.

During the period under review, the Division had conducted various workshops and training sessions including GTD technical courses, Mini MBA, Kepner Tregoe Problem Solving and Decision-Making, SEMS, 53 Practice, PSI (Process Standardisation & Improvement), Shared Values, and other soft-skills programmes.

Some 75% of its executive and 33% non-executives had availed themselves to the training, SESB continued its collaboration with Institut Latihan Perindustrian Kots Kinsbalu (ILPKK) in the recruitment of non-executive technical staff through the Skim Latihan Parantia Ketukangan. SESB adopted Kirk Patrick's four levels of training evaluation. Reward and Recognition initiatives were introduced with 30 incentive schemes. For FY2007/2008, the AKP score for HRM was 80% points. The achievement in AKP will be the prime mover for SESB to move forward to achieve service excellence by year 2012.

# Generation Division

During the period under review, the total installed capacity for the Generation Division was 871.3 MW (SESB 435.8 MW and IPP 435.5 MW) and the maximum demand throughout the state was 646.9 MW.

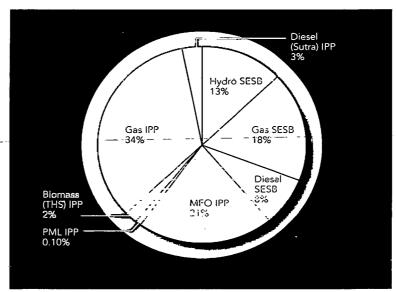
Total cost per unit (CPU) generated for all SESB power stations (i.e. major, minor, rural and mini hydro stations) and IPP plants for FY2007/2008 was 16.4sen/I:Wh while the CPU for SESB's major stations only and IPP plants was 16.1sen/I:Wh. The overall unit generated and total expenditure incurred were 4,176 GWh and RM381 million respectively of which minor and rural stations accounted for only 1.71% of the total unit generated and 0.53% of the total sypenditure.

As a strategy to reduce overall generation costs, the Division had focused on the SESB major stations, all IPPs and mini hydro plants. It had also optimised power generation from hydro

and gas plants as a cost saving strategy. Among initiatives to be implemented to achieve this objective were Trash diverter II project at SJ Tenom Pangi and replacement of Lateral Exhaust Ducting and Damper Door at SJ Patau-Patau. *Graph 1* shows the generation fuel mix as at end August 2008. Generation from gas fuel accounted for 52% of the total energy, followed by MFO at 21% and hydro at 13%.

During the period under review, the Sepanggar Bay Power Corporation Phase 2 (34 MW) (an IPP project) and the Powertron Phase 2 (70 MW) project were completed in July and August 2008 respectively. The East-West Interconnection project which was completed in July 2007 had enabled energy from the West Coast to be exported to the East Coast and thus reducing unit generated from the expensive diesel-operated Gas Turbine operation at Tawau and Sandakan.

Graph 1
Generation Fuel Mixed as at 31 August 2008



### Transmission Division

The key mandate for the Transmission Division is to ensure supply reliability and quality. In its endeavour to fulfil this responsibility, the Division has formulated the following objectives:

- To carry out planning, operation, maintenance and system improvement works of the transmission system throughout Sabah and Federal Territory of Labuan.
- To operate the Sabah Grid in the most efficient manner.
- To transmit adequate power supply efficiently and economically with minimum interruptions.

The supply reliability of transmission lines contributes to the overall image of SESB as transmission lines and substations are the linkages between supply source and distribution system.

SESB Transmission Division underwent restructuring during the period under review resulting in the creation of two new departments - the Energy Procurement Unit (EPU) and Operation Planning (OP). The EPU is responsible for monitoring the Independent Power Producers (IPP), while OP would dedicate itself to short term planning and forecasting for operational purposes.

**Table 1** below showed the Delivery Point [Unreliability Index (DPUI) and System Average Interruption Frequency Index (SAIFI) achieved by the Transmission Division during FY2007/2008.

As indicated in Table 1, there was a mark difference between "Total Achievement" and "Achievement without Major Incident". A major incident is defined as a load loss of 50 MW and above. The segregation between the two scenarios is necessary for the purpose of continuous monitoring on the effectiveness of the routine and preventive maintenance performances.

Three major incidents that led to the large disparity in achievement during the period under review were:

- Total blackout on the East Coast due to tripping of both 275 kV Kolopis – Segaliud lines with a total load loss of 124 MW on 30 September 2007.
- VT faulted at Karamunsing Sub-Station with total load loss of 308 MW on 6 November 2007.
- Tower collapsed of 132 kV along Kayu Madang – UMS lines due to theft on tower members with a total load loss 459.3 MW on 21 April 2008.

The Division had implemented a total of 21 projects for maintenance and system improvement. The following seven projects were completed while 14 more are in various stages of implementation.

- Replacement of neutral earthing resistor (NER) at Karamunsing Sub-Station and UMS 66 kV Sub-Station completed on 1 December 2007.
- Installation of three-pole 132 kV & 66 kV SF6 gas circuit breaker at the 66 kV Sub-Stations in Tenom Town, Penampang, Kota Kinabalu, and Inanam completed on 4 April 2008.
- 132 I:V transmission line rentice clearing for year 2008 from Sandakan to Segaliud Sub-Station 13 May 2008.
- 132 PV transmission line rentice clearing for year 2008 from Semporna to Kalumpang Sub-Station completed on 13 May 2008.
- 132 EV transmission line rentice clearing for year 2008 from Tawau to Kalumpang Sub-Station on 13 May 2008.
- Procurement and training of 132/275 I:V Emergency Restoration System (ERS) Towar completed 13 June 2008.

Table 1

| 100 |  | <u> </u>                        |        |             |                       |  |
|-----|--|---------------------------------|--------|-------------|-----------------------|--|
|     |  | Key<br>Performance              |        | Achievement |                       |  |
|     | Targets and Objectives                                 | Indicators/ Measures            | Target | Total       | W/O Major<br>Incident |  |
| 1   | Delivery Point Unreliability Index<br>(DPUI)           | System Minutes                  | 42     | 154.38      | 11.89                 |  |
| 2   | System Average Interruption<br>Fraquency Index (SAIFI) | Interruption/<br>Delivery Point | 0.29   | 1.125       | 0.108                 |  |

 Installation of polymeric 132 kV transmission line arresters (TLA) on the 132 kV transmission line from Sandakan to Segaliud Sub-Station completed on 23 July 2008.

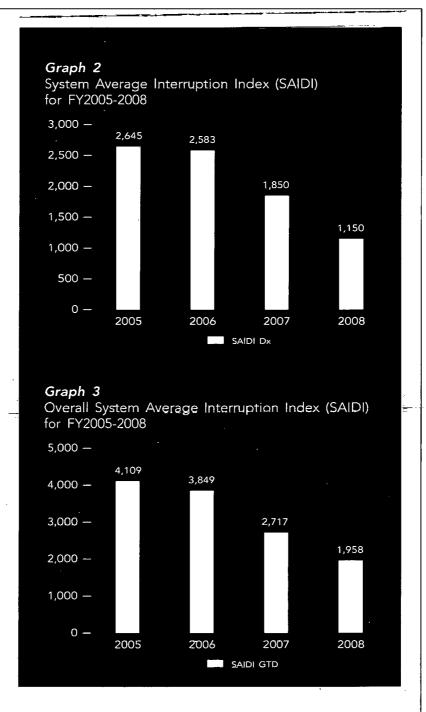
### Distribution Division

Under the SESE's 20 Year Strategic Plan, the 3 principal Key Performance Indicators (KPIs) for which the Distribution Division is directly responsible are System Average Interruption Index (SAIDI), Losses and ACP. Focus was given to the implementation of preventive maintenance schadule and HV system improvement projects to improve supply reliability. Among the maintenance projects implemented were:

- Vegetation Management for 11 kV and 33-kV System
- Preventive Maintenance for VCB switchgears at PMU and PPU
- Preventive Maintenance for 33 kV Transformers by MCM

These initiatives would be further improved in Financial Year 08/09 while 52% of the budget for HV system improvement projects had been utilised in FY2007/2008. Among projects to be given priority under these initiatives are the new feeders from PMU and creating feedback system from existing feeders.

As indicated in **Graph 2** the Distribution Division had succeeded in reducing SAIDI by .700-mins-while-Qverall-SAIDI-for-SESB is shown in **Graph 3**.



The Metering Unit of the Division which is responsible for reducing system loss had outlined the following critical initiatives that would have greatest impact system losses reduction especially Non-Technical Losses (NTL).

- Scheduled Inspection on LPC Meters – 100% LPC Check
- Installation of kVARH Meter on LPC Consumers
- Installation of Check Meter on LPC Consumers
- Replacement of Old OPC (Ordinary Power Consumers) Meters

Results of these initiatives in FY2007/2008 are as indicated in *Table 2. Graph 4* shows the System Loss recorded for FY2004-FY2008.

Initiatives to reduce ACP is under the purview of the Consumer Services & Marketing Unit. Other than increasing the daily disconnection activities carried out at station level, several new initiatives had been carried out in FY2007/2008 including:

- Monitoring the daily performance of Meter Readers
- Daily monitoring of Unbilled Accounts
- Appointing vendors to carry out disconnection – only exercised in Kota Kinabalu
- Ongoing monitoring of Government Accounts

The ACP performance for FY2007/2008 is indicated in **Graph 5**.

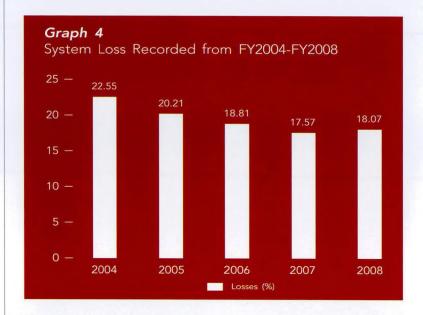
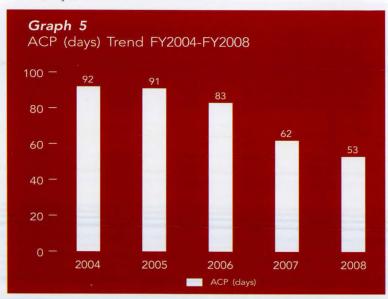


Table 2

| Nos. | KPIs                            | Target | Achievements | %    |
|------|---------------------------------|--------|--------------|------|
| 1    | Inspection of LPC<br>Meters     | 2,431  | 1,704        | 70%  |
| 2    | Installation of kVARH<br>Meters | 80     | 80           | 100% |
| 3    | Replacement of old meters OPC   | 62,179 | 22,251       | 36%  |

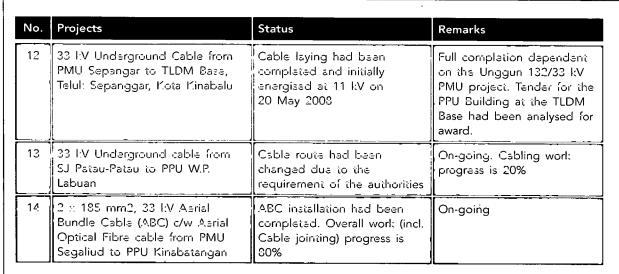
Graph 5 ACP (days) Trend FY2004-FY2008



### Major Projects Division

Under the 9 Malaysia Plan, the Federal Government had allocated RM600 million to implement 23 projects to strengthen electricity supply mainly the transmission and distribution system in Sabah as follows:-

| No. | Projects   | Status   | Remarks   |
|-----|--|--|---|
| 1   | Extension from 132/66 kV Inanam<br>PMU to the proposed 132/33 kV<br>Minintod PMU               | Transmission Line: 89% completed Substation: 97% completed Inanam PMU extension: 12% completed | On-going  |
| 2   | Proposed new 132/33 kV Unggun<br>PMU (formerly known as PMU<br>Naval Base)                     | Project start: June 2008<br>Progress: 10%  | On-going  |
| 3   | Additional 132/11 kV; 1 x 20/30<br>MVA Transformer at Lahad Datu<br>PMU                        | Project start: May 2008<br>Progress: 8%  | The SCADA portion will<br>be tested once the data<br>freezing is lifted   |
| 4   | Additional 132/33 kV; 1 x 45<br>MVA Transformer at Sandakan<br>and Tawau PMU                   | Project start: May 2008<br>Progress: 8%  | On-going  |
| 5   | 132 kV Kota Kinabalu Outer Ring<br>Phase 1 from Northern Town<br>PMU to the new Kepayan PMU    | Commissioned on<br>21 August 2008  |   |
| 6   | 132 kV Kota Kinabalu Outer Ring<br>Phase 2 from the new Kepayan<br>PMU to the new Lok Kawi PMU | Project start: March 2008<br>Progress: 10%   | On-going  |
| 7   | Proposed 132 kV Alam Mesra<br>PMU; 2 x 800mm <sup>2</sup> XLPE cu,<br>132 kV from UMS PMU      | Project start: August 2007<br>Progress: 90%  | On-going. First PMU to use<br>the Compact Air Insulated<br>System (CAIS)  |
| 8   | Sabah East West Grid<br>Interconnection  | Commissioned on 28 July<br>2007  | On average transfers<br>70-90 MW of power from<br>the West Coast to the East<br>Coast daily   |
| 9   | 33 kV Overhead lines from Sook<br>to new 33/11 kV Nabawan PPU                                  | Commissioned on<br>11 December 2007  | Nabawan Rural Power<br>Station had been<br>decommissioned and all<br>loads had been transferred<br>to the new PPU                   |
| 10  | 33 kV Underground cable from<br>PMU Kepayan to PPU KKIA &<br>MAB Kota Kinabalu                 | Cable laying had been completed and initially energised at 11 kV                               | Circuits will be transferred<br>to the new 33 kV swithgears<br>at the Kepayan PMU in<br>stages. The PPU building<br>progress is 75% |
| 11  | 33 kV Underground Cable from<br>PMU Kepayan & PMU Minintod<br>to PPU Star City, Kota Kinabalu  | Cable route had been changed due to the requirement of the authorities                         | On-going. Cabling work progress is 60%. The PPU building had commenced in October 2008.   |



Besides these projects undertaken by SESB, the Major Project Division is also monitoring and coordinating the implementation of several generation projects carried out by the Independent Power Producers and Small Renewal Energy Programme (SREP) as follows:

| No. | Projects  | Status                                 | Remarks  |
|-----|---|--|--|
| 1   | Sepanggar Bay Power<br>Corporation (SBPC),<br>100 MW Combined Cycle                                   | Completed                              | Commercial Operation Date<br>(COD) achieved on<br>15 August 2008   |
| 2   | Ranhill Powertron (RPSB) 190 MW<br>Combined Cycle Block: 1 & 2  | Overall Progress is 99%                | Steam Turbine Generator (STG)23 achieved Initial Operation Date (IOD) on 23 August 2008 and performance tests commenced on 22 September 2008 |
| 3   | Panhill Powertron II (RPSBII)   |  | Supplementary Agreement<br>signed. New COD (first<br>block Open Cycle)<br>8 November 2009  |
| 4   | SREP Projecta:<br>Sg. Kedamaian, Kota Balud<br>Sg. Pangapuyan, Kota Marudu<br>Sg. Kaingaran, Tambunan | Contractual complation:<br>& July 2007 | Delays do not provide<br>penalty clauses. Affected by<br>M&E material deliveries and<br>unresolved land matters                              |
| 5   | 10 MW Kina Biopower Sdn. Bhd,<br>Sandakan   | Ravised COD:<br>23 October 2008        | On-going .   |
| 6   | 100 MW Seguntor Bioenergy<br>Sdn. Bhd. Sandskan   | Ravisad COD:<br>30 October 2008        | On-going   |
| 7   | 5 MW Kalansa Energy<br>Corporation Sdn Bhd, Beluran   | Planned                                |  |

# Organisation Development Division

### Process Standardisation and Improvement (PSI)

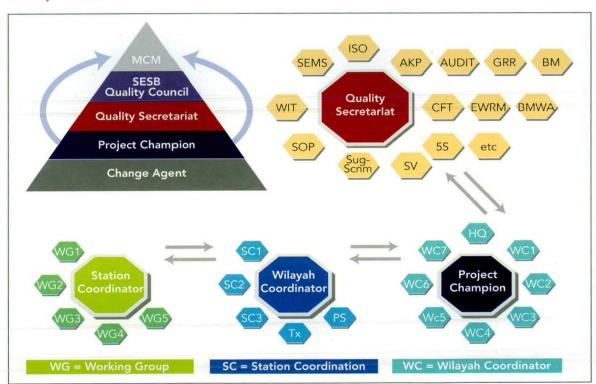
SESB launched the PSI programme on 27 November 2007. SESB's Quality Manual, 9 General Procedures, 175 Level 2 procedures and 216 work instructions were developed through a joint effort of the management team and selected key personnel of the Company. 34 staff members were trained as

ISO Lead Auditors and another 64 staff members were trained as ISO Auditors to facilitate Internal Quality Audit exercise and PSI implementation programme in SESB. SESB's Quality Manual and 9 General Procedures had been submitted to SIRIM for adequacy audit in preparation for ISO 9001:2000 compliance audit targeted for September 2008.

SESB Management Team approved the Quality Framework as depicted in Figure M1 below on

9 November 2007; thus enabling a structured implementation of quality initiatives and staff participation and hence promoting team work. The Quality Council headed by the Managing Director, oversees the planning, execution, corrective action and review of all quality initiatives through regular Quality Council meetings. Each quality initiative is headed by a Project Champion who promotes, plans, coordinates and reviews progress of the quality initiative.

Figure M1 Quality Framework



### a. AKP Initiatives

A work group leader was appointed by the Quality Council to spearhead each of the nine (9) AKP criteria. A working committee was also formed for each work group to dayslop implementation work plans for the respective group, gather and collate evidence for activities conducted, prepare presentation materials and final report for submission to TIJB, SESB scored 700 points for AKP in FY2006/2007, and the target for FY2007/2008 is 750 points.

### b. WIT/CFT

During FY2007/2008, 50 'Work-Improvement Teams,' (WIT) and 33 'Cross-Functional Teams,' (CFT) were formed from among the staff to address apacific issues affecting performance of the company. Based on the Quality Framework structure, each of the WIT and CFT team was headed by a Project Champion. Some of the CFT projects had begunto bear fruits such results as 'rentice management,' 'reducing system losses,' and 'data integrity in meter readings', A '7 Quality Tools' course was also organised for 25 potential WIT facilitators to anable them to facilitate WIT projects.

### c. 5S programme

The 53 programme was initiated in SESB in November 2007. A Project Champion was appointed to oversea the overall 5S programmes covering 34 stations, 90 staff members were trained as internal 5S auditors who in turn conducted quarterly internal audits on all the 34 stations. The internal audits exercise has contributed to a reduction of stations with 'cero STAR' rating from 19 to 6, improved the number of stations with '4 STAR' rating from 0 to 8, and 1 station achieved a '5 STAR' rating. Concerted efforts by the 59 Project Champion and 5S Station Facilitators coupled with the continuous support from the management led to 11 stations being conferred 5S certification by Malaysia Productivity Centre (MPC) in July 2008.

### d. Safety and Environment Management System (SEMS)

SEMS programme had been in practice in SESB since 2002. With the introduction of Quality Framework in 2007, the SEMS programms succeeded in making major headway, an indication of staff commitment towards 'safety and health' at their respective work place, 118 staff members were trained as SEMS auditors. The joint concerted efforts of the SEMS Project Champion and Station Facilitators had resulted in the reduction of number of stations having 'zero STAR' rating from 4 to 0, and increased the number of stations having '2 STAR' rating from 9 to 20.

### e. Shared Values

SESB initiated a 'Shared Values' quality initiative based on the 5 Shared Values namely: integrity, customer focus, business and services excellence, and caring. A Project Champion has been appointed to drive the inculcation of Shared Values throughout the Company. A 'Shared Values' programme was conducted by ILSAS on 13-14 May 2008 for 40 change agents from various cones and departments in SECR.

### Information System Division

One key focus of the IT initiative for the year is the company-wide dissemination of information to all staff in SESB through the IT Infrastructure. Kiosks were placed at 33 strategic sites at SESB local offices where information from SESB Website, Intranet and shared systems could be accessed by those not provided with individual PC workstations such as field staff, security personnel, drivers and general workers. Common email addresses are assigned for these staff at the Kiosks to facilitate better and faster communications. PC penetration level in SESB has exceeded its target of 90% following the installation of the kiosks.

Another major improvement is the replacement of 9.6kbps and 128kbps data-communication lines with streamyx 1.5Mbps at eleven SESB branch offices. Beside improving the response time, the Company was able to realised an annual saving of RM185,000 from the reduced line rental charges.

Vegetation and Maintenance

### Other Initiatives

Corporate Social Responsibility
As one of the largest GLC in Sabah
SESB is mindful of the fact that
its success is not only measured
by the company's performance
but also the extent to which it
has contributed to the well being
of the community, humanity,
society and environment. Various
activities, functions and events
had been organised to promote
goodwill with the government and
community as well as to enhance
SESB's corporate image.

The Company fully subscribes to the concept of giving back to the society. Hence the theme for SESB's Corporate Social Responsibility is "Caring For Future Development" which focus on education, health, environment and rural electrification.

For FY2007/2008, SESB has allocated RM50,000.00 for its corporate social responsibility programmes which covers contributions to charitable cause and community welfare services including among others, donations to Thalesemia Association.

### Prospects

A comprehensive Power Plan for SESB covering the three core businesses of Generation, Transmission and Distribution has been drawn up to year 2025.

The forecast demand growth of electricity is at 7.7% per annum up to year 2010. To support the growing demand as well as to improve the reliability of supply, various generation, transmission and distribution projects will be implemented.

SESB has set a target of 90% electrification by 2010 to enable more people in the state having access to electricity in an effort to contribute towards the social and economic development of Sabah.



# Report 2008 Berhad ] [ Annual Tenaga Nasional

# Corporate Information

### Board Of Directors

### Tan Sri Leo Moggie

(Non-Independent Non-Executive Chairman)

### Dato' Sri Che Khalib bin Mohamad Noh

(President/Chief Executive Officer) (Non-Independent Executive Director)

### Dato' Puteh Rukiah binti Abd Majid

(Non-Independent Non-Executive Director)

### Dato' Mohammad Zainal bin Shaari

(Non-Independent Non-Executive Director)

### Tan Sri Dato' Lau Yin Pin @ Lau Yen Beng

(Senior Independent Non-Executive Director)

### Tan Sri Dato' Hari Narayanan a/l Govindasamy

(Independent Non-Executive Director)

### Dato' Zainal Abidin bin Putih

(Independent Non-Executive Director)

### Board Audit Committee

### Tan Sri Dato' Lau Yin Pin @ Lau Yen Beng

(Chairman of the Committee)

Dato' Mohammad Zainal bin Shaari

Tan Sri Dato' Hari Narayanan a/I Govindasamy

Dato' Zainal Abidin bin Putih

### Board Nomination And Remuneration Committee

### Tan Sri Leo Moggie (Chairman of the Committee)

### Dato' Mohammad Zainal bin Shaari

Tan Sri Dato' Hari Narayanan a/I Govindasamy

Dato' Fuad bin Jaafar

Tan Sri Dato' Seri Siti Norma binti Yaakob

### Company Secretaries

Nor Zakiah binti Abdul Ghani (LS 0008795)

Wan Marzimin bin Wan Muhammad (LS 0009013)

### Share Registrar

### Symphony Share Registrars Sdn. Bhd.

Level 26, Menara Multi-Purpose Capital Square No. 8, Jalan Munshi Abdullah 50100 Kuala Lumpur, Malaysia

### Registered Office And Head Office

### Tenaga Nasional Berhad

No. 129, Jalan Bangsar

59200 Kuala Lumpur, Malaysia Telephone: 603-2296 5566 Facsimile : 603-2283 3686

Website : www.tnb.com.my

Whistle Blowing Information System: Toll Free 1-800-888-862

http://wbis.hq.tnb.com.my

### Dato' Fuad bin Jaafar

(Independent Non-Executive Director)

### Tan Sri Dato' Seri Siti Norma binti Yaakob

(Independent Non-Executive Director) (Appointed w.e.f. 12 September 2008)

### Datuk Zalekha binti Hassan

(Alternate Director to Dato' Puteh Rukiah binti Abd Majid) (Non-Independent Non-Executive Director) (Resigned w.e.f. 28 January 2008)

### Datuk Mohd Zaid bin Ibrahim

(Non-Independent Non-Executive Director) (Resigned w.e.f. 18 March 2008)

### Principal Bankers

### Malayan Banking Berhad

Level 1, Tower A
Dataran Maybank
No. 1, Jalan Maarof
59000 Kuala Lumpur, Malaysia

### CIMB Bank Berhad

No. 21 & 23, Lorong Ara Kiri 1 Lucky Garden, Bangsar 59100 Kuala Lumpur, Malaysia

### Bank Islam Malaysia Berhad

KL Sentral Branch Ground Floor No. CS/3B/G, Block 3B Plaza Sentral, KL Sentral 50474 Kuala Lumpur, Malaysia

### External Auditor

### Messrs PricewaterhouseCoopers

(No. AF: 1146) Level 10, 1 Sentral Jalan Travers Kuala Lumpur Sentral P. O. Box 10192 50700 Kuala Lumpur, Malaysia

### Stock Exchange Listing

### Main Board

Bursa Malaysia Securities Berhad Malaysia

### Rating

(as at 9 October 2008)

Baa1 (Moody's)

BBB (Standard & Poor's)
AA1 (Rating Agency Malaysia)

AA+ (Malaysian Rating Corporation Berhad)

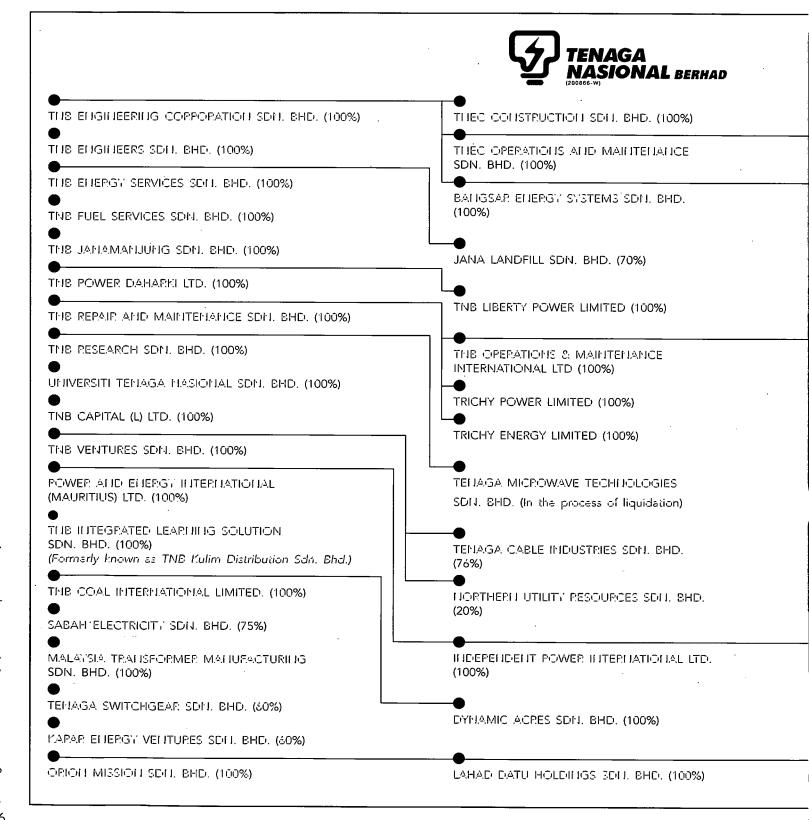
American Depository Receipts Programme (ADR)

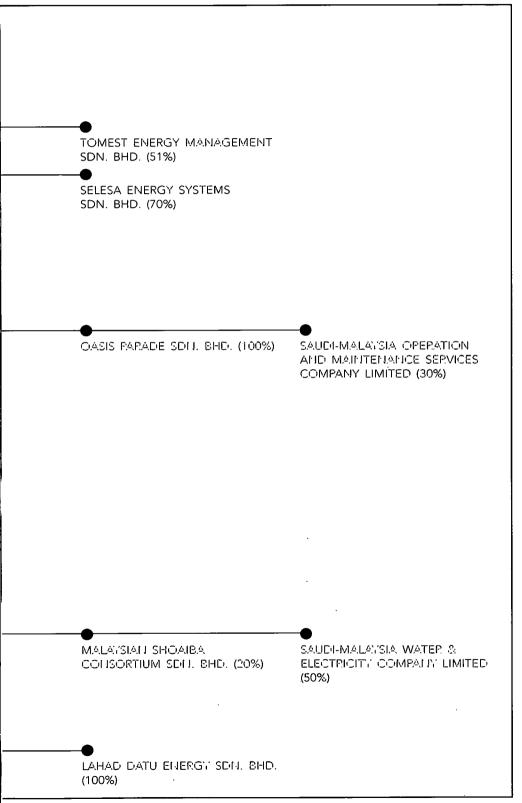
ADR Level 1



# Group Corporate Structure

As at 9 October 2008





# Associate / Investment Companies

JIMAH ENERGY VENTURES HOLDING SDN. BHD. (20%)

FIBRECOMM NETWORK (M) SDN. BHD. (49%)

TEKNOLOGI TENAGA PERLIS CONSORTIUM SDN. BHD. (20%)

PERUSAHAAN OTOMOBIL ELEKTRIK (MALAYSIA) SDN. BHD. (20%)

GB3 SDN. BHD. (20%)

LABUANI REINSURANCE (L) LTD. (10%)

FEDERAL POWER SDN. BHD. (8.91%)

BARUH HYDRO-ELECTRIC CORPORATION SDN. BHD. (6.67%)

ELECTROSTORM INC. (1.58%)

### Trust Foundation

YAYASAN TEMAGA NASIONAL

RETIREMENT BENEFIT TRUST FUND

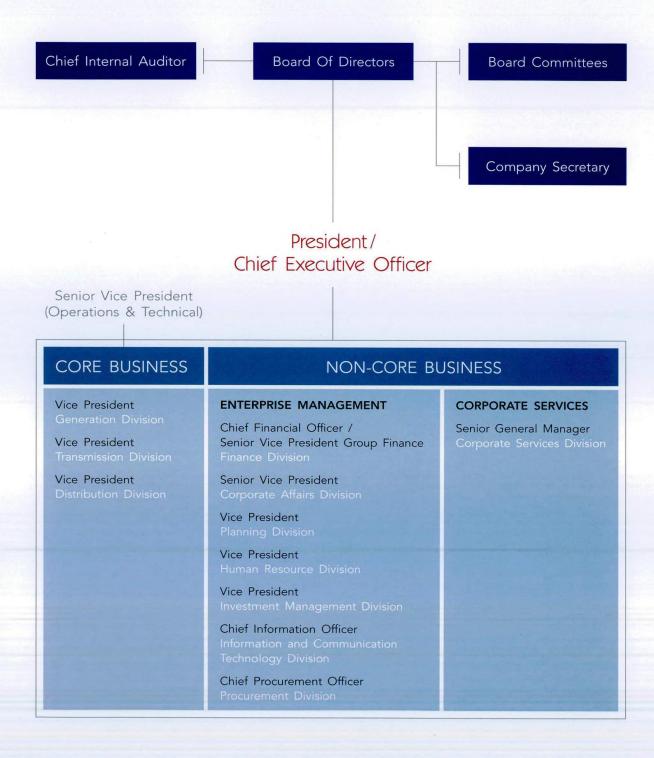
### Note:

The complete list of companies under Tenaga Nasional Berhad is set out in Notes 15 to Notes 15 to the Financial Statements on page 218 to page 225 of this Annual Report.

# Tenaga Nasional Berhad ] [ Annual Report 2008 ]

# Organisational Structure

As at 9 October 2008



# Calendar Of Corporate Events

### 10 September 2007

### 58th Anniversary Celebration

TNB held an annual gathering to commemorate its 58th anniversary. The celebration which was held at Kilat Club was broadcasted to all 25 TNB stations nationwide via video conferencing.

### 8 October 2007

### E-Vendor Registration

TNB launched its On-Line Vendor Registration that helped to simplify and speed up vendor registration process.

### TNB - PERKEM Collaboration

A ceremony was held to mark the exchange of the Document of Collaboration between TNB and PERKEM (Association of Malay Electrical and Mechanical Contractors). It was part of the initiatives under the TNB Bumiputera Vendor Development Programme.

# 25 October 2007

### FY2007 4th Quarter Results Announcement

TNB announced its 4th quarter unaudited financial results for FY2007.









### 2 November 2007

**T7 Final Review Session** TNB conducted a Final Review Session to mark the successful completion of its T7 Strategy by the close of FY2007. T7 laid the foundations for TNB to be among the best companies in Malaysia by inculcating goal-oriented culture.

Signing Ceremony of Agreement for TNB REMACO & TurboCare SpA

TNB Repair and Maintenance Sdn Bhd (TNB REMACO) forged an alliance with multinational TurboCare SpA Group which provided it with full access to technology and skill via technology transfer. An agreement to formalise the arrangement was signed on 2 November 2007.

13 December 2007

2007

Annual General Meeting TNB held its Annual General Meeting for year 2007 during which thirteen resolutions were passed.

January

### 10 January 2008

Ma'al Hijrah Celebrations TNB participated in the Ma'al Hijrah 1429H national level celebrations.

21 January 2008

2nd Surveillance Audit SIRIM QAS International Sdn. Bhd. conducted the "Second Surveillance Audit" on TNB's Process Standardisation and Improvement (PSI) to enhance customer service excellence.











# 2008

### 18 March 2008

# MoU between Felda & JPower

TNB signed a
Memorandum of
Understanding with FELDA
Palm Industries Sdn Bhd
and Japan's J-Power to
develop a biomass power
plant at Jengka, Pahang.

### 15 April 2008

### Visit by Yunan Power Grid Corporation (YPGC)

The Yunan Power Grid Corporation (YPGC) visited TNB Headquarters as part of its study tour to familiarise itself with the regulatory regime governing the energy sector.

# 2008

### 19 April 2008

### Long Service Award

TNB honoured 913 staff for their long service at a Loyal Service Award Ceremony for the Central Region.

### 18 February 2008

### Majlis Malam Usahawan/ Vendor TNB 2008

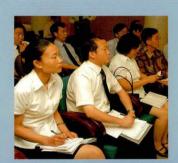
TNB hosted a dinner for its registered entrepreneurs and vendors as part of its support and commitment towards its Bumiputera Development Programme.



18 February 2008



18 March 2008



15 April 2008



19 April 2008

### 3 May 2008

### National-Level Workers Day Celebration

108 staff from various divisions and representatives of the Staff Union attended the National Level Workers Day celebration organised by the Ministry of Human Resources at Stadium Putra Bukit Jalil.

### 27 May 2008

### AKIPM for TNB

TNB emerged as the winner of The Prime Minister's Industry Excellence Award for 2007. It also won The Quality Management **Excellence Award** (Category 4). Both awards were presented by YAB Dato' Seri Mohd Najib Tun Razak, the Deputy Prime Minister of Malaysia.

### 3 June 2008

### REPPA with Bell Eco Power

TNB signed a Renewable Energy Power Purchase Agreement (REPPA) with Bell Eco Power to enable the latter to develop a 2 MW power plant at Batu Pahat, Johor.

### 17 June 2008

### Electric Asia '08 Expo & Forum

TNB showcased the region's premier electrical and power industry event named Electric Asia '08 Expo & Forum at the Kuala Lumpur Convention Centre. The event comprised of an International Exposition as well as Conference and Technical Symposium. It was previously known as Tenaga Expo and Forum.

### 30 June 2008 The BrandLaureat The BrandLaureate Societe Awards 2008

TNB won The BrandLaureate Societe Award 2008 for excellence in Corporate Social Responsibility.













### ICT Productivity Day

TNB organised its first ICT Productivity Day to promote affordable ICT products offered by several 'associate vendors' of its ICT Division.

9 14 August 2008

### Whistle Blowing Information System (WBIS)

TNB introduced the WBIS which enables members of the public to report misconduct, misbehaviour or misuse of power by TNB staff.

### 28 August 2008

### E-Application

TNB introduced online application for electricity supply by consumers. Using web-based technology, the system provides fast, convenient and easy monitoring of electricity supply applications.

∞ 31 August 2008

### Merdeka Parade 2008

TNB participated in the Private Sector Category of the Merdeka Parade '08 held at Dataran Merdeka in conjuction with the 51st National Merdeka Celebrations.



29 July 2008



14 August 2008



28 August 2008



31 August 2008



TNB THE FIRST WINNER: Tenaga Nasional Berhad (TNB) chair Leo Moggie (right) and its chief executive officer Datuk Seri posing with their awards after TNB became the first winner of gory, Prime Minister's Excellence Award which comes with a



Club promotes robotics the fun way

# **Online channel** for complaints

TNB launches whistle-blowing system

By M. KRISHNAMOORTHY and LESTER KONG newsdesk@thestar.com.my

PETALING JAYA: The public and staff of Tenaga Nasional Bhd now have an online chan-

### TNB signs MoU on biomass plant

KUALA LUMPUR: Tenaga Nasional Bhd (TNB) has signed a memorandum of understanding with Felda Palm Industries Sdn Bhd and Japan's Power to develop a biomass power plant at Jengka, Pahang.

The renewable energy project, which is expected to be completed by end-2010, will generate electrical energy sourced from paln

fruit bunches (EFB).

The plant, to be de-4.6ha, will house EFB pro storage areas, a biomass on EFB fuel, a steam to

ing of bonuses and promotions.

The Domestic Inquiry Committee of the Board of Directors found 32 complaints to be baseless, and is investigating 25 more.

Of the 173 complaints, 78 were from heads of departments, 49 from anonymous letters and 46 from individuals

Complaints through the WBIS will be investi-

### TNB needs at least 2 years to study possibility of nuclear plant set up

IT WILL take Tenaga Nasional Bhd at least two years to study the possibilities of setting up a nuclear plant be-fore actually realising the

Servant Conference in Kuala

Lumpur yesterday. Che Khalib said it was still too early to choose a suitable location for the plant and to



TNB sedia RM53j

TNB submits proposal to buy Bakun dam stake

taja pelajar

# **FNB** an old hand in **CR**

PROPRATE RESPONSIBILITY AWARDS

It takes pride in continuously developing human capital



# TNB starts work on Bakun dam

Waiting for government to decide on proposal to buy stake in the project



### Hybrid power plant takes shape in Terengganu

A HYBRID power plant combining energy from four sources – solar, wind, diesel and battery – is being built on Pulau Perhentian, Besut, at a cost of RM12.6 million.

The first of its kind in Asia, the building of the plant is jointly financed by the Terengganu government, Ministry of Energy, Water and Communications through the **Electricity Supply Industrial Trust Fund** (AAIBE) and Tenaga Nasional Bhd.

Nasional Berhad (TNB) menerusi asional (YTN) memperuntukkan ki-a setahun bagi menaja pelajar ke tinggi di dalam dan luar negara. Tan Sri Leo Moggie berkata, pe-entuk biasiswa dan pinjaman bokan antara tanggungjawab sosial

nubuhan YTN pada tahun 1998, ajar diberi bantuan pendidikan, de-an melebihi RM524 juta. ang sedang ditaja oleh YTN adalah

ilan baru Jun ini, YTN telah me-a kepada 20 pelajar untuk mengikuti segara dan seramai 80 pelajar untuk negara," katanya pada majlis pe-rah pelajar cemerlang YTN di Uni-sional (Uniten) di sini semalam.



| ► TENAGA NASIONAL BHD |         |         |         |         |  |  |
|-----------------------|---------|---------|---------|---------|--|--|
|                       | 2007    | 2008F   | 2009F   | 2010F   |  |  |
| ET PROFIT (RM mil)    | 4,061.1 | 3,177.3 | 2,853.9 | 2,726,9 |  |  |
| PS (sen)              | 82.5    | 73.3    | 65.9    | 62.9    |  |  |
| IVIDEND YIELD (%)     | 5.2     | 7.6     | 6.5     | 6.2     |  |  |
| DE (%)                | 18.0    | 19.2    | 10.7    | 9.6     |  |  |
|                       |         |         |         |         |  |  |

### High coal prices may dampen Tenaga's earnings

'TNB can apply for

TENAGA Nasional Bhd (TNB) is welcomed to partici-

sub-sea cable project'

vould be a different issue," he told reporters after launching The Malaysian Reserve business forum, 'Managing Malaysia', in Kuala Lumpur vesterday

The national power producer is welcome to

approach Sime Darby, says Second Finance Minister Tan Sri Nor Mohamed Yakcop

parties have approached to replace Sime Darby.

He said the sub-sea cable

He said the sub-sea cable infrastructure is still important to optimise the utilisation of hydro power in Peninsular Malaysia.

The plan was for TNB to buy electricity distributed via the subsea cables at 17 sen per kw hour at the intake onto the actional grid making it the

# Moving toward energy efficiency Office more relative interaction in the control of the more relative in the control of the contro

Tenaga sees lower earnings despite rise in electricity tariffs

Look into TNB power theft, PM urged

Like most other counters, Tenaga Nasional was not spared the carnage after the shocking results of the recent general election. So what next for the national power outil?

### THE MALAYSIAN GENERAL

election on March 8 had devastating consequences on the stock market in the immediate aftermath, especially for government-linked stocks and politically-linked counters, real or

Tenaga Nasional Bhd, like oth such stocks, once blessed by the association with ruling coalitie Barisan Nasional (BN), was drench by the political tsunami unleashed the Malaysian electorate on t fateful day



enaga Nasional Bhd (June 18, RM8.05)

NEUTRAL: TNB recently approved tariff hike brings relief to rising fuel costs pressure, as an estimated 24% tariff adjustment from July 1. will boost its FY2009 revenue by

### US official says Malaysia ready for nuclear energy



### 6 GLCs among top corporate performers

SIX government-linked companies namely Tenaga Nasional Bhd, Sime Darby Bhd, Telekom Malaysia Bhd, Malayan Banking Bhd, Ma-laysian Airline System Bhd and Petroliam Nasional Bhd, and Petroliam Nasional Bhd, along with PPB Group Bhd were given the "Top 10 Award" in Kuala Lumpur. The awards, given in con-junction with the launch of the third edition of Malay-sia's true corporate directory.

malaysia's top corporate directory
— Malaysia 1000 — was in
recognition of the corporations' leading performance
in the country based on
their financial perform-

ance.
Along with the top performers, 11 awards were also given for industry excellence, one award to the top performer ranked by return on capital employed, one award for the category of top performer ranked by return on shareholders funds.

A total of 10 Merdeka A total of 10 Merdeka awards were also presented to companies deemed to have served the people and country well since pre-Mer-deka days. The awards were present-ed by Minister of Interna-tional Trade and Industry, Tan Sri Muhyiddin Yassin on Wedresday.

Tan Sri Muhyiddin Yassin on Wednesday. Leighton Contractors (Malaysia) Sdn Bhd took the Top Performer Award ranked by return on share-holders' fund award, while 3M Malaysia Sdn Bhd re-ceived the Top Performer

**ELAKA: Jabatan Perikanan** tetap akan memulihara penyu karah di Pulau Upeh, di sini, spesies yang kini diancam kepupusan, walaupun ti-

diancam kepupusan, walaupun ti-dak mempunyai dana untuk mem-beli pulau terbabit yang berharga RM10.3 juta daripada pemiliknya, Tenaga Nasional Berhad (TNB). Ketua Pengarahnya, Datuk Ju-naidi Che Ayub, berkata membeli Pulau Upeh untuk menyelamatkan penyu karah bukanlah satu-satu-nya cara bagi menangani masalah kebupusan spesies terancam itu kepupusan spesies terancam itu

# (TNB) is welcomed to participate in the RM9 billion to RM10 billion sub-sea cable project to supply 1,600MW to 1,800mw hydro-electricity TNB secures coal requirement for FY08

### ISHUN P AHMAD

TENAGA Nasional Bhd has secured its coal requirement for its current fiscal year ending Aug 2008. According to its online forum "TNB Talks", a total of 15 million tonnes or 11% more than required, was secured for FY08.

Tenaga plans to use 13.5 million tonnes in FY08. The supply is sourced from Indonesia (63%), Australia (23%) and South Africa (14%).

and South Africa (14%).
Tenaga said apart from traditional suppliers, it has also
managed to source from new
suppliers who have gone
through its evaluation and
due diligence process. It noted that the coal price secured
is lower that recent deals by

their best offer," said Tenaga. Meanwhile, Tenaga said it is taking steps to identify

opment stage," it said. On coal's share of the total

# Statement Of Corporate Governance

To equip and prepare Tenaga Nasional Berhad (TNB or the Company) with the resilience to meet the current challenging environment, the rapid changes and demanding global economy, volatility of material and operational costs, it is pertinent that internal control processes and structures must be continuously reviewed and enhanced to enable the Board and the Management to undertake its duty and responsibilities in ensuring that value to its stakeholders and shareholders are met. The following are highlights of the initiatives on good corporate governance undertaken for the year under review.

A review of of the roles and functions in the President/CEO's office to ensure greater focus on strategic issues and to streamline our business activities was approved by the Board in December 2007. Three new Divisions namely Corporate Affairs, Planning and Procurement were established following the review. The revised organisation structure is indicated on page 118 of the Annual Report.

Earlier in the Financial Year, the Board had also endorsed the establishment of the Fuel Procurement Executive Committee to ensure timely decision-making in the procurement of fuel, particularly coal, to ensure security of fuel supply to the power stations and hence preventing interruption to the day-to-day operations of the power generating system.

The composition of the Board is further strengthen with the appointment of Tan Sri Dato' Seri Siti Norma Yaakob who brought with her distinguished credentials as a former member of the Malaysian judiciary. She is known as a person of high esteem and an acclaimed professional in her own right. Her knowledge and experience would serve the Board well in assessing and evaluating legal perspectives before decisions are made.

The Board has set clear indication of matters that could be delegated for decision as well as those reserved specifically for the Board's approval under the Limits of Authority (LOA). The LOA is continuously reviewed and have been adopted by the subsidiaries. It contains both the monetary and non-monetary limits of authority for recommending and approving the Company's operational and management decision making activities prior to execution. The LOA is the fundamental and integral component of the Company's Group Financial Control

and Risk Management Framework. Compliance with the LOA would promote greater managerial discipline internally as clear processes and procedures with proper check and control are put in place that would in turn provide the confidence in decisions made.

In line with the Company Long Term Strategic Plan to expand its business venture internationally to sustain growth, a Policy and Strategy Document for Investment was approved by the Board. The policy provides the guideline on the focus area, country risks and the expected yield on the investment made.

The Board also approved a Treasury Policy designed to take into consideration the best, updated prudent practices and to a certain extent practical necessity to suit the current market volatility affecting treasury activities of the Company. The policy takes into consideration the requirements of the new accounting standard applicable to the financial instruments. The Treasury Policy is structured with the following sub-policies namely:

- Credit Risk Policy
- Liquidating Risk Policy
- Interest Rate Risk Policy
- · Foreign Exchange Risk Policy,
- Investment Policy,
- Permitted Instrument.
- Monitoring Policy of TNB Retirement Benefit Trust Fund (RBTF) and
- Sattlement Policy.

To inculcate good discipline among TNB employees and its subsidiaries, an Anti-Fraud Policy Statement was also approved by the Board. It provides guidelines that would encourage the enhancement of integrity and good values over and above the the continuing observance of the skisting code of ethics.

An Investor Palations Policy was put in place to ensure a transparent and timely disclosure of the Company development, to the stallsholders. This policy is intended to provide guiding principles for TNB in its quest to ensure that investor relations functions, activities and afforts are effective, timely and informative. It also aims to build continuous, long-term relationships and credibility with shareholders and potential investors based on trust, transparency and a greater understanding of the Company and its businesses.

Compliance of these internal policies and strategies will ensure due diligent and care are reinforced in the interest of the Company and its stakeholders. This culture would in turn bring about good performance which is a strong indicator for current and better long term performance and risk management by the Company.

To further strengthen the application of the existing Whistle Blowing activities in the Company, a toll free 1-800-888-362 Whistle Blowing Implementation System was officially launched on 14 August 2008. Alternatively, feedback and complaints from the public can also be channelled to http://wbis.hq.tnb.com.my.

In the period under review, the Company has won recognition and accolades from various organisations and professional bodies as indicated in pages 10 to 15 of the Annual Report.

The Board of Directors of TNB remains committed to improve corporate governance practices to ensure that the highest standards of corporate culture are practised throughout the Group in the interest of sharsholders. The Board is pleased to report to the shareholders on the manner TNB has strengthened its application of the principles of corporate governance and adoption of the corporate governance best practices laid down in the Malaysian Code on Corporate Governance (the Code).

### (A) THE BOARD OF DIRECTORS

The Board is determined and committed with its responsibility in governing, guiding and monitoring the direction of the Company with the eventual objective of enhancing long term sustainable value creation aligned with the interests of shareholders, while taking into account the interests of other stakeholders. The Board is committed to ensure good corporate governance practices are well applied inline with the principal responsibilities outlined in the Code and operates within a set of governance as set out below:-

### Composition of the Board

The Board of Directors of TNB consists of nine (9) members comprising one (1) Non-Executive Chairman, one (1) Executive Director and seven (7) Non-Executive Directors. The diverse background of members drawn from such varied fields as finance, law, engineering, management and public administration provide considerable depth and wisdom of knowledge, expertiss and experience to the Board of TNB. A brief profile of each Director is set out on pages 154 to 159 of this Annual Report.

Process of Appointment to the Board Appointment to the Board of TNB is made either by the Special Shareholder pursuant to Article 5(2) of the Company's Articles of Association or by the Board of Directors pursuant to Article 133 of the Company's Articles of Association.

The Board Homination & Remuneration Committee (BHPC) scrutinizes the sourcing and nomination of suitable candidates for appointment as a Director in THB and its subsidiary companies. This Committee will ensure the selection of Board members with the right skill set, expertise and industry knowledge thus strengthening the composition of the Board and contribute significantly to the effectiveness of the Board.

### Roles and Responsibilities

The Board puts in place long term strategic plans and reviews the short and medium term performance on an annual basis. This is to align the long term strategic plans and directions with current demand of the customers and changes in the aconomic outlook. Monitoring the schievement of the business targets is made quarterly by the Board with monthly management reporting on financial and technical performance updates.

The roles and responsibilities of the Chairman of the Board and the President/ Chief Executive Officer are distinct and separated. The Chairman is responsible for the conduct of the Board and ensures that the Board's discussions are conducted in such a way that all views are taken into account before a decision is made. The President/Chief Executive

Officer has the general responsibility of running the business on a day-to-day basis thus ensures a balance of power and authority so as to provide a safeguard against the exercise of unfettered powers in decision-making.

Accountability is part and parcel of governance in TNB – whilst the Board is accountable to the shareholders, the Management is accountable to the Board. The Board ensures that the Management act in the best interests of the Company and its shareholders by working to anhance the Company's performance.

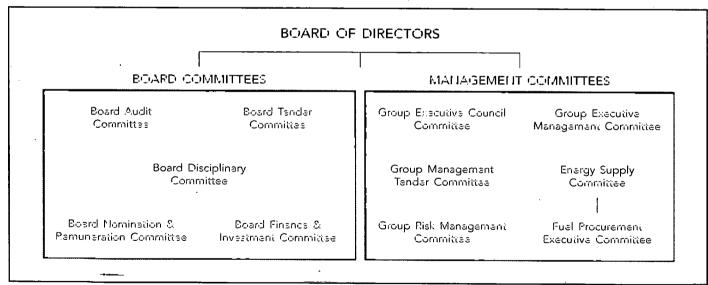
There is a clear division of responsibilities between the Board and the Management. The President/Chief Executive Officer supported by his team of Management through Committees namely the Group Executive Council, Group Executive

Management Committee, Group Management Tender Committee, Energy Supply Committee. Group Pisk Management Committee, Fuel Procurement Executive Committee and these Committees are responsible for the implementation of Board resolutions, overall responsibilities over the day-to-day operations of the Group's business and operational efficiency.

### Operation of the Board

The Board has established five (5) Board Committees. The Board has entrusted specific responsibilities to the Board Committees, which operate within clearly defined written terms of references based on which the Committees would conduct broad and indepth deliberation of the issues before putting up any recommendation to the Board.

A diagram outlining the main Committees involved in the decision making process is set out below:-



The composition of the Board Committees and the attendance of Members at the meetings of the Board Committees are listed as follows:-

### Board Audit Committee

| Directors                                    | Meeting Attendance |
|--|--------------------|
| Tan Sri Dato' Lau Yin Pin @ Lau Yen Beng     | 17/17              |
| Dato' Mohammad Zainal bin Shaari             | 14/17              |
| Tan Sri Dato' Hari Narayanan a/l Govindasamy | 16/17              |
| Dato' Haji Zainal Abidin bin Putih           | 15/17              |

### Board Tender Committee

| Directors                                | Meeting Attendance |
|--|--------------------|
| Dato' Puteh Rukiah binti Abd Majid       | 13/13              |
| Dato' Mohammad Zainal bin Shaari         | 11/13              |
| Tan Sri Dato' Lau Yin Pin @ Lau Yen Beng | 13/13              |
| Dato' Fuad bin Jaafar                    | 13/13              |

### Board Nomination and Remuneration Committee

| Directors                                    | Meeting Attendance |
|--|--------------------|
| Tan Sri Leo Moggie                           | 2/2                |
| Dato' Mohammad Zainal bin Shaari             | 1/2                |
| Tan Sri Dato' Hari Narayanan a/l Govindasamy | 1/2                |
| Dato' Fuad bin Jaafar                        | 2/2                |
| Tan Sri Dato' Seri Siti Norma binti Yaakob   | not applicable     |

### Board Finance and Investment Committee

| Directors                                  | Meeting Attendance |
|--|--------------------|
| Tan Sri Leo Moggie                         | 5/5                |
| Dato' Mohammad Zainal bin Shaari           | 5/5                |
| Dato' Haji Zainal Abidin bin Putih         | 5/5                |
| Tan Sri Dato' Seri Siti Norma binti Yaakob | not applicable     |

The key terms of reference of the Board Committees are as follows:-

### **Board Audit Committee**

 The terms of reference of the Board Audit Committee are spelt out in detail under the Audit Committee Report.

### **Board Tender Committee**

- To ensure the implementation of and compliance with the TNB Procurement Policy and Procedures and will make the necessary recommendations (if any) to the Board. The Committee shall ensure TNB practices Best Value with integrity and accountability;
- To ensure TNB complies with the applicable laws, regulations, rules and guidelines to achieve Best Business Practices in its procurement of equipment, materials, works or services;
- The Board Tender Committee meets at least once a month;

### **Board Nomination and Remuneration Committee**

- To identify and recommend new nominees to the Board and its subsidiaries as well as the Board Committees;
- To assist the Board in reviewing the required mix of skills, experience and other qualities, including core competencies which non-executives directors should bring to the Board;
- To implement the process formulated by the Board designed to assess the effectiveness of the Board;
- To determine the level and make-up of remuneration for the Executive Director and Senior Managements;
- The Board Nomination and Remuneration Committee meets as and when required and at least once a year.

### Board Finance and Investment Committee

- To establish a framework of policies from which the Committee shall make its recommendation to the Board in relation to the management of the Company's financial and investment activities.
- The Board Finance and Investment Committee meets as and when required and at least twice a year.

### The Board Meetings

The Board meetings are scheduled in salvance and during the Financial Year ended 31 August 2008, fifteen (15) Board Meetings were convened to deliberate and consider a variety of significant matters including review on business plan, budget, quarterly financial results, risk assessment, key performance indicators of the Senior Management, debt restructuring and other corporate proposals such as foreign investment exercise, overall performance of the Company and the subsidiary companies as well as other related business matters that require their deliberation and due approval.

Minutes of proceedings and resolutions passed at each Board and Board Committees Meetings are kept in the statutory register at the registered office of the Company. In the event of potential conflict of interest, the Director in such position will make declaration to that effect as soon as practicable. The Director concerned will then abatain from any decision-making process in which he/she has interest in.

### Attendance Details of Board Members

| Directors  | Meeting Attendance |
|--|--------------------|
| Tan Sri Leo Moggia (Chairman)                                  | 15/15              |
| Dato' Sri Che Khalib bin Mohamad Noh                           | 15/15              |
| Dato' Puteh Rukiah binti Abd Majid                             | 14/15              |
| Dato' Mohammad Zainal bin Shaari                               | 12/15              |
| Tan Sri Dato' Lau Yin Pin @ Lau Yen Beng                       | 15/15              |
| Tan Sri Dato' Hari Narayanan a/l Govindasamy                   | 15/15              |
| Dato' Zainal Abidin bin Putih                                  | 15/15              |
| Diatul: Mohd Zaid bin Ibrahim resigned w.e.f.<br>18 March 2008 | 8/8                |
| Dato' Fuad bin Jaafer  | 15/15              |

### Supply of Information to the Board

The Board and its Committees have full and unrestricted access to all information within THB pertaining to the Group's business and affairs.

The Board Meetings are held regularly, on a monthly basis and special meetings will be convened as warranted by specific circumstances. The Board is provided in advance with the agenda for every Board meeting, together with comprehensive management reports which includes proposal analysis, risk evaluation and supporting documents for the Board's perusal. Before decisions are made, consideration is given to the adequacy of information available to the Board and, if necessary, decisions are deferred if further information is required.

All Directors have the right and duty to make further anquiries when necessary. In most instances, Senior Management of the Company as well as external advisors are invited to be in attendance at Board Meetings to provide insight and to furnish clarification on issues that may be raised by the Board. Whether as a full board or in their individual capacities, Directors are also at liberty to take independent professional advice on any matter connected with the discharge of their responsibilities as they may deem necessary and appropriate.

The Board is also notified of any disclosures/announcements made to Bursa Malaysia.

### **Board Effectiveness**

The present composition, size, modus operandi, strength of relationship with the Management and functional Board Committees contribute to an effective Board. This is also in line with the principle and best practices of the Malaysian Code of Corporate Governance (revised 2007). Apart from the convening of Board Meeting on a frequent basis, deliberation and discussion at a Board Meeting is conducted in a comprehensive and in depth manner before arriving at any decision, as recommended by the Management.

The internal Board and Management interactive session held twice in the financial year since 2004 have proven to be a useful and constructive platform/venue outside the Board for intensive deliberation and sharing of views and opinion between Board and Management to formulate strategic plan and direction of the Company. During this session too, the Board is updated on the performance of the various core business divisions. Among the highlights of the discussion in these sessions are coal supply scanario, other operational planning, human resource development initiatives, status report on major projects and other development initiatives.

### Board Balance and Independence

The requirement of the Code for a board balance is fulfilled with Independent Directors forming more than one third of the Board.

The current Board consists of five (5) Independent Non-Executive Directors namely Tan Sri Dato' Lau Yin Pin, Tan Sri Dato' Hari Harayanan s/o Govindasamy, Dato' Zainal Abidin bin Putih, Dato' Fuad bin Jaafar and Tan Sri Dato' Sari Siti Norma binti Yaskob who are independent of Management and free from any business relationship that could materially interfere with the exercise of their independent judgement. The presence of Independent Directors assures an additional element of balance to the Board as they provide unbiased and independent views, advice and judgement to all Board deliberations. Tan Sri Dato' Lau Vin Pin is the Senior Independent Non-Executive Director. He is the Company's longest serving Director and as such has significant knowledge of the Company and its business.

### Re-election

Pursuant to Article 133 of the Company's Articles of Association, newly appointed Directors are subject to re-election by shareholders at the first opportunity after their appointment and the retiring Directors may offer themselves for reelection by the shareholders. In accordance with Article 135 of the Company's Articles of Association all Directors are required to retire from office at least once in every three (3) years.

The BNRC reviews the appointment of new Director to the Company and its subsidiaries taking into consideration the required mix of stills and experience before making recommendations to the Board for approval.

Further information concerning the Directors standing for re-election at the Annual General Meeting is included in the Statement Accompanying Notice of Annual General Meeting. The detailed profiles of Directors standing for reelection are provided in order to enable shareholders to make an informed decision in re-electing them.

### Continuing Board Development

Recognising the ever increasing demands of their role as Directors of a leading Public Listed Company, the Directors of TNB continue to equip themselves with the relevant professional advancement programmes particularly in corporate regulatory development and current development in the industry.

The Board members have attended and successfully completed the Mandatory Accreditation Programme whilst recently appointed director is scheduled to attend the same in compliance with the Listing Requirements of Bursa Malaysia Securities Berhad, Various professional programmes organised by various professional bodies are also open for the directors to attend which also includes training programme by the Malaysian Directors Academy (MINDA) - Programme for Building High Performance Director organised by Khazanah Nasional Berhad in collaboration with IMD.

In addition to attending various conferences and seminars organised by the external organisers, the Board also benefit from an in-house Board Development Programme. The topic on Electricity Markata in Singapore was presented at the in-house Board Development Programme 2008 which provided an in eight on the Singapore Market Reform. The training for the Directors also includes site visits to National Load Despatch Centre (NEDC) and Bangsar Regional Control Center (BRCC). A presentation on the business plan and operation at the premise of UNITEN and Research Centre TNB Research provides an awareness and better understanding on the operation of the subsidiaries.

### Directors' Remuneration Procedure

The BHPC will recommend to the Board on the framework and the remuneration package for the Executive Director and Senior Management. In determining the framework, the Committee may engage professional advice from internal as well as external sources.

# The Level and Make-Up of Remuneration

- (a) The remuneration package of the Executive Director comprises of a fixed and variable pay which is linked to the key performance indicator as follows:-
  - (i) Basic Salary
    The basic salary (which include the statutory contributions to the Employee Provident Fund Board) for Executive Director is recommended by the BIARC, taking into account the individual performance and information obtained from independent sources on the rates of salary for similar position in a selected group of comparable companies in

the market.

Reward Scheme The Group operates a bonus scheme for all employees, including the Executive Director. The criteria set in determining the quantum of bonus is the level of profit achieved by the Company through the Group's business activities as compared against the targets. It is also linked with the assessment of each individual's performance and competencies. Meanwhile the Executive Director is provided with Contractual bonus based on performance.

- (b) The remuneration package of Non-Executive Directors comprises of the following elements:-
  - (i) Fees The Directors are paid fixed monthly fees and meeting allowance for each Board and Board Committee meeting attended during the year. Such fees are tabled to the chareholders of the Company for approval.
  - (ii) Benefits-in-kind

    Other benefits in the form of coverage on electricity bills and reimbursement are made available as appropriate.

### Disclosure on Directors' Remuneration

The details on the aggregate remuneration of directors for the financial year ended 31 August 2008 are as follows:-

| Name of Directors   | (i) Salary &<br>(ii) Contribution<br>to EPF<br>(RM) | Director's Fee<br>(RM) | Meeting<br>Allowance<br>(RM) | Bonus<br>(RM) | Benefits<br>in Kind<br>(RM) | Total<br>(RM) |
|---|---|------------------------|------------------------------|---------------|-----------------------------|---------------|
| Executive Directors   |   |                        |                              |               |                             |               |
| Dato' Sri Che l'Ihalib bin Mohamad Noh  | (i) 300,000.00<br>(ii) 119,520.00                   | _                      | _                            | 354,000.00    | *97,344.00                  | 1,170,854.00  |
|   | 719,520.00  |                        |                              |               |                             |               |
| Non-Executive Directors   |   |                        |                              |               |                             |               |
| Tan Sri Leo Moggie  | _   | 132,000.00             | 34,000.00                    | _             | 22,097.40                   | 188,097.40    |
| Dato' Puteh Rukiah binti Abd Majid  | -   | 76,000.00              | 31,200.00                    | _             | 10,000.00                   | 117,200.00    |
| Dato' Mohammad Zainal bin Shaari  | _   | **73,000.00            | **44,175.00                  |               | 35,821.18                   | 152,993.18    |
| Tan Sri Dato' Lau Yin Pin<br>@ Lau Yen Beng                                     |   | 76,000.00              | 51,050.00                    | _             | 4,212.80                    | 131,262.80    |
| Tan Sri Dato' Hari Narayanan a/l<br>Govindasamy                                 | _   | 76,000.00              | 33,700.00                    | _             | 14,775.78                   | 127,475.78    |
| Dato' Zainal Abidin bin Putih   | j _   | 75,000.00              | 33,750.00                    | _             | 13,879.20                   | 128,329.20    |
| Dato' Fuad bin Jaafar   | i _   | 71,093.00              | 30,300.00                    | _             | 17,602.94                   | 119,298.94    |
| Datuk Zalekha binti Hassan (Alternate<br>Director, resigned w.e.f. 28 Jan 2008) | _   | _                      | 500.00                       | _             | 6,738.41                    | 7,238.41      |
| Datuk Mohd Zaid bin Ibrahim<br>(resigned w.e.f. 18 March 2008)                  | _   | 48,742.00              | 13,850.00                    | _             | 34,048.33                   | 96,640.33     |
| Total   | 719,520.60  | 628,838.00             | 280,825.00                   | 354,000.00    | 256,520.04                  | 2,239,703.04  |

<sup>\*</sup> This cum consists of RM42,000.00 for car allowance and RM55,344.00 for flexible benefits

### (B) SHAREHOLDERS

TMB is committed to maintain a constructive relationship with its shareholders, pursuing its on-going commitment to sustain the highest standards of corporate governance practices throughout the Group with full appreciation of its impact on long-term corporate performance and optimal shareholder value.

### Relations Between the Company and Investors

The Board and Management of TNB recognise the importance of transparency and accountability to its shareholders and investors, thereby its pursuit of the highest standards of corporate governance practices throughout the Group.

<sup>\*\*</sup> Paid directly to Khazanah Nasional Berhad

Whilst various channels of communication are optimized to provide shareholders and investors with a balanced and comprehensive view of the Group's performance and the issues faced by the Group in light of the challenging environment, the role of investor relations is entrenched as the communications platform between the Group and the investor at large. In this regard, the Investor Relations & Management Reporting Unit ("IRMU"), a dedicated unit under the Finance Division has been entrusted with the responsibility of coordinating and responding to all queries and information raised by shareholders, research analysts and investors. An egual level of importance is placed on the need for investor relations to channel the views of the investment community back to Management and the Board of Directors.

The Annual Investor Relations Programme which serves to provide the Management opportunities and platforms to interact with investors, analysts as well as the media. The events and activities scheduled in the Programme include:-

- Quarterly results announcement
- Analyst briefing/conference call
- Full year results announcement
- Analyst briefing/conference call
- Dividend payment
- Preparation and release of Annual Report
- Annual General Meeting
- Site visits
- Investor Day/Domestic road-shows
- International road-shows
- Major international broker conferences

The programme is reviewed and updated periodically as and when invitations for IP events are received.

During the year under review, the unit had organized and participated in various local and international events which include:-

- Conferences and forums organized by research houses including CLSA, Credit Suisse First Boston, JP Morgan, Morgan Stanley and Deutsche Bank. In the Financial Year TNB attended 5 of these conferences/forums.
- Announcement of quarterly financial results to the financial community and the media. During these events, teleconferencing facility was arranged to enable the investment communities at major financial centers worldwide to listen as well as participate in the briefings. On average, some 87 participants from the financial community and the media attended or tool: part in the teleconferencing during the quarterly presentations in the Financial Year.
- The Invest Malaysia exhibition organized by Bursa Malaysia.
- One-on-one and group meetings with equity and fixed income investors and analysts. These meetings have proven to be the most effective medium to enhance investors' understanding and perception of the Group. In the Financial Year, TNB attended a meeting to meet the local fund managers organised by CIMB.
- Aside from the conferences and meetings attended outside of THB premises, Management and IR frequently played host to local and international fund managers and investors who requested for meetings at THB offices. During the year under review, THB held approximately 120 of such meetings (excluding Quarterly announcement of financial results).

In the Financial Year, TNB had approximately 68 meetings with equity research analysts, fund managers and investors who had requested to meet up with company officials (excluding investors that were seen at conferences, road shows and quarterly financial results presentations).

# Constructive Use of the Annual General Meeting

The Annual General Meeting (AGM) is the principal avenue for shareholders to communicate and engage in dialogue with the Board and Management of TNB. The highlights of the Company technical and financial performance which is made via visual presentation is made by the Chairman and President/ Chief Executive Officer at the AGM. The turnout of shareholders at general meetings of TNB has always been high. A total of 3835 shareholders and proxies attended the Seventsenth AGM hald in 2007.

Constructive dialogue between the Board and the shareholders are encouraged whereby at the AGM, shareholders are given the opportunity to raise question on issues partaining to the Company's Financial and Operational performance. The shareholders can exercise their voting rights and the meeting is convened in strict compliance with the laws and procedures of general meeting. Separate resolutions are proposed for separate motions and the Chairman will declare the outcome of each resolution after. proposal and secondment are done by the shareholders. Each item of ordinary and special business in the notice of the general meeting would be accompanied by a full explanation of the effects of the proposed resolution. Shareholders are also given the opportunity to put forward their questions on the proposed resolutions and on the Group's operations. The Chairman will provide sufficient time for shareholders' questions on matters pertaining to the Company's performance and would asel: to explain to the shareholders with regard to their concern.

Immediately after the AGM, the Chairman and the President/Chief Executive Officer will address all issues raised by the press and analysts through a press conference and an analyst briefing during which all stakeholders are provided with the latest update on the Company.

# Continuing Disclosure of Material Information

TIIB firmly observed the continuing disclosure obligation imposed upon a listed issuer by Bursa Malaysia. The Company has in place Corporate Disclosure Policy and Procedures since 1994, which provides for adoption of Best Practices in Corporate Disclosure laid down by Bursa Malaysia in July 2004. As required under the said Best Practice, the Company Secretary is identified as "Corporate Disclosure Manager" within the context of the aforementioned Best Practice.

Timely and accurate disclosure is made on all the material information and throughout the Financial Year under review, the material information and the material development thereof on acquisition, disposal, divestment, issuance of notes, proposed financing facility, conversion of bonds, related party transaction, employes share option scheme, notice of book closure, change in boardroom are among the material information released to Bursa Malaysia via Bursa Malaysia Link.

### Confidentiality of Information

In the conduct of briefings or presentations, the Company takes care to ensure that any information regarded as undisclosed material information about the company and its operations will not be given to any single shareholder or shareholder group.

### (C) ACCOUNTABILITY AND AUDIT

### Financial Reporting

The Directors are responsible for ensuring that financial statements are drawn up in accordance with the requirements of the Companies Act 1965 and in line with approved accounting standards in Malaysia so as to present an objective and understandable assessment of the Group's financial position and prospects. TNB publishes quarterly financial reports so that its shareholders can monitor the Company's financial position regularly. In this Annual Report, an assessment is provided in the Directors' Report of the Audited Financial Statements.

On behalf of the Board, the Board Audit Committee (BAC) scrutinises the financial, statutory compliance aspects of the Audited Financial Statements and Companies policies and procedures prior to full deliberation at the Board level. The Board ensures the integrity of the Company's financial reporting and fully recognise that accountability in financial disclosure form an integral part of good corporate governance practices.

### Relationship with the Auditors

The Board has, through the BAC, established a formal, transparent and appropriate relationship with the Group's Auditors, both external and internal. A report by the Board Audit Committee is provided in page 145 and its Terms of Reference is provided on pages 148 to 151.

The Board Audit Committee meets regularly with the external and internal auditors to discuss and review the audit plan, quarterly financial results, annual financial statements, their audit findings and made recommendations for the Boards approval.

### Internal Control

The Board admowledges that they are responsible for maintaining a sound system of internal control to safeguard shareholders' investment and the company's assets as required by the Code. TNB adheres to Bursa Malaysia guidalines on the Statement on Internal Control: Guidance for Directors of Public Listed Companies, as guidance for compliance with these requirements.

On 28 August and 16 October 2008, the Board Audit Committee met with the Enternal Auditors without the presence of the Executive Director and the Management to discuss on the adequacy of the system of internal control to ensure efficient and effective operation and compliance with statutory requirements and the Company guideline, policies and procedures.

Information on the Group's internal control is presented in the Statement of Internal Control, pursuant to paragraph 15.27(b) of the Bursa Malaysia Listing Requirements is set out in pages 142 to 144.

### RESPONSIBILITY STATEMENT IN RESPECT OF THE FINANCIAL YEAR UNDER REVIEW

(Pursuant to paragraph 15.27(a) of the Bursa Malaysia Listing Requirements)

The Board is fully accountable to ensure that the financial statements are prepared in accordance with the Companies Act 1965 and the applicable approved accounting standards set by Malaysian Accounting Standards Board so as to present a true and fair view, balanced and understandable assessment of the Group's financial position and prospects. In this Annual Report, an assessment is provided in the Directors' Report of the Audited Accounts.

The Board Audit Committee reviews the statutory compliance and scrutinises the financial aspects of the Audited Accounts prior to full deliberation at the Board level.

### ADDITIONAL COMPLIANCE STATEMENT

Apart from providing the shareholders and the state-holders with an overview of the state of corporate governance in the Company. TNB is also pleased to disclose the following information:

### (1) Utilisation of Proceeds Raised from Any Corporate Proposal

There were no proceeds raised from any Corporate Proposal in the Financial Year ended 31 August 2008.

### (2) Share Buy-Back for the Financial Year

There was no share buy-back exercise carried out by the Company for the Financial Year ended 31 August 2008.

### (3) Options, Warrants or Convertible Securities Exercised

During the financial year, 2,309,277 new ordinary shares of PM1.00 each were issued by the Company comprising:-

- a) 2,573,225 ordinary shares of RM1.00 each in TNB pursuant to the Employees' Share Option Scheme II ('ESOS II') at exercise prices of RM6.71, RM6.99, RM7.42, RM7.33, RM11.07 and RM6.33 per share, and
- b) 236,052 ordinary shares of RM1.00 each in TNB pursuant to the conversion of Unsecured Convertible Redeemable Income Securities at the price of RM9.18 per share.

The new ordinary chares issued during the financial year ranked pari passu in all respects with the existing ordinary shares of the Company.

The Company has been granted an exemption by the Companies Commission of Malaysia via a latter dated 18 September 2008 from having to disclose in this Report the name of the persons to whom options have been granted during the year and details of their holdings pursuant to section 169(11) of the Companies Act, 1965 except for information on employees who were granted options representing 450,000 ordinary shares and above. Details are as set out in page 177 of the Directors Report.

### (4) American Depository Receipts ("ADR")

In January 1994, THB launched its Level 1 American Depository Receipts (ADR) in Hew York, the United States of America. Each ADR carries an equivalent of four underlying TNB shares. The only custodian bank for TNB's ADR programme is Malayan Banking Berhad. The Bank of New York in the USA is the Depository Bank and the ADRs are traded over the counter. As at 31 August 2008, the total number of ordinary shares held through these ADRs was 3,345,501 which represented less than five per cent of the issued and paid-up capital of the 4,334,518,345 shares of TNB.

### (5) Sanctions/Penalties

There were no sanctions and/or penalties imposed on the Company and its subsidiaries, Directors or Management by the relevant regulatory bodies during the Financial Year ended 31 August 2003.

### (6) Non Audit Fees

Apart from the annual audit fees, the Group had paid non audit fees to the external auditors. The amounts paid for the Financial Year ended 31 August 2008 are as follows:-

| No. | Dlvlslon/Subsidiary                | Nature of Non-Audit Fees to Auditors | RM                         |
|-----|------------------------------------|--------------------------------------|----------------------------|
| 1.  | Group Finance-Treasury             |                                      | 487,212.50                 |
| 2.  | Group Finance-Corporate Finance    | Pagasus Project                      | 15,750.00                  |
| 3.  | TNB Engineering Corporation (TNEC) | Other Accounting Services            | 10,000.00                  |
| 4.  | Liberty Power Limited (LPL)        | Ta:: Advisory Services               | 55,000.00*<br>(PKR1.2 mil) |
|     |                                    | TOTAL                                | 567,962.50                 |

<sup>\*</sup> PKR 1 = RM0.04587

### (7) Variation in Results

The Company did not issue any profit forecast for the Financial Year ended 31 August 2008. As such, no commentary is made on variation in results.

### (8) Profit Guarantee

The Company did not issue any profit guarantee for the Financial Year ended 31 August 2008.

### (9) Material Contracts

There were no material contracts entered into by the Company and/or its subsidiaries involving directors and major shareholders' interest, either subsisting as at 31 August 2008 or entered into since the end of the previous Financial Year ended 31 August 2007.

### (10) Revaluation Policy

The revaluation policy of the Company in relation to its landed properties is set out in Note 2(i) of the Notes to the Financial Statements set out on pages 190 to 191 of this Annual Report.

### (11) Recurrent Related Party Transactions of Revenue or Trading Nature

At the Seventaenth Annual General Meeting of TMB which was held on 13 December 2007, the shareholders had approved and ratified all recurrent related party transaction (RRPT) of a revenue or trading nature, which are necessary for the day-to-day operations of the Group, entered into by the Group with certain classes of related parties from 14 December 2007 until the forthcoming AGM. In accordance with paragraph 4.1.5 of Practice Note 12/2001 of the Listing Requirements, a breakdown of the aggregate value of the recurrent transactions together with the type of the recurrent transactions, the related parties involved and the nature of their relationship with TNB in each type of the recurrent transaction made during the Financial Year are tabulated below:

### RENEWAL OF SHAREHOLDERS' MANDATE FOR RRPT OF A REVENUE OR TRADITIG NATURE

| Transacting<br>Company in<br>TNB Group | Persons<br>Connected<br>to Major<br>Shareholder<br>(Related Parties<br>Involved) | Interested<br>Major<br>Shareholder | Nature of Relationship  | Nature of<br>Recurrent<br>Transactions | Aggregate Value (RM) of the Transaction during the validity of the Mandate |
|--|--|------------------------------------|---|--|--|
| TNB                                    | Putrajays<br>Holdings<br>Sdn. Bhd.   | Masanah<br>Nasional<br>Berhad      | Khazanah Nasional Berhad<br>being a Major Sharaholder<br>of TNB has 15.59% interest<br>in Putrajaya Holdings Sdn.<br>Bhd., making the latter<br>person connected to the<br>Major Shareholder. | Payment of office rental               | 1,203,094.80   |
| Bangsar Energy<br>System Sdn.<br>Bhd.  | Talekom<br>Malaysia Berhad   | Macansh<br>Nasional<br>Berhad      | If hazanah Hasional Berhad<br>being a Major Shareholder<br>of TNB has 41.78% interest<br>in Telekom Malaysia<br>Berhad, making the latter<br>person connected to the<br>Major Shareholder.    | Capacity and<br>Energy Services        | 10,343,501.00  |

### SHAREHOLDERS' MANDATE FOR REPT OF REVENUE OR TRADING NATURE

| Transacting<br>Company In<br>TNB Group | Persons<br>Connected to a<br>Director/Major<br>Shareholder<br>(Related Parties<br>Involved) | Interested<br>Major<br>Shareholder | Nature of Relationship   | Nature of<br>Recurrent<br>Transactions                           | Aggregate Value<br>(RM) of the<br>Transaction during<br>the validity of the<br>Mandate |
|--|---|------------------------------------|--|--|--|
| TIJE                                   | OPUS<br>International   | Fihazanah<br>Nasional<br>Barhad    | Thazanah Hasional Berhad<br>being a Major Shareholder<br>of TNB has 62.24% interest<br>in OPUS International,<br>making the latter person<br>connected to the Major<br>Shareholder.                          | Payment<br>for project<br>management<br>and professional<br>fees | 433,092.75   |
| TUE                                    | Messra, Zaid<br>Ibrahim & Co.   | Datul: Mohd<br>Zaid bin<br>Ibrahim | Datul: Mohd Taid bin<br>Ibrahim being a Director<br>of TNB who is also the<br>Chairman and Majority<br>Shareholder of Messrs. Zaid<br>Ibrahim & Co., making the<br>latter person connected to<br>a Director. | Provision of<br>Legal and<br>Consultancy<br>Services             | 647,758.19   |
| TI IB                                  | Telskom<br>Malaysia Berhad  | IChazanah<br>Masional<br>Berhad    | Chacanah Nasional Berhad<br>baing a Major Shareholder<br>of TNB has 41.73% interest<br>in Telekom Malaysia<br>Berhad, making the latter<br>person connected to the<br>Major Shareholder.                     | Payment on office rental   | 3,399,680.20   |
|  | 16,532,126.94   |                                    |  |  |  |

Note: The abovementioned transactions does not equal or exceed the applicable prescribed threshold pursuant to Paragraph 2.1 of Practics Note 12/2001 of the Listing Requirements.

STATEMENT ON COMPLIANCE WITH THE REQUIREMENTS OF BURSA MALAYSIA IN RELATION TO APPLICATION OF PRINCIPLES AND ADOPTION OF BEST PRACTICES LAID DOWN IN THE MALAYSIAN CODE OF CORPORATE GOVERNANCE

(Pursuant to paragraph 15.26 of the Bursa Malaysia Listing Requirements)

The Board is pleased to report to sharsholders that the Company has applied the principles of corporate governance and is in compliance with Part 1 of the Code. Further to that, the Board remains committed to attain the highest possible standard of corporate governance through continuous adoption of best practices as recommended in Part 2 of the Code.

Signed on behalf of the Board of Directors in accordance with their resolution dated 16 October 2008.

TAN SRI DATO' LAU YIN PIN @ LAU YEN BENG SENIOR INDEPENDENT NON-EXECUTIVE DIRECTOR

# Enterprise Wide Risk Management

TNB recognises that effective risk management is the key element in the Company's overall strategy with a focus on the on-going implementation of an Enterprise-Wide Risk Management (EWRM) framework to ensure that the major areas of risks are managed and controlled effectively.

The EWRM frameworl: ensures a uniform application of risk management across the Group through standardised risk management processes and Group-wide exchange of risk information.

### 1. Overview

Tenaga Nasional Berhad (TNB) recognises that the management of principal risks plays an important and integral part of the Group's daily operations and the effective identification and management of such risks will positively affect the achievement of the Group's business and strategic objectives. The on-going implementation of an Enterprise-Wide Risk Management (EWRM) framework which was introduced since 2003 would ensure that the major areas of risks are identified, managed and controlled or mitigated effectively.

The EWRM framework provides for a uniform application of risk management across the Group through standardised risk management processes and Groupwide exchange of risk information. As a result, the Management is able to make conscious and informed decisions by formulating and implementing necessary action plans and monitoring the results. As the EWRM framework is able to priorities operational reviews throughout the Group, it also enables the development of an effective internal audit plan in the risk management process. Consequently management and audit resources can also be directed to high-risk areas on an informed basis.

### 2. Enterprise Wide Risk Management Framework

The TNB EWRM framework provides for a complete risk management cycle incorporating the assessment, reporting, treatment, monitoring and review of the business risks within the Group. Please see Figure 1

### 2.1 Risk Management Policy

The TNB EWRM Policy formulated in 2004 was reviewed during the year to enhance the effectiveness of the framework. The ascond edition was published in October 2007. Further improvements were subsequently made in the following areas:

- Streamlining of the roles and responsibilities of the Group Risk Management Working Committee (GRMWC) to provide focus on the management of operational risks;
- Defining the roles and responsibilities of the Risk Manager, Risk Coordinator and Risk Owner; and
- Effecting changes to the EWRM reporting structure

### 2.2 Risk Management Structure

The EWRM requires that a risk management structure be embedded in the framework to ensure that roles, responsibilities and accountabilities for managing risk are clearly defined and communicated. The risk management structure (Figure 2) comprises various levels of authority in the Group namely the Board of Directors, Board Audit Committee (BAC), Group Risk Management Committee (GRMC) chaired by the President/Chief Executive Officer, Group Risk Management Working Committee (GRMWC) chaired by the Chief Financial Officer/Senior Vice President (Finance), Enterprise-Wide Risk Management (EWRM) Department, Group Internal Audit (GIA) and TNB Operating Divisions.

Half-yearly risk assessment reports from all divisions are submitted to the EWRM Department for analysis and subsequently forwarded to the relevant risk management committees for deliberation.

### 2.3 TNB ISO Quality Manual

The EWRM framework has been identified as one of the key support processes under the TNB ISO Quality Manual and had been documented and certified by SIRIM under the QMS MS ISO 9001:2000 certification process.

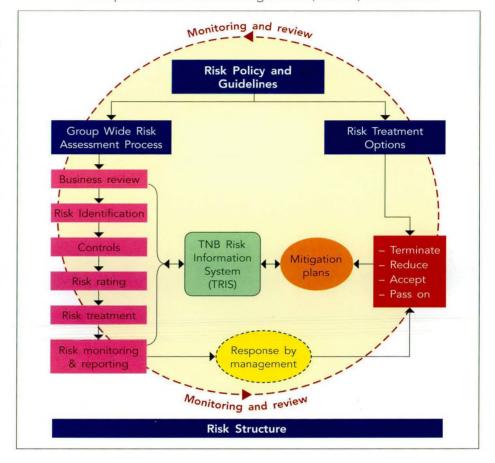


Figure 2
Risk Management Structure



### 3. Major Initiatives/Achievements

### 3.1 Risk Assessment Process

The Group Wide Rish Assessment (GWRA) Process was reviewed and streamlined to standardize the rish management methodology in the Group. It focuses on identification, assessment, control and monitoring of rishs. The EWRM Department was also involved in conducting due diligence for TNB major projects and overseas ventures in collaboration with external rish advisors.

### 3.2 Risk Awareness & Review Session

The EWRM Department had conducted more than 20 risk awareness and review sessions for TNB's operating divisions together with the relevant Risk Managers, Risk Coordinators and Risk Owners. The exercise was to validate changes made to the operating risks as well as to ensure that all risk profiles continue to align with TNB's current business strategies and objectives.

### 3.3 Risk Profile Development

Rish profiles for newly established divisions and/or departments and those that underwent major restructuring were developed to ensure that the relevant rishs are clearly defined and adequately addressed. During the year under review, ten rish profiles were developed by the EWPM Department together with the relevant divisions and subsidiaries.

### 3.4 Risk Analysis on Common Risks

In the previous years several common risks across TNB were analysed and their collective impaction the Group was assessed, in particular its exposure to legal and fraud risks as well as risk of accidents. Various recommendations to mitigate such risks were presented to and approved by the risk committees and BAC.

Ongoing activities to mitigate legal risks involved assessment of TNB contract management and the standardisation of major contracts as well as establishing a TNB Confidentiality Policy. In addition, audits on fraud policy and ethics were included in the audit plan for the year under review and a fraud database is being compiled. In the case of risk of accidents, data collation and reconciliation of statistics and insurance details are ongoing and road shows are organised to educate TNB staff with regards to this risk and the necessary mitigating action that need to be taken.

### 3.5 Risk Communication

Pisk communication, focusing on the dissemination of risk information at all levels, forms an integral part of the risk management activities in TNB.

Two Risl: Management Forums were organised as a platform to communicate decisions made by the GRMWC, GRMC and BAC to the Risl: Managers, Risl: Coordinators and senior management. During the forums, risl: management issues identified in the course of risl:-based audits conducted by the Group Internal Audit were highlighted. Also discussed was the success of using the EWRM framework to turnaround the performance of a subsidiary.

### 3.6 TNB Risk Information System

The EWRM framework requires the installation of a system that compiles and documents all risk information. For this purpose, the EWRM Department has put in place and maintained the on-line TNB Risk Information System (TRIS), an inhouse system developed with the collaboration of the ICT Division. The department has also established a TRIS Helpdesk managed by dedicated TRIS administrators to ensure the amount running of the system.

As part of continuous improvement to the system, further enhancements to TRIS had been identified and developed. In addition, regular training on TRIS were conducted throughout the year for newly appointed Risk Managers, Risk Coordinators and Risk Owners or as refresher courses for those already in service.

### 3.7 Project Risk Assessment Process

The preliminary methodology for a Project Risk Assessment Process was approved by GRMWC and GRMC. The process serves as a risk assessment tool to identify, analyse and manage risks associated with a project throughout its lifecycle. Further enhancement to the methodology and the development of a project risk assessment system is planned for the next financial year.

### 3.8 Implementation & Review of Curriculum for Risk Management

The EWRM Department has successfully developed and implemented the first "Introduction to Risk Management" curriculum with the guidance and cooperation of TNB's training institute, ILSAS. During the period under review, at least two training courses had been conducted by certified trainers with registered participants from the various divisions. A review of the curriculum was carried out by the year-end to further improve the module.

### 4. Corporate Emergency Response Plan (CERP)

The TIIB Corporate Emergency Response Plan (CERP) has been developed for the Group to provide a framework that enables a prompt, coordinated and effective response to foreseen or unforeseen emergency situations. The CERP Steering Committee, headed by the Senior Vice President (Operations & Technical) who is also the Crisis Commander, provides guidance on the formulation of the CERP and the cascading of the plan to the divisions across TNB. The Steering Committee also ensures that structured testing and simulation exercises are carried out and that adequate training is provided to key personnel including members of the Crisis Management Team.

In addition, the CERP document for System-Related Emergencies was printed and distributed to the relevant personnal within THB. Awareness training sessions were carried out across the Group in collaboration with the System Operations Department of the Transmission Division to enhance the understanding of the various elements of the CERP, to ensure preparedness for any emergency situation and to give emphasis on the necessary collaboration between the core divisions.

The CERP Steering Committee had reviewed the TNB CERP document for Mon-System Palated emergencies such as floods and pandemics. The document is scheduled for approval and implementation in the next financial year.

As a company that provides essential services crucial to national security, TNB continues to collaborate with external parties and various government agencies in particular the Hational Security Council, the Chief Government Security Officer, the Prime Minister's Department and the Ministry of Health. TNB had also participated in the various drills on pandemic and cyber threats organised by the relevant government agencies.

### 5. Conclusion

Central to the success of risk management is the ability to successfully embed risk management culture and processes within the Group. Risk management initiatives within TNB will continue to be strengthened to ensure that TNB is able to respond effectively to the continuing changing business environment while achieving its objectives to protect and enhance stakeholders' value.

# Statement Of Internal Control

# **Board Responsibility**

The Board of Directors (Board) is responsible for Tenaga Nasional, Berhad's Group (the Group) system of internal control. The system is designed to meet the Group's business objectives and safeguard shareholders' investments, the interest of customers, regulators and employees, and the Group's assets. The internal control system covers the areas of risk management, finance, operations, management information systems and compliance with the relevant laws and regulations. The system provides a reasonable but not an absolute assurance against material misstatement, loss or fraud.

The Board has established a framework for identifying, evaluating and managing the significant risks faced by the Group. The framework and risk management processes are reviewed at regular intervals by the Board and is in accordance with the Statement on Internal control: Guidance for Directors of Public Listed Companies.

# Risk Management

An Enterprise Wide Risk Management (EWRM) System has been approved by the Board and implemented by the Group to identify, assess, treat, report and monitor strategic and operational risks faced by the Group. The Board Audit Committee (BAC) reviews the effectiveness of the system and the reports arising from risk management activities undertaken during the year. The BAC is assisted by the Group Risk Management Committee, Chief Risk Officer, EWRM Department and operations staff in the risk management processes. Review of the EWRM systems is undertaken by Group Internal Audit

on the operating entities to provide assurance on the adequacy and effectiveness of the system in mitigating and controlling the risks faced by the Group. The processes in place enable the system to be refined and enhanced to meet the challenges and needs of the Group. During the year, the following initiatives were undertaken to enhance risk management processes in the Group:

- Revision of the Procurement Policies & Procedures and EWRM Policies & Procedures to improve procurement and risk management processes, and enhance accountability and responsibility.
- Development and implementation of a risk management module as part of a training programme to increase employees' risk awareness and assist them to identify, assess, treat and monitor risks within their scope of work.
- Development and approval of the Anti-Fraud Policy.

- Launching of a Whistle Blowing hotline to complement the existing Whistle Blowing Procedures to provide a more convenient feedback mechanism, thus encouraging higher transparency and improvement in the governance process.
- Roadshows on the Group's Code of Ethics and the importance of integrity. The Anti Corruption Agency (ACA) was invited to appair to employees on the importance of cultivating, instilling and maintaining integrity and good ethical practices throughout the organisation.
- Development and implementation of a training module on the effects of fraud, the laws and enforcement on fraud, and fraud prevention in the organisation for new management trainees.
- Fraud and Ethics Review, comprising a Fraud and Ethics Survey, Fraud Data Analysis and review of the system for managing fraud.
- Implementation of Project Risk Assessment for projects worth RM100 million and above.

# Control Structures

The Board has established control structures and is committed to evaluate, enhance and maintain them to ensure effective strategic and operational control over the Group's business operations. The following liey internal control structures are in place to assist the Board to maintain a proper control environment:

### Board and Management Committees

In its efforts to promote corporate governance, transparency and accountability, the Board has set up Board and Management Committees to assist them to accomplish the vision, mission, strategies and objectives set for the Group. The Committees oversee the areas assigned to them under their Terms of Reference. The Committees play an important role to direct, monitor and ensure that the plans and operations are in accordance with the Group's approved long term and short term business plans, and the policies of the Group. The Committees are:

### **Board Committees**

- Audit Committee
- Tender Committee
- Disciplinary Committee
- Nomination & Remuneration Committee
- Finance & Investment Committee

# Management Committees

- Group Executive Council Committee
- Group Executive Management Committee
- Energy Supply Committee
- Tender Committees
- Group Pial: Management Committee
- Fuel Procurement Executive Committee

# Organisation Structure

The Board has implemented a divisional structure for the Group. Clear lines of authority, responsibility and accountability have been established to enable the Group's vision, mission, strategies and operational objectives to be achieved. The divisional structure enhances the ability of each division to focus on their assigned core or support functions within the Group.

The Board also reviews and refines the effectiveness of the Group's organisation. and control structures to enhance the Group's ability to achieve their strategic and operational objectives and manage challenges in its operating environment. During the year, three new Divisions were formed, being the Corporate Affairs, Planning and Group Procurement Divisions. The regulatory relations, legal, corporate communications and company secretarial functions were consolidated into the Corporate Affairs Division. The planning function for power systems, energy procurement and strategies were grouped in the Planning Division. The procurement function was upgraded from a department to a division to oversee the strategic procurement matters of the Group. The formation of the Divisions was to strangthen the functions as well as enhance strategic and operational performance.

# Management Information Systems

The Board recognises the importance of leveraging on information and communication technology to assist in providing effective and efficient būšiness operations, timely and accurate communication with stakeholders, and enhancing the Group's performance in the long term. The major systems used

# by the Group are:

- Enterprise Pasource Management System (ERMS)
- s-Customer Information & Billing System (e-CIBS)
- Enterprise Human Resource Management System (EHRMS)
- Supervisory Control and Data Acquisition System (SCADA)
- Remote Metering System (RMR)
- Electronic Banking Facilities
- Tenaga Risl: Information System (TRIS)
- Electronic Document Management System (EDMS)
- Distribution Network Information Management (DNIM)

# Group Policies & Procedures

The Board has approved policies and procedures to govern the financial and operational functions, and ethics of the Group. The objectives of the policies and procedures are to ensure that ethics, and internal control principles and mechanisms are embedded in operations. This enables the Group to respond quickly to evolving risks and immediately report on any significant control failure. The policies and procedures are also reviewed on a regular basis to ensure its relevance and effectiveness. Amongst others, the policies and procedures implemented are:

- Internal Control Guidelines
- Group Financial Policies & Procedures
- Treasury Policy
- Safety & Health Policy
- Environmental Policy
- Investment Policy
- Procurement Policy & Procedures
- Anti Fraud Policy
- Disciplinary Policy & Procedures
- Information & Communication Policy & Codes of Practice
- Enterprise Wide Risl: Management Policy & Guidelines
- Limits of Authority
- Code of Ethics
- Procurement Code of Conduct
- Whistle\_Blowing\_Procedures

# Special Engagement Against Losses Team & Revenue Maximisation Unit

Both the above entities assist the Group in the detection and curbing of theft of electricity as well as improve billing and collection where theft has been identified.

# MODITORING & REVIEW

# Board Interactions With Management via Breakout Sessions

The Board interacts actively with management during breakout sessions to discuss and review the plans, strategies, performance and risks faced by the Group. During the year, two Board Breakout sessions were held. These sessions provide a monitoring and review mechanism to enhance the Board's effectiveness and enables management to seek mandates to address the risks faced in its internal and external environment. An inaugural Board Audit Committee Breakout session with Senior Management was also held during the year to promote awareness and importance of improving and maintaining strong internal controls in the Group.

# **Business Planning & Budgeting**

The Board has approved the implementation of a 20 Year Strategic Plan. Business plans, budgets and Hay Performance Indicators (HPI)s are aligned to the Strategic Plan. These serve as guides to the achievement of the Group's vision of becoming among the leading corporations in energy and related businesses globally.

Strategies identified in the Strategic Plan, 5 Year Business Plans, Annual Operation Plans and KPIs are reviewed, approved and monitored by the Board and management. Pavisions are made based on changes in business and operating environments. Feedback from the Board during breakout sessions with them is used to develop the Five Year and Annual Operating Plans.

The Five Year Business Plan and Annual Operating Plan also contain the budget of the Group, to enable the Group to direct its resources towards the achievement of its financial objectives. The budget is monitored at regular intervals by management to ensure effective budget utilisation.

# Financial and Operational Review

The Board Audit Committee (BAC) reviews the Group's quarterly financial performance together with management, and these are subsequently reported to the Board. The quarterly reviews enable the BAC to deliberate and assess the Group's financial results and operational performance. Monthly management accounts which serve as a monitoring tool, are also circulated to the Board and key management staff to provide information on key financial results, operational performance indicators, budget comparisons to enable them. to monitor and contribute towards improving performance.

# Group Internal Audit (GIA)

The Group Internal Audit Department (GIA) was set up by the Board to provide independent assurance on the adequacy of risk management, internal control and governance systems. GIA carries out regular reviews on the business processes to assess the adequacy and affectiveness of internal controls, compliance with regulations and the Group's policies and procedures, and highlight significant risks

affecting the Group. BAC meetings are held regularly to deliberate audit findings, management response, corrective actions, and monitoring of actions taken by management for areas with significant or high risks. GIA scope of coverage includes generation, transmission, distribution, projects, procurement, engineering, finance, human resources, corporate services, information and communication technology, investment in subsidiaries, risk management and compliance.

GIA has an independent status in the Group and reports functionally to the Board through the Board Audit Committee, GIA annual audit plans, budgets, competency and resources are reviewed and approved by the Board Audit Committee. This is to enable review on the adequacy of coverage, resources available and goverage of significant and high risk areas. The review also halps to confirm the audits that are to be co-sourced and outsourced to facilitate transfer of knowledge from consultants and coverage by external party in areas where technical skills are not available in GIA.

# Conclusion.

For the financial year under review, some weaknesses in internal control were detected. However, after due and careful inquiry and based on the information and assurance provided, the Board is satisfied that there were no material losses as a result of weaknesses in the system of internal control, that would require separate disclosure in Tenaga Nasional Berhad's Annual Report, Nevertheless, for areas requiring attention, measures have been and are being taken to ensure ongoing adequacy and affectiveness of internal controls and to safeguard shareholders' investments and the Group's assets.

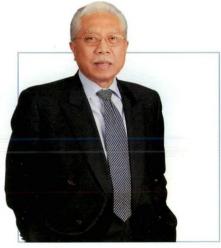
This statement is made in accordance with the resolution of the Board of Directors dated 16 October 2008.

# Board Audit Committee Report





The BAC was
established on
9 December 1990
by the Board of
Directors, to assist
them to carry out
their responsibilities.
The BAC is guided
by their Terms of
Reference which is
set out in pages 148
to 151 of the Annual
Report.





Membership And Meetings

The Board Audit Committee (BAC) members and the number of meetings which they attended during the financial year were as follows:

| No. | Name   | Status of<br>Directorship | Independent | No. of<br>Meetings<br>Attended |
|-----|--|---------------------------|-------------|--------------------------------|
| 1.  | Tan Sri Dato' Lau Yin Pin @<br>Lau Yen Beng (Chairman) | Non-Executive<br>Director | Yes         | 17/17                          |
| 2.  | Tan Sri Dato' Hari Narayanan<br>a/I Govindasamy        | Non-Executive<br>Director | Yes         | 16/17                          |
| 3.  | Dato' Zainal Abidin bin Putih                          | Non-Executive<br>Director | Yes         | 15/17                          |
| 4.  | Dato' Mohammad Zainal<br>bin Shaari                    | Non-Executive<br>Director | No          | 14/17                          |

According to the BAC's Terms of Reference, the Committee shall convene meetings as and when required, and at least six (6) times during the financial year. The Committee met seventeen (17) times.

The Chief Internal Auditor and Company Secretary who is also the secretary to the BAC were in attendance during the meetings. The President/Chief Executive Officer, and officers of the company were also invited to attend the meetings on the matters requiring their attention and feedback.

The BAC Chairman submits a report on matters deliberated to the Board of Directors after each BAC meeting.

# Summary Of Activities Of The Board Audit Committee

A summary of the activities performed by the BAC during the financial year is set out below.

### Risk Management

- Reviewed the adequacy of the Group's risk management system for identifying and managing the Group's risks.
- Reviewed the Group's Bi-annual Strategic and Operating Risk Profiles, and the activities undertaken by the Enterprise Wide Risk Management Department to promote and improve risk management swareness and processes.
- Reviewed revisions made to the Enterprise Wide Risk Management Policy to extend the scope of risk management activities and enhance accountability over risk management processes.

# Internal Audit

- Raviewed and approved Group Internal Audit (GIA)'s Budget and Annual Audit Plan to ensure adequacy of resources, competencies and coverage on auditable entities with significant and high risks.
- Reviewed internal audit reports issued by GIA and external parties on the effectiveness and adequacy of risk management, operational, compliance and governance processes.
- Reviewed the adequacy and effectiveness of corrective actions taken by management on all significant matters raised.
- Deliberated the results of adhoc investigations performed and confirmed that appropriate actions are taken to correct the weaknesses.
- Assessed the performance of the Group Internal Audit Department.
- Conducted an inaugural BAC Breakout Session with Senior Management to improve internal control awareness, highlight the staff responsibilities on internal controls and actions required to address common and recurring audit findings.

# External Audit

- Reviewed and approved the External Audit Plan and the scope for the annual audit.
- Deliberated and reported the results of the annual audit to the Board of Directors.
- Recommended to the Board of Directors the appointment and remuneration of the Group External Auditor.
- Met with the Group External Auditor without the presence of management to discuss any matters that they may wish to present.

# Financial Results

 Raviawed the Quarterly and Annual Financial statements of the Company and Group including announcements, and recommended them to the Board for their approval.

# Related Party Transactions

 Reviewed the system for identifying, monitoring and disclosing related party transactions for TNB and its subsidiaries.

# Annual Reporting

 Reviewed and recommended the Statement on Corporate Governance, Statement on Internal Control, Board Audit Committee Report, Circular to Sharsholders on Related Party Transactions and Corporate Social Responsibility Report, to the Board for approval.

# Others

- Reviewed and verified that the allocation options granted under Employee Share Option Scheme (ESOS) during the Financial Year were in accordance to the required provisions set out under the Company's Scheme.
- Visited Universiti Tenaga Nasional and TNB Research Sdn. Bhd. to enhance awareness of operations and provided feedback to management on areas requiring improvement.

# Group Internal Audit

The internal audit function of the Group is carried out by the GIA Department. GIA is independent and reports directly to the BAC.

GIA provides independent, objective assurance on areas of operations reviewed, and advice on best practices that will improve and add value to the Group.

A systematic and disciplined approach is adopted to evaluate adequacy and effectiveness of the risk management, financial, operational, compliance and governance processes. Internal audit activities are aligned to the strategic plan/objectives of the company. A risk-based methodology is adopted to ensure that the relevant controls addressing risks are reviewed regularly.

During the financial year, a total of 68 reports covering 158 assignments were issued. The areas of coverage includes generation, transmission, distribution, procurement, engineering, projects, finance, corporate governance, fraud & ethics, human resource, logistics, information and communication technology, investments in subsidiaries and risk management.

The reports issued provide independent and objective assessment of the following:

- Existence, effectiveness and adequacy of the internal control systems to manage operations and safequard the Group's assets.
- Adequacy and effectiveness of the risk management operations, governance and compliance functions to manage and anticipate potential risks over key business processes.

The internal audit reports arising from the assignments were issued to management for their response, corrective actions and provision of deadlines to complete the relevant preventive and corrective actions. The reports were subsequently tabled to the EAC for their deliberation. Management staff was present during the deliberation of the reports to ensure that they undertake the responsibility of carrying out preventive and corrective actions on the weaknesses reported.

TAN SRI DATO' LAU YIN PIN @ LAU YEN BENG

Chairman Board Audit Committee Tenaga Nasional Berhad (Senior Independent Non-Executive Director)

# Terms Of Reference Of The Board Audit Committee

# 1. Constitution

- 1.1 The Board of Directors of Tenaga Nasional Berhad (TNB), in accordance with Article 146 of the Memorandum and Articles of Association of TNB, has established a Committee of the Board, known as the Board Audit Committee (BAC), vide Minute No. 39/90 on 9 October 1990.
- 1.2 The function and authority of the BAC extends to TNB and all its subsidiaries, joint ventures and associates where management responsibility is vested to TNB or subsidiaries of TNB (Collectively referred to as the "Group").

# 2. Composition Of The Committee

- 2.1 The members of the BAC shall be appointed by the Board of Directors of TNB and shall consist of not less than three (3) members. All the audit committee members must be non-executive directors, with the majority of whom shall be independent in accordance with the definition in Bursa Malaysia Listing Requirements.
- 2.2 Where the members for any reason are reduced to less than three (3), that Board shall within three (3) months of the event, appoint such number of new members as may be required to make up the minimum number of three (3) members.
- 2.3 At least one (1) member of the Committee must meet the criteria set by the Burss Malaysia Listing Requirements, i.e.:-
  - i) must be a member of the Malaysian Institute of Accountants or
  - ii) if he/she is not a member of the Malaysian Institute of Accountants, he must have at least 3 years' working experience, and:-
    - a) he/she must have passed the examinations specified in Part 1 of the 1st Schedule of the Accountants Act 1987; or
    - he/she must be a member of one of the associations of accountants specified in Part II of the 1st Schedule of the Accountants Act 1967.
- 2.4 The Board shall elect a Chairman from the Committee who shall be an independent director as set out in the Bursa Malaysia Listing Requirements.
- 2.5 The term of office and performance of the Committee shall be raviewed by the Board to determine whether the Committee has carried out its duties in accordance with their terms of reference.
- 2.6 No alternate Directors shall be appointed to the BAC.

# Chairman Of The Committee.

- 3.1 The following are the main duties and responsibilities of the Chairman of the Committee:
  - 3.1.1 to steer the Committee to achieve its objectives;
  - 3.1.2 to provide leadership to the Committee and ensure proper flow of information to the Committee, review adequacy and timing of documentation;
  - 3.1.3 to provide a reasonable time for discussion at the Committee meetings. Organise and present the agenda for Committee meetings based on input from Members and ensure that all relevant issues are on the agenda. In addition, the Chairman should encourage a healthy level of stepticism and independence;
  - 3.1.4 to ensure that consensus is reached on every Committee resolution and where considered necessary, call for a vote and the decision will be made by simple majority. Dissenting opinions should be captured;
  - 3.1.5 to manage the process and working of the Committee and ensure that the Committee discharges its responsibilities;
  - 3.1.6 to ensure that all members participate in the discussion to enable affective decisions to be made; and
  - 3.1.7 the Chairman of the BAC shall be available to answer questions about the Committee's work at the Annual General Meeting of the Company.

### Committee Members

- 4.1 Each Committee Member is expected to:-
  - 4.1.1 provide independent opinions to the factfinding, analysis and decision making process of the Committee, based on their experience and knowledge;
  - 4.1.2 consider viewpoints of the other committee members; and make decisions and recommendations for the best interest of the Group;
  - 4.1.3 Keep abreast of the latest corporate governance guidelines in relation to the Committee and the Board as a whole; and
  - 4.1.4 continuously seel; out best practices in terms of the processes utilised by the Committee, following which these should be discussed with the rest of the Committee for possible adoption.

# 5. Objectives Of The Committee

The objectives of the Committee are:

- 5.1 to ensure transparency, integrity and accountability in the Group's activities so as to safeguard the rights and interests of the shareholders;
- 5.2 to provide assistance to the Board in fulfilling its fiduciary responsibilities relating to corporate accounting and reporting practices;
- 5.3 to improve the Group's business efficiency, the quality of the accounting and audit function and strengthening public confidence in the Group's reported financial results;
- 5.4 to maintain, through regularly scheduled meetings, a direct line of communication between the Board and the External and Internal Auditors;
- 5.5 to ensure the independence of the external and internal audit functions; and
- 5.6 to create a climate of discipline and control which will reduce the opportunity for fraud.

# 6. Authority Of The Committee

The Committee is authorised by the Board to:

- 6.1 investigate any activity within its Terms of Reference; or as directed by the Board of Directors;
- 6.2 determine and obtain the resources required to perform its duties, including approving the budget for the external and internal audit functions;
- 6.3 have full and unrestricted access to all employees, the Group's properties and works, to all books, accounts, records and other information of the Group in whatever form;
- 6.4 have direct communication channels with external auditors and person(s) carrying out the internal audit function or activity for the Group;
- 6.5 direct the Internal Audit Function in the Group;
- 6.6 approve the appointment of the Head of Internal Audit;
- 6.7 engage independent advisers and to secure the attendance of outsiders with relevant experience and expertise if it considers this necessary; and
- 6.8 to review the adequacy of the structure and Terms of Reference of the Board Committees, including the BAC.

# 7. Functions Of The Committee

The functions and responsibilities are as follows:

# 7.1 Corporate Financial Reporting

- 7.1.1 To review and recommend acceptance or otherwise of accounting policies, principles and practices.
- 7.1.2 To review the quarterly results and annual financial statements of the Company and Group before submission to the Board. The review should focus primarily on:
  - any changes in existing or implementation of new accounting policies;
  - major judgment areas, significant and unusual events;
  - iii. significant adjustments resulting from
  - iv. the going concern assumptions;
  - compliance with accounting standards;
     and
  - vi. compliance with Bursa Malaysia Listing Requirements and other legal and statutory requirements.
- 7.1.3 To review with management and the external auditors the results of the audit, including any difficulties encountered.
- 7.1.4 To review and verify the allocation of scheme options pursuant to the Company's Employees' Share Option Scheme (ESOS) in accordance to the Bursa Securities Listing Requirements as to provide a statement by audit committee in the annual report.

# 7.2 Enterprise-Wide Risk Management

- 7.2.1 To review the adequacy of and to provide independent assurance to the Board of the effectiveness of risk management functions in the TNB Group.
- 7.2.2 To ensure that the principles and requirements of managing risk are consistently adopted throughout the TNB Group.
- 7.2.3 To deliberate on the key risk issues highlighted by Group Risk Management Committee in their reports to BAC.

# 7.3 Internal Control

- 7.3.1 To assess the quality and effectiveness of the systems of internal control and the efficiency of the Group's operations.
- 7.3.2 To review the findings on internal control in the Group by internal and external auditors.
- 7.3.3 To review and approve the Statement on Internal Control for the Annual Report as required under Bursa Malaysia Listing Requirements.

# 7.4 Internal Audit

- 7.4.1 To approve the Corporate Audit Charters of internal audit functions in the Group.
- 7.4.2 To ansure that the internal audit functions have appropriate standing in the Group and have the necessary authority, resources and competency to carry out their work. This includes a review of the organisational structure, resources, budgets and qualifications of the internal audit personnel.
- 7.4.3 To review internal audit reports and management's response and actions taken in respect of these. Where actions are not taken within an adequate timeframe by management, the BAC will report the matter to the Board.
- 7.4.4 To review the adequacy of internal audit plans and the scope of audits, and snaura that the internal audit functions are carried out without any hindrance.
- 7.4.5 To appraise the performance of Head of Internal Audit.
- 7.4.6 To be informed of resignations and transfers of senior internal audit staff and provide resigning/transferred staff an opportunity to express their views.
- 7.4.7 To direct any special investigation to be carried out by Internal Audit.

# 7.5 External Audit

- 7.5.1 To nominate the External Auditors together with such other functions as may be agreed to by the Board and recommend for approval of the Board the external audit fee, and consider any questions of resignation or termination.
- 7.5.2 To review external audit reports and management's response and actions taken in respect of these. Where actions are not taken within an adequate timeframe by management, the BAC will report the matter to the Board.
- 7.5.3 To review external audit plans and scope of work.
- 7.5.4 The BAC shall meet the external and internal auditors or both at least twice a year to discuss problems and reservations arising out of audits and any matters the auditors may wish to discuss, in the absence of management, Executive Directors or non-independent Directors where necessary.

# 7.6 Corporate Governance

- 7.6.1 To review the effectiveness of the system for monitoring compliance with laws and regulations and the results of management's investigation and follow up (including disciplinary action) of any instances of noncompliance.
- 7.3.2 To review the findings of any examinations by regulatory authorities.
- 7.6.3 To review any related party transaction and conflict of interest situation that may arise within the Group including any transaction, procedure or course of conduct that raises questions of integrity.
- 7.6.4 To review and approve the Statement of Corporate Governance for the Annual Report as required under Bursa Malaysia Listing Requirements.
- 7.6.5 To review the investor relations programme and shareholder communications policy for the company.
- 7.6.6 To examine instances and matters that may have compromised the principles of corporate governance and report back to the Board.
- 7.6.7 To develop and regularly review TNB's Code of Corporate Governance and Business Ethics.
- 7.6.8 Where the BAC is of the view that a matter reported by it to the Board has not been satisfactorily resolved, resulting in a breach of Bursa Malaysia Listing Requirements, the BAC must promptly report such matters to Bursa Malaysia.

# Committee Meetings

- 8.1 The Committee shall convene meetings as and when required, and at least six (6) times during the financial year of TNB.
- 8.2 The number of Committee meetings held a year and the details of attendance of each individual member in respect of meetings held should be disclosed in the annual report.
- 8.3 The Chairman of the Committee, or the Secretary on the requisition of any member, the Head of Internal Audit or the External Auditors, shall at any time summon a meeting of the Committee by giving reasonable notice. It shall not be necessary to give notice of a Committee meeting to any member for the time being absent from Malaysia.

[ Tenaga Nasional Berhad ] [ Annual Report 2003

- 8.4 No business shall be transacted at any masting of the Committee unless a quorum is present. The quorum for each meeting shall be three (3) members.
- 8.5 The Chairman of the Committee shall chair the Committee meetings and in his absence, the members present shall elect one amongst themselves to be the Chairman of the meeting.
- 8.6 In appropriate circumstances, the Committee may deal with matters by way of circular reports and resolution in lieu of convening a formal meeting.
- 8.7 Officers of the Group or others as necessary may be invited to attend meetings where the Committee considers their presence necessary.
- 8.8 All recommendations of the Committee shall be submitted to the Board for approval.
- 8.9 A Committee member shall accuse himself/ harself from the meeting during discussions or deliberations of any matter which gives rise to an actual or perceived conflict of interest situation for the member. Where this causes insufficient Directors to make up a quorum, the Committee has the right to appoint another Director(s), which meets the membership criteria.
- 8.10 The Committee, through its Chairman, shall report to the Board after each meeting.
- 8.11 Subject to the provisions of this Terms of Reference and Memorandum and Articles of Association of TIJB, the Committee shall establish its own procedures for meetings.

# 9. Secretary Of The Committee

- 9.1 The Secretary of the Committee shall be the Company Secretary.
- 9.2 The Secretary shall draw up an agenda for each meeting, in consultation with the Chairman of the Committee. The Agenda shall be sent to all members of the Committee and the Head of Internal Audit at least three (3) working days before each meeting together with the relevant papers.
- 9.3 The Secretary shall promptly prepare the written minutes of the meeting and distribute it to each member. The minutes of the Committee meeting shall be confirmed and signed by the Chairman of the meeting at the next succeeding meeting.

7.4 The minutes of each meeting shall be entered into the minutes book kept at the registered office of the Company under the custody of the Company Secretary. The minutes shall be available for inspection by the members of the Board, external auditors, internal auditors, and other persons deemed appropriate by the Company Secretary.

## 10. Disclosure

- 10.1 The Committee shall assist the Board in making disclosures concerning the activities of the Committee, in the Report of the Board Audit Committee, to be issued in the Annual Report.
- 10.2 The Board requires all Directors to submit a Disclosure of Interest to avoid any conflict between their personal interests and the interests of the Company. In the event of a conflict, either perceived or actual, this Disclosure of Interest shall be submitted to the Chairman of the Committee with a copy to the Company Secretary.

# 11. Revision Of The Terms Of Reference

- 11.1 Any revision or amendment to the Terms of Reference, as proposed by the Committee or any third party, shall be presented to the Board for its approval.
- 11.2 Upon the Board's approval, the said revision or amendment shall form part of this Terms of Reference and this Terms of Reference shall be considered duly revised or amended.

# Board Of Directors

# from left to right: Tan Sri Leo Moggie (Non-Independent Non-Executive Chairman) Dato' Sri Che Khalib bin Mohamad Noh (President/Chief Executive Officer) (Non-Independent Executive Director) Dato' Puteh Rukiah binti Abd Majid (Non-Independent Non-Executive Director) Dato' Mohammad Zainal bin Shaari (Non-Independent Non-Executive Director) Tan Sri Dato' Lau Yin Pin @ Lau Yen Beng (Senior Independent Non-Executive Director) Tan Sri Dato' Hari Narayanan a/I Govindasamy (Independent Non-Executive Director)



# Profile Of Directors



TAIL SELLED MOISGIE

Tan Sri Leo Moggie, 67 years of age and a Malaysian was appointed as Non-Independent Non-Executive Chairman of Tenaga Nazional Berhad on 12 April 2004. He is the Chairman of the Board Nomination and Remuneration Committee and Board Finance and Investment Committee. Tan Sri Leo Moggie also sits on the Boards of Digi.Com Berhad and The New Straits Times Press (Malaysia) Bierhad.

Tan Sri Leo Moggie holds a Masters of Arts in History from University of Otago, New Zealand and a Masters in Business Administration from Pennsylvania State University, USA.

He held several senior ministerial positions both at the federal and state levels prior to his appointment as Chairman of Tenaga Nasional Berhad. Tan Sri Leo Moggie was the former Minister of Energy, Communications and Multimedia (1998-2004), Minister of Works (1989-1995), Minister of Energy, Telecommunications and Posts (1978-1989 and 1995-1998) in the Federal Cabinet and Minister of Local Government (1977-1978) and Minister of Welfare Services (1976-1977) in the State Government of Sarawak.

He began his career as a Civil Servant and held various positions in the Sarawal: State Civil Service from 1966 to 1974. He was also a member of Council Negeri Sarawal: (1974-1978) and a Member of Parliament (1974-2004).

Tan Sri Leo Moggie attended all the 15 Board Meetings held in the Financial Year.

### Chairman

Non-Independent Non-Executive Director

Dato' Sri Che Khalib bin Mohamad Noh, 43 years of age and a Malaysian, was appointed as a Non-Independent Executive Director of Tenaga Nasional Berhad on 1 July 2004. He sits on the Board Disciplinary Committee.

He is a Fellow of the Association of Chartered Certified Accounts (United Kingdom) and also a member of the Malaysian Institute of Accountants.

Dato' Sri Che Khalib has held several key positions in the private sector. He started his career with Messrs Ernst & Young and later joined Bumiputra Merchant Bankers Berhad. Between 1992 and 1999, he served in several companies within Renong Group, including Projek Lebuhraya Utara-Selatan, HBN Management Services Sdn. Bhd., Renong Overseas Corporation Sdn. Bhd. and Marak Unggul Sdn. Bhd., the consortium company responsible for the management of Keretapi Tanah Melayu Berhad. In June 1999, he joined Ranhill Utilities Berhad as the Chief Executive Officer. He was the Managing Director and Chief Executive Officer of KUB Malaysia Berhad prior to his appointment as President/Chief Executive Officer of Tenaga Nasional Berhad.

Prior to joining Tenaga Nasional Berhad, Dato' Sri Che Khalib served as a member of the Board and Executive Committee of Khazanah Nasional Berhad from 2000 till 2004. He also served as Board member on several of the United Engineers Malaysia Berhad Group of Companies and Bank Industri & Teknologi Malaysia Berhad.

Dato' Sri Che Khalib attended all the 15 Board Meetings held in the Financial Year.

President/Chief Executive Officer Non-Independent Executive Director



DATO' SRI CHE KHALIB BIN MOHAMAD NOH



DATO' PUTEH PUMAH BINTI ABD MAJID

Dato' Putah Ruhiah binti Abd Majid, 55 years of age and a Malaysian, was appointed as Mon-Independent Mon-Executive Director of Tenaga Nasional Berhad on 13 September 2006. She is the Chairman of Board Tender Committee and a member of the Board Disciplinary Committee.

She is a holder of a Bachelor of Economics (Hons) from Universiti Malaya, Malaysis and Masters (Economy) from Western Michigan University, USA.

She has held various positions in the Government such as the Deputy Under Secretary, Minister of Finance (Incorporated), Privatisation and Public Enterprise Division (2000-2004) and later as Under Secretary, Investment, Minister of Finance (Incorporated) and Privatisation Division (2004-August 2006). She is currently the Deputy Secretary General (Systems and Controls), Ministry of Finance.

She sits on the Boards of Perbadanan Usahawan Nasional Berhad, Pengurusan Asat Air Berhad, Pelaburan Hartanah Bumiputra Berhad and Penerbangan Malaysia Berhad.

Dato' Putsh Pulsiah attended 14 out of the 15 Board Meetings held in the Financial Year.

Non-Independent Non-Executive Director

Date' Mohammad Zainal bin Shaari, 45 years of age and a Malaysian was appointed as Non-Independent Non-Executive Director of Tenaga Plasional Berhad on 31 March 2007. He serves as a member of the Board Audit Committee, Board Tender Committee, Board Finance and Investment Committee and Board Homination and Remuneration Committee.

Hs is presently the Executive Director/Chief Operating Officer of Khazanah Nasional Berhad. He is also a member of the Financial Reporting Foundation.

Date' Mohammad Zainal is a Fallow of the Institute of Chartered Accountants in England and Walss, and the Association of Chartered Certified Accountants (ACCA) of the United Kingdom. He is also a Member of the Malaysian Institute of Accountants and the Malaysian Institute of Certified Public Accountants.

He has served in various positions in the private sector including with a public accounting firm in the United Kingdom (1984-1990) and with PricewaterhouseCoopers (1990-2002). He served a short stint with Bina Fikir Sdn. Bhd. before being appointed to serve Khazanah Nasional Berhad in October 2004.

Dato' Mohammad Zainal attended 12 out of the 15 Board Meetings held in the Financial Year.



DATO! MOHAMMAD ZAIDAL BID SHAARI

Tan Sri Dato' Lau Yin Pin, 59 years of age and a Malaysian, is the Senior Independent Non-Executive Director of Tenaga Nasional Berhad. He was appointed to the Board of Tenaga Nasional Berhad on 25 September 1990. He chairs the Board Audit Committee and sits on the Board Tender Committee.

He is a Chartered Accountant of the Malaysian Institute of Accountants (MIA) since 1979, a Fellow Member of the Chartered Association of Certified Accountants (ACCA), United Kingdom since 1981 and also a graduate of the Institute of Chartered Secretaries and Administration (ICSA), United Kingdom. He obtained his Diploma in Commerce (with Distinction), from Kolej Tunku Abdul Rahman. Tan Sri Dato' Lau Yin Pin has served in various capacities in the private sector including as a Public Accountant and a Business and Financial Consultant.

He is the Chairman of STAR Publications (Malaysia) Berhad and sits on the Board of YTL Power International Berhad and Media Chinese International Limited.

Tan Sri Dato' Lau Yin Pin attended all the 15 Board Meetings held in the Financial Year.





TAN SRI DATO' LAU YIN PIN @ LAU YEN BENG



TAN SRI DATO' HARI NARAYANAN A/L GOVINDASAMY

Tan Sri Dato' Hari Narayanan, 58 years of age and a Malaysian, is an Independent Non-Executive Director of Tenaga Nasional Berhad. He was appointed to the Board of Tenaga Nasional Berhad on 1 March 1995. He is a member of the Board Audit Committee and Board Nomination and Remuneration Committee.

Tan Sri Dato' Hari Narayanan's directorships in other public companies are S P Setia Berhad, Puncak Niaga Holdings Berhad and IEV Group Berhad.

He holds a Bachelor degree in Electrical and Electronics Engineering from the University of Northumbria, England.

He has vast experience in the field of electrical and electronics engineering and has held key positions at InchCape Berhad and Tamco Cutler-Hammer Sdn. Bhd. He is currently the Chairman of Noblemax Resources Sdn. Bhd. and Deputy Chairman of Emrail Sdn. Bhd.

Tan Sri Dato' Hari Narayanan has attended all the 15 Board Meetings held in the Financial Year.

Independent Non-Executive Director



DATO/ IAMAL ABIDITY BIN PUTIH

Dato' Zainal Abidin bin Putih, 62 years of age and a Malaysian was appointed as Independent Non-Executive Director of Tenaga Nasional Berhad on 1 May 2003. He serves as a member of the Board Audit Committee as well as the Board Finance and Investment Committee.

He is presently the Chairman of the Malaysian Accounting Standards Board (MASB), Mobile Money International Sdn. Bhd. and a Trustee of IJN Foundation.

He is a qualified Chartered Accountant from the England and Wales Institute. He has extensive experience in Public Accounting Practice and has held various positions such as Partner, Executive Director, Country Managing Partner and Chairman in the firm of Hanafish Paslan & Mohammad, which merged with Ernst & Young in 2002.

He was also the past Chairman of Mentalish Rubber Company Berhad, Pengurusan Danaharta Nasional Berhad, a past President of Malaysian Institute of Certified Public Accountant (MICPA), a past member of Malaysian Communication and Multimedia Commission and a past Advisor to Ernst & Young Malaysia.

He also sits on the Boards of Burniputra-Commerce Holdings Berhad, ESSO Malaysia Berhad, CIMB Investment Bank Berhad and CIMB Bank Berhad.

Dato' Zainal Abidin attended all the 15 Board Meetings held in the Financial Year.

### Independent Non-Executive Director

Dato' Fuad bin Jasíar, 65 years of age and a Malaysian, was appointed as Independent Non-Executive Director of Tenaga Nazional Berhad on 15 March 2007. He sits on the Board Tender Committee, Board Disciplinary Committee and Board Nomination and Remuneration Committee.

He is a holder of a Diploma in Tachnology from Brighton University, United Kingdom.

He has served in various capacities during his tenura with Tenaga Nasional Berhad holding positions such as Assistant Distribution Engineer, Senior District Manager, Construction Engineer, Assistant Senior Construction Engineer, Assistant Senior Construction Engineer, Deputy Chief Engineer/Assistant General Manager and Deputy General Manager. In January 1994, Dato' Fued became the General Manager for Transmission Division and later became the Senior General Manager for Energy Supply. On 4 September 1997, he was appointed as TNB's Chief Operating Officer and Executive Director and subsequently on 16 October 2000 he was appointed as the President/Chief Executive Officer of Tenaga Nazional Berhad.

Dato' Fund attended all the 15 Board Meetings held in the Financial Year.





DATO: FUAD BIN JAARAR

[ Tenaga Nasional Berhad ] [ Annual Report 2008

Tan Sri Dato' Seri Siti Norma binti Yaakob, 68 years of age and a Malaysian, was appointed as Independent Non-Executive Director of Tenaga Nasional Berhad on 12 September 2008. She chairs the Board Disciplinary Committee and serves as a member of Board Finance and Investment Committee and the Board Nomination and Remuneration Committee.

She graduated as a Barrister-at-Law from Gray's Inn, London. She also holds a Certificate in Public International Law in Post-Finals Course, Council of Legal Education, London.

She has held various senior positions in the Legal Service of Malaysia holding such positions as Senior Assistant Registrar, President of Sessions Court, Senior Federal Counsel of Attorney General's Chambers, Deputy Public Trustee, Malaysia and Chief Registrar of Federal Court, Malaysia. She was appointed a Judge of the High Court of Malaya (1983-1994), Judge, Court of Appeal, Malaysia (1994-2000). Effective 1 January 2001 she was made a Judge of the Federal Court of Malaysia and subsequently on 8 February 2005 she was elevated as the Chief Judge of Malaya and held that position until 5 January 2007.

Currently she sits on the Boards of KAF Investment Bank Berhad, RAM Holdings Berhad, RAM Rating Services Berhad and RAM Rating (Lanka) Limited.

Independent Non-Executive Director



TAN SRI DATO' SERI SITI NORMA BINTI YAAKOB

# Group Executive Council Committee - GECC



# from left to right:

- Dato' Sri Che Khalib bin Mohamad Noh (President/Chief Executive Officer)
- Datuk Wira Md. Sidek bin Ahmad (Senior Vice President, Operations & Technical)
- Dato' Abdul Razak bin Abdul Majid (Senior Vice President, Corporate Affairs)
- Dato' Izzaddin Idris (Chief Financial Officer/Senior Vice President, Group Finance)

The Group Executive Council Committee (GECC) serves as the highest executive forum of the organisation and has a broad responsibility of reviewing the Group's policies, strategies and procedures in line with the Company's mission and vision, overall performance of the Group as well as promotions of executives.

GECC is also duly responsible to co-ordinate business planning strategies and Group wide policies as well as to monitor and oversees the effective implementation of activities and performance of other Group Management Committees that covers the appointments of members of the respective committees.

During the Financial Year under review, the Committee held 10 Meetings.

# Energy Supply Committee - ESC



# from left to right:

- Dato' Sri Che Khalib bin Mohamad Noh (President/Chief Executive Officer)
- Datuk Wira Md. Sidek bin Ahmad (Senior Vice President, Operations & Technical)
- Dato' Abdul Razak bin Abdul Majid (Senior Vice President, Corporate Affairs)
- Ir. Ab'llah bin Haji Mohd Salleh (Vice President, Transmission)
- Dato' Ir. Aishah binti Dato' Haji Abdul Rauf (Vice President, Distribution)
- Mohd Nazri bin Shahruddin (Vice President, Generation)
- Zainab binti Abdullah (Vice President, Planning)

This Committee is the highest management forum having the authority to endorse and approve all power system development plans and proposals for TNB in Peninsular Malaysia prior to submission to the TNB Board. The Committee also makes decisions related to major TNB's core business operational issues as well as issues related to the expedition of on-going generation, transmission and primary distribution development projects in Peninsular Malaysia.

During the Financial Year under review, the Committee held five Meetings.

# Group Executive Management Committee - GEMC



# standing from left to right:

- Datuk Wira Md. Sidek bin Ahmad (Senior Vice President, Operations & Technical)
- Dato' Izzaddin Idris (Chief Financial Officer/Senior Vice President, Group Finance)
- Dato' Abdul Razak bin Abdul Majid (Senior Vice President, Corporate Affairs)
- Ir. Ab'llah bin Haji Mohd Salleh (Vice President, Transmission)

### sitting from left to right:

- Dato' Sri Che Khalib bin Mohamad Noh (President/Chief Executive Officer)
- Dato' Ir. Aishah binti Dato' Haji Abdul Rauf (Vice President, Distribution)

The Group Executive Management Committee (GEMC) led by the President/Chief Executive Officer is responsible for the overall management of the Company's operational and financial administration. The Committee meets on a monthly basis and provides an avenue for the Senior Management to facilitate better coordination and effective interaction between the Divisions and TNB's Group of Companies in deliberating and resolving pertinent issues by providing the best possible solutions to ensure implementation and execution of the necessary actions are done in accordance with the Company's wide initiatives and policies.



# standing from left to right:

- Mohd Nazri bin Shahruddin (Vice President, Generation)
- Dato' Nik Ibrahim bin Nik Mohamed (Vice President, Investment Management)
- Dato' Kamaruzzaman bin Jusoh (Vice President, Human Resource)
- Razali bin Awang (Chief Information Officer)
- Nor Azmi bin Ramli (Chief Procurement Officer)

# sitting from left to right:

- Zainab binti Abdullah (Vice President, Planning)
- Md. Jailani bin Abas (Senior General Manager, Corporate Services)

Additionally it is also responsible for formulating policies, procedures, strategies and undertaking operational decisions pertaining to operational matters, corporate issues, finance, human resource, corporate affairs and entrepreneur development.

During the Financial Year under review, the Committee held 15 Meetings

# Corporate Social Responsibility



Corporate social responsibility (CSR, currently also known as corporate responsibility) is a concept under which organisations consider the interests of society by taking responsibility for the impact of their activities on customers, suppliers, employees, shareholders, communities and other stakeholders, as well as the environment. This obligation is seen to extend beyond the statutory obligation to comply with legislation and sees organisations voluntarily taking further steps to improve the quality of life for employees and their families as well as for the local community and society at large.

As one of the nation's leading GLCs, TNB is committed to undertaking Corporate Social Responsibility (CSR) best practices that impact positively to all our stakeholders, be they our employees, customers, partners or the communities and the environment we operate in and above all the nation-building agenda. The far reaching impact of TNB's CSR policy was acknowledged by the Government and was used as a benchmark for the pilot study on CSR for its Silver Book initiative.

As the leading power utility, TNB's integral role to deliver electricity to the public efficiently and at the lowest rate possible is by far the single most important CSR activity it has undertaken. The Company recognises the need and relevance of the Government policy for the country's ongoing development and the various initiatives we have undertaken to deliver safe, reliable and secure electricity to customers for their private and economic needs, are testament to our commitment to ensure society will gain and benefit from these developments. With this in mind, TNB strongly supports government driven policies and initiatives such as those enshrined in the 9th Malaysia Plan and it aims to continue powering the country's vision of becoming a fully developed nation by the year 2020.

The need to support the Government has been translated into the Company's battle cry of "Powering the Nation", which sets the tone for our CSR activities.

During the period under review, TNB continued to forge ahead with its CSR initiatives in the various areas, touching the lives of many while at the same time creating sustainable values in its relentless pursuit of business excellence.

# Powering Communities

This is in consonance with TNB's philosophy of giving back to the community by providing philanthropic assistance to the deserving and needy as well as implementing programmes that create community wellness and better quality of life.



# Baiti Jannati

TNB launched the Baiti Jannati programme to repair dilapidated houses of the hardcore poor nationwide thus providing them with decent and comfortable dwellings. Priority was given to senior citizens, the disabled and single parents. To date, a total of 18 houses have been repaired at an estimated cost of RM200,000.

# Community Leader Outreach Programme (CLOP)

TNB organised dialogue sessions with community leaders and customers to get feedback on its services. CLOP serves as an alternative channel for customers to file reports, submit requests or forward suggestions that would help to improve TNB's services. The Programme was introduced in 2005 to provide a platform for TNB to build



good relationships and networking with local authorities and the community at large.

# Electricity Safety and Awareness Campaign

TNB conducted an Electricity Safety and Awareness Campaign to impart better knowledge on electricity safety to the community. Among the groups identified for this programme are the primary and secondary school teachers who play an effective role in educating and disseminating information on the safe use of electricity to the students. The campaign was conducted through half-day seminars comprising three modules namely on Electrical Safety, Domestic Installation Safety and Electricity Safety at or near TNB's Installations. During the period under review, 2,949 teachers from 10 states benefited from this programme.

# Rural Electrification Programme

The programme has helped elevate the standard of living and improved the quality of life of the rural communities when some 99% of the populated areas in the country are provided with electricity supply compared to only 30% in 1957. The programme underscores our commitment to nation-building as the costs of investment, operation and management of extended lines to rural areas far superceded the revenue derived from these areas.

# Mobile Cancer Screening Programme

This early detection of pre-symptomatic cancer programme was conducted by the National Cancer Council (MAMPIA) through mobile units dispatched to strategic locations throughout the nation. Only breast, cervical, prostate and stomach cancer are targeted for early detection. TNB has pledged an annual funding of RM200,000 to the programme for a period of five years.

# Powering Education

TNE believes that education can turn dreams into reality. The Company has a very strong tradition in producing world-class scholars and researchers through its education and scholarship programmes. Among the many beneficiaries are current business leaders in the country who were TNB scholars who had enjoyed the education provided by the Company under its scholarship programmes.

# Universiti Tenaga Nasional

Over the years, TNB has strengthened this role and is now actively involved in not only providing scholarships, but also in providing education through Universiti Tenaga Nasional (UNITEN).

As an institute of higher learning, UNITEN has an immense and important responsibility in helping the Government produce well rounded individuals. The University also gives primary focus on research and development activities which encourage and develop the culture of innovation and competition among the academic staff as well as its students. Strategic provides access and opportunities for students and academic staff to master knowledge as well as acientific and technical expertise that are relevant with industrial and market place needs.

### **PINTAR**

PINTAR or Promoting Intelligence, Nurturing Talent and Advocating Responsibility is an education programme conducted in collaboration with Khazanah Nasional Berhad (Khazanah), to inculcate education awareness among the poor families with special focus on those located in the Northern Corridor Economic Region (NCER), Eastern Corridor Economic Region (ECER) and Islandar Development Region (IDR). The programme is supported by both the Finance and Education Ministries with Khazanah taking the lead role to collaborate with Government-Linked Companies (GLCs) to ensure its success. 45 schools were adopted at the inception of the programme.

The implementation of PINTAR is in line with the Government's call to promote public-private partnerships for sustainable education development under the 9th Malaysia Plan and the 2006 Budget. Two key thrusts of PINTAR's mission are to raise the children's motivation to learn and to ensure a conducive learning environment.

TMB has adopted 23 primary schools nationwide under this programms. An annual allocation of RM520,000 has been provided to foster academic excellence particularly among rural school children who will be sitting for the UPSP examination. The contribution goes towards paying for tuition fees, the conduct of engagement sessions with parents and school teachers, motivation courses as well as skills building workshops. To date, a total of 2,387 students had benefited from this programme.

# PRS-UNITEN/PINTAR 2008 Programme

This motivation programme was managed entirely by students of Tenaga Nasional's own university, Universiti Tenaga Nasional (UMITEN) under the Persatuan Pembimbing Rakan Sabaya (PRS) or Association of Peer Mentoring. In all 150 Standard & pupils from Sebolah Kebangsaan Bayan Lapas, Bertam Indah and Sebolah Kebangsaan Sg. Ars in Pulsu Pinang were selected for the 3-day programme which had helped to raise the spirit, determination and the confidence of the pupils in facing the UPSR examination.

# Program Jejak Kegemilangan

Under this programms, outstanding students from rural areas and underprivileged families nationwide are taken on a study visit to Kuala Lumpur including to Universiti Tenaga Nasional (UNITEN), emposing them to campus life and inspiring them to seek greater achievements.

# Program Kem Remaja Bestari

This is basically an education camp programme for children of TNB employees as well as orphans designed to guide and inspire them to perform well in such public examinations as UPSR, PMR and SPM.

# Scholarships and Study Loans

TRIB disbursed scholarships and study loans to outstanding and deserving students through its foundation, the Yayasan Tenaga Masional. The annual contribution of RM53 million a year goes a long way in helping these students to pursue their tertiary education both in local universities as well as at world-renowned universities abroad as an effort to build a pool of good scholars and talents for TNB and the country.

# Special Needs Education Services

TNB had made a five-year commitment in support of the fund for educating children with special needs under the Special Needs Education Services of the Ministry of Education.

### Education Motivation Tall:

TNB had conducted an aducation motivation talk for Standard 5 pupils from Seholah Kebangsaan Bebar, Pekan, Pahang dan Sekolah Kebangsaan Dato' Sari Kamaruddin, Manjung, Perak. The programme was designed to guide the pupils on the systematic and effective studying technique besides motivating them to strive for excellence in their studies and co-curriculum activities. Most of those selected were outstanding pupils from poor families.

# Taking Motorsports to School Programme

Some 80 students and 8 accompanying teachers from Sekolah Kebangsaan Bebar, Pekan, Pahang and Sekolah Kebangsaan Dato' Sri Kamaruddin, Manjung, Perak were selected by TNB to watch the Petronas F1 Grand Prix at Sepang, Selangor. To date, 336 students have enjoyed the privilege of watching this prestigious sporting event.

# TNB@SUKMA Programme

A total of 160 students from schools in Terengganu were brought by TNB to watch the final of the men and women hockey matches at the 12th SUKMA (Malaysian Games). This annual programme was organised in conjunction with SUKMA would provide the students first hand exposure to hockey as well as to nurture their interest in the sport.

# Powering Business Excellence

TNB believes that aligning CSR initiatives with its business strategies will bring long term returns. On good initiative is the support it renders to local manufacturers and contractors through the Vendor Development Programme. In addition, consistently maintaining high standards of its businesses and operations by ensuring adequate, safe, reliable and continuous delivery of power supply, providing excellent customer service and inculcating a work culture of high integrity are among its many commitment in powering business excellence.

## Vendor Development Programme

A programme designed to develop a stable and competitive supplier base for TNB through strategic partnerships with and support given to local vendors in particular the Bumiputra vendors. A structured vendor management programme, which involved strategic and innovative initiatives including training, guidance, liaising with banks for financing, implementation of Quality Management System and development incentives to the vendors,



TNB succeeded in helping suppliers reduce costs and improve quality and level of service. The Company had also promoted vendor products overseas by leveraging on TNB banners. With these advantages, TNB is better positioned to face the challenges of a highly competitive environment in the industry. TNB is also able to help the nation achieves its development objective of growth with equity.

### Renewable Energy

TNB has to date signed nine renewable energy power purchase agreements with Small Renewable Energy Power Developers in Peninsular Malaysia with a total export capacity of 49.8 MW. It has also signed an MoU with FELDA Palm Industries Sdn Bhd and Japan's J-Power to develop a biomass power plant at Jengka, Pahang.

# System Average Interruption Duration Index (SAIDI)

System Average Interruption Duration Index or SAIDI is an industry standard which measures service reliability or service level standard by a utility like TNB to its customers. It is an indication of the average duration of interruption of service in minutes term over a particular period of time. Since September 2008, TNB had used the new integrated TNB

Outage Management System (TOMS) to more accurately measure SAIDI or its service level standards to customers.

# TNB Careline 15454 Helpdesk

TNB Careline 15454 is a 24-hour onestop call management centre that handles enquiries on power supply management nationwide. Using the latest call centre telephony system, TNB Careline 15454 strives to achieve service excellence by ensuring that more than 90% of calls received are answered within 20 seconds in order to meet a service level of more than 75%.

### Toll Free WBIS System

This system enables members of the public to report misconduct, misbehavior or misuse of power or position by TNB employees through the toll-free line 1-800-888-862. An internal WBIS System has also been installed to enable employees to lodge report of misdemeanors by their peers.

### E-Application

TNB's online application for electricity supply which currently targets developers of housing projects and individual applicants. The system, which uses web-based technology provides fast, convenient and easy monitoring of electricity supply applications.

"Wayleave and Land Matters" Seminar A programme conducted jointly with the relevant Government Agencies and Local Authorities to share information on the existing legislations governing land use and wayleave for the development of high voltage electrical infrastructures.

# Powering A Green Nation

As a power producer and distributor, TNB's nature of operations requires the Company to take great interest in its environment. As a principle, TNB embraces the notion that any project or development undertaken by TNB must blend and not in conflict with the environment its operates in.

# **Environmental Policy**

TNB has formulated an environmental policy that complies with all applicable laws and regulations and establishes standards to protect, conserve and improve the environment in all its operations and decision-making. An Environmental Management System (EMS) has been implemented to ensure that impact on the environment from its operations are eliminated, mitigated or minimised.

# Global Standards ISO 14000

Audits on TNB's corporate responsibility initiatives are planned and policies and procedure are formulated to establish compliance, achievements and effectiveness of its environmental initiatives. Environmental audits are conducted at required intervals to ensure compliance with TNB's Corporate Environmental commitments. In addition, the Company also conducted training programmes for its employees to develop a high level of competency in environment protection.

### Firefly Conservation

A project to conserve the unique firefly colony at Kampung Kuantan was jointly undertaken by TNB and the Selangor State Government. In addition to research activities, TNB had implemented four projects to upgrade infrastructure at the Firefly Centre by building four pavilions, a mini theatre and public address system in the existing building, upgrading of the existing jetty and the access road as well as the square. The projects were part of the obligations under the agreement signed between the two parties to the conservation project. Earlier, the Company had also completed projects to refurbish the gateway, erected TNB billboard at the parking area as well as directional signs to the center at several strategic locations from Kuala Lumpur to Tanjung Karang, Salangor.

Various initiatives to provide sustainable livelihood for the boatmen operating in the area have also been taken by TNB. These include the sponsoring of Basic Conversational Arabic and Japanese classes for the boatmen to improve their conversational skills with Arab and Japanese visitors. The classes were conducted by trainers from TNB's Institut Latihan Sultan Ahmad Shah (ILSAS). Foreign language classes are useful as the center has been receiving foreign visitors.

The Company also launched 'Lets Go To School With TINB' Programme as part of financial support for children of the boatmen most of whom are without a fixed source of income.

# **Bird Sanctuary**

A bird sanctuary had been created at the Sultan Salahuddin Abdul Aziz Power Station at Espar. Strict emission regulations observed by the station had made its grounds the main converging site for birds like plovers, herons, godwit, sandpipers and egrets. This is part of TNE's effort to conserve our natural heritage for the future generations.

TNB Youth Motivation, Education and Environmental Awareness Programme. The programme which was implemented since 2003 was jointly organised by THB and TNB Research Sdn Bhd. It aimed to inculcate environmental awareness among youths, particularly school children, by taking them through the following three phases:

Phase 1: Environmental Awareness Camp

Phase 2: Mini Projects – preservation of the environment

Phase 3: Inter-school mini projects competition

During the period under review, focus was given to the preservation of fire flies at Hampung Kuantan (Please refer to paragraph on Firefly Convervation). 10 schools representing every district in Salangor participated in the project. As at end August 2008, a total of 268 student from 26 schools throughout Malaysia had participated in this programme.

# Powering Our Work Force

TNB believes that its employees are its greatest assets. Its CSP initiatives for the employees over the year involved systematic training programmes and career development opportunities to enhance their professionalism as well as to encourage their involvement in volunteerism and extracurricular activities to achieve a good work-life balance.

# Health Benefits

TMB provides a wide range of health and medical benefits for its staff, ratirees and eligible dependents.

# Occupational Safety, Health and Environment (OSHE) (Distribution Division perspective)

TNB is committed to providing employees with a safe and healthy workplace. A programme to ensure accidents at the workplace can be minimised, if not prevented, has been implemented through the following initiatives:

- Formulation, development and enforcement of occupational safety and health policies.
- Establishment of a culture that emphasises on occupational safety and health.
- Advice to the management of the Distribution Division on compliance with relevant legislations and regulations.
- Services of Division auditor and secretariat for occupational safety and health.

### Sports and Recreation Club

A wide range of physical and recreational facilities and social activities are provided through the Kilat Club to enhance employee well-being and morale. TNB had spent some RM470,000 to finance sports and social activities through the Club.

# The 5S Programme

5S is a management tool that focuses on providing a conducive and productive work environment. It owes its origin to five Japanese words namely seiri, seiton, seisa, seiketsu and shitsuke. It is a foundation for all other productivity improvement initiatives. Another benefit of activities under 5S is the enhancement of teamwork.

# Powering Champions

Sports has always been on TNB's corporate agenda. The Company's high regard for sports lies not only in its social role but more importantly in its role as a catalyst to develop future champions. TNB's active involvement in sports through the years is in line with

the Government's aspiration to produce top athletes and for Malaysia to be a top-notch sporting nation and one of the responsibilities of private agencies to promote sports in Malaysia.

# Sports Coaching Programme

TNB is the main supporter of hockey. One of the key initiatives is the joint project it conducted through close collaboration with the state hockey bodies of Johor, Negeri Sembilan, Selangor, Wilayah Persekutuan, Kedah, Pahang, Perak and Penang. The project mobilises the "Thunderbolt Coaching Team" comprising former national hockey players to conduct specialised hockey skills coaching sessions to rising hockey stars. Some 3000 new talents have been identified and are involved in this project.

TNB is the main sponsor for Sultan Azlan Shah Cup, an international tournament, which features top hockey teams from around the world. TNB is also the key sponsor for several local leagues such as the Razak Cup, Junior League and TNB-MHL Hockey League organised by Malaysia Hockey Federation.

Besides hockey, TNB is also the main sponsor for cricket in the country. It is actively involved in the development of cricket by officially competing in every tournaments, both local and international, under the auspices of the Malaysian Cricket Association.



# Other Services - Productivity And Quality Management



Productivity and Quality Management Department (PQM) is responsible for improving TNB's overall productivity and quality and facilitates corporate change programs. It comprises of three units: Change Management Unit, Policy Management Unit and Quality and Organisational Development Unit.

# Change Management Unit

Change Management Unit (CMU) facilitates the Divisions in developing key initiatives and achieving their set Corporate Programme targets. The unit's objective is also to increase the auccess rate by assisting the identification and removal of potential blockers and to identify interventions. This department also monitors the implementation and achievement of each Division's Key Initiatives under the Corporate Transformation program. TNB is currently undergoing a push towards service excellance under its Service Excellence 10/10 (SE10/10) corporate transformation programms scheduled to complete by 2010. This unit also assists TNB Divisions improve through implementation of short term special change projects and through workshop facilitation and team development activities.

# Policy Management Unit

Policy Management Unit has a major responsibility in the coordination of TNB Quality Management System (QMS) activities in accordance to the Quality System Certification Scheme by SIRIM. To carry out this responsibility, Policy Management Unit has established the following as its objectives:

- To ensure the achievement and austainability of Process Standardisation & Improvement (PSI) in TMB by assisting Client Division/Department document their processes, procedures and work instructions based on ISO 9000 Standards Requirements.
- To ensure the availability and utilisation of the latest policies, procedures and circulars throughout TNB.

In order to support its objectives, it has to undertake the following roles:

- A. PROCESS STANDARDISATION & IMPROVEMENT (MS ISO 9001:2000)
  - Advisory services and guidance to Client Divisions/ Departments with regards to PSI implementation and sustainability
  - Develop and continuously update curricula and modules of PSI training with ILSAS
- B. POLICY COLLATION
   Coordinate collation of policies,
   procedures and circulars

# Organisational Development And Quality Unit

The Organisational Development and Quality Unit is responsible for promoting quality in the organisation through such initiatives as the President Quality Award (AEP), Worl: Improvement Team (WIT), 55, Team Building and others.

Effective from the period under review, the AKP assessment would be held biannually. The longer interval provided TNB with sufficient time to prepare itself for participation in the Quality Management Excellence Award (Category 4). The effort paid off when TNB won the award and went on to garner the Prime Minister Industry Excellence Award (AKIPM) for 2007.

TNB had continued to keep the quality tradition alive especially in WIT where there are now some 700 active WIT teams in the Group and its subsidiaries. For FY2007/2008, the WIT teams had won the following awards:

- Malaysia Productivity Centre Director General Award – for TNE's participation and success achieved in MPC Mational ICC, Convention. The award was received by Datul: Abdul Razak Majid, Senior Vice President Corporate Affairs on behalf of TNB.
- Prism Award Category 1 Gold Medal – awarded to EG WIT of Sultan Islandar Power Station, Pasir Gudang, Johor at the Indonesian Quality Convention 2008 held at Cisarua, Jakarta, Indonesia.
- Runner Up Services Sector won by Impian WIT of Glugor Power Station, Penang at the ICC National Convention 2008 at One World Hotal on 19-22 August 2008 after having defeated 38 other teams nationwide.
- Silver Award to K-Power WIT of TMBD Kuala Lipis, Pahang at the International Convention of Quality Control Circles (ICQCC) in Beijing on 23-26 October 2007.

TNB continues to implement the 5S concept throughout the organisation to provide a comfortable and conducive work environment. While not being their principal objective, asveral business unit had been conferred 5S certification from the National Productivity Centre (NPC). Indeed the Tuanku Ja'afar Power Station at Port Dickson was selected as the winner of NPC National 5S Practitioner 2007.

# Occupational Safety And Health Report



### Introduction

There is a great challenge for TNB to ensure that occupational safety and health, OSH, is managed in tandem with efficient operations. Critical business operations should be conducted in consonance with ensuring a safe and healthy work environment. A balance needs to be struck to ensure that this is achieved. It requires a comprehensive and complex synergy in the interfacing between systems and processes, management prerogatives, allocation of resources and deployment of work force. This difficult amalgamation needs to be recognised in ensuring that TNB provides an efficient, effective and reliable service, while at the same time protecting lives and assets to enable the organisation to grow and stand tall in its mandate of "Powering the Nation Progress".

# Service Quality Enhancement

The management of OSH has achieved further progress with a wide range of requirements being imposed to ensure greater compliance. Improvements, however small, are reported. Quality of services are being closely monitored and the readiness to accept challenges in meeting targets are assessed and implemented. Certification agencies are invited to conduct audit to ensure compliance to relevant OSH and quality requirements.

# OSH Management System

The OSH Management System, aptly known as the Safety Excellence Management System (SEMS) has come a long way in managing OSH in TNB. The SEMS was further enhanced to meet challenges from the certification bodies for the Group to achieve the best OSH performance. The system has been fine tuned to meet the standards of the OHSAS 18001:2000 and the MS 1722, and programmes are in place to adapt to the new challenge.

Trainings are conducted on a regular basis to build up competency of all personnel in the management, implementation and audit of OSH as stipulated. It is also been made mandatory for subsidiaries of the Company to adopt the system. As a result, Baseline Audit was conducted on UNITEN, Putrajaya Complex. Project sites are being scrutinised for implementation of an appropriate OSH management system.

# OSH Awareness and Training

Focus has been given to senior management on awareness and understanding of the OSH. Their commitment is paramount in ensuring that OSH excellence should be placed at par with operational excellence.

TNB's most valuable asset, the staff, are given continuous exposure to OSH through internal and external training courses, seminars, conferences, symposiums and workshops. Suitable personnel were being identified for overseas seminars and conferences so that TNB could be kept current in the changes in technologies and concepts of OSH.

Even contractors on TNB projects were given exposure on OSH. NIOSH-TNB Safety Passport was developed as a joint effort with National Institute of Occupational Safety & Health (NIOSH) to ensure that contractors were fully aware of the basic requirements of OSH. The programme would be made compulsory to all TNB contractors in due course. Similar programme was conducted for field supervisors as a concerted effort on the part of TNB to eradicate illiteracy on OSH matters.

Even the public was not forgotten in the quest by the Group to impart electrical safety knowledge. Seminars were organised for schools, non-government organisations, industries and associations as a way to ensure safety in the use of electricity. Safety Campaigns were carried out by relevant Divisions involving the staff as well as the public as part of TNB's corporate social responsibility.

# **Emergency Response**

Readiness in responding to crisis and emergencies are critical in TNB's business of power generation, transmission and distribution. In this regard, the Group has put in place elaborate emergency response plans which are closely monitored by the relevant divisions and departments. Emergency Response Management Team and Emergency Response Personnel are continuously exposed to a rigorous training regime and the status of alertness are being continuously tested and reviewed. Emergency drills are closely monitored and a rating system will be implemented for better assessment.

# OSH Excellence Award

During the period under review, a total of 12 TNB power stations had won Gold Medal Class 1 & 2, Silver and Bronze medals at the The Malaysian Society of Occupational Safety and Health (MSOSH) Award 2007.

# Statement Of Environment



# TNB ENVIRONMENTAL POLICY

- Protect, conserve and improve the environment in all of its operations and decision making.
- Comply with all applicable laws and regulations, establish standards that
   will lead to continuous improvement of its environment performance.
- Implement an Environmental Management System (EMS) that will ensure all impacts on the environment from its operations are eliminated or minimised.
- Carry out environmental audits are required intervals to ensure compliance with its Corporate Environment commitments, and implement environmental training programmes for our employees to develop a high level of competency.
- Promote environmental awareness amongst contractors, the public and other stakeholders and to make available the environmental policy to them.

# A. Environmental Management Plan

# **Environmental Monitoring Programme**

The Environmental Management Plan was conducted as per requirement for licenses under the Environmental Quality Act, 1974 or in accordance with the specific DoE's Detailed EIA or EIA approval conditions for the respective power stations. In general, the monitoring programme focused on monitoring the air quality, water quality and boundary noise level. Besides that, some stations also conducted ecological monitoring programme as part of the Environmental Monitoring programme.

TNB is continuously installing efficient and environmentally friendly equipment as well as the Continuous Emission Monitoring System (CEMS) in the new power stations.

# B. Environmental Audits and MS ISO Certification

All 12 TNB power stations have a complete set of MS ISO 14001 documentations and are currently implementing EMS based on standards.

Annual Environmental Management Audits or EMS based on MS ISO 14001 are conducted at all power stations by TNB Generation Division auditors (Generation Risk Management Unit, GRMU). The EMS reassessment audit is conducted once a year by SIRIM QAS International.

# C. Scheduled Waste Disposal

The acheduled Waste Management programmes of TNB has been implemented to comply with the Environmental Quality (Schedule Waste) Regulation 2005. Scheduled waste includes all waste generated periodically that requires disposal by DoE – registered contractors.

All scheduled waste generated are notified to DoE and are temporarily stored at Scheduled Waste Store prior to disposal. Environmental Management Representative (EMR) is responsible to record, monitor and manages wastes generated at their respective units.

# D. Recycling Programme

The weate recycling and reduction programme was included in the EMS initiatives within respective divisions. Currently, most of the power stations are implementing and Environmental Management programmes to minimise wastage and reduce consumption of resources. Some of the stations have also assigned Recycling Centres at strategic places in the station. Continuous staff awareness programmes were undertaken via staff monthly gathering.

- i. Condition Monitoring Programmes (CMP): Transmission Division is continuously implementing CMP in the operation of the division. One of the initiatives of CMP is on transformer oil reclamations where by used transformer oil is filtered using latest technology and reused in operation.
- ii. Pacycling old power cables:
  Recycling old power cables
  was implemented via the Scrap
  Committee at each region. The
  recycling process of power cables
  can be conducted upon approval
  from this committee. Usually, the
  committee will appoint a recycling
  company to handle the scrap
  materials for further processing.

# E. Crisis Management

Crisis Management in TNB is headed by the Disaster Team who is represented by Emergency Response Team (ERT) which the main component of the TNB Safety Excellence Management System (SEMS) implemented at all divisions.

SEMS will identify every possible emergency that can happen in the division business activities and consequently an Emergency Response Plan (ERP) is developed as mitigation measures.

All divisions also conduct an annual EPP exercise that involves all staff and relevant authorities and agencies.

# F. Halon Replacement

Generation and Distribution Division have achieved halon free in all their operation while the halon replacement programmes is still on-going within the Transmission Division. The halon replacement programmes is among the key focus area of the Hetwork Maintenance Department (HMD) of Transmission Division. Gradual halon gas replacement with new approved gas in the existing fire fighting system is implemented under NMD department 2004-2008 Business Plan. This programme shall be completed within next financial year.

# G. Current Issues

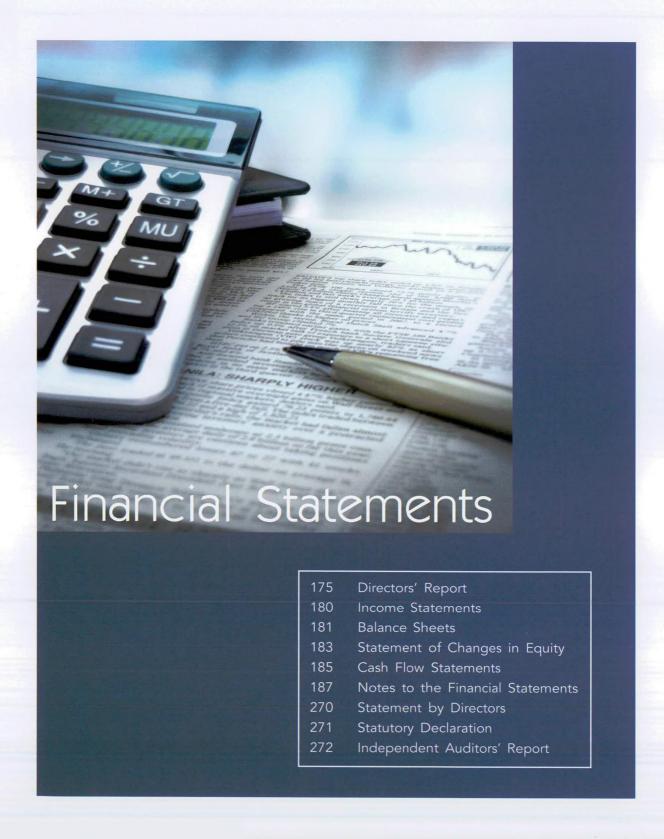
Global Warming: The challenge for the electricity industry is not only on limited fossil fuel but also on the escalating price of fossil fuel. The utilisation of fossil fuel to generate electricity also contributes greatly towards air pollution and greenhouse gasses. Enforcement of international protocols and the national environmental legislation require TNB to enhance our management initiatives and to meet the stringent emission standards. TNB is also seeking

for latest technology to reduce pollution such as carbon monoxide (CO), Carbon Dioxide (CO2), nitrogen oxides (NOx), and sulfur dioxide (SO2) and installed the technology in the operation of our latest power plant.

Clean Development Mechanism (CDM): Clean development mechanism (CDM) is a global effort under the Kyoto Protocol (K.P), article 12, to reduce and stabilise the greenhouse gases concentration (GHG) injected into our atmosphere. Malaysia as part of the global community recognises and supports the objectives of the United Nation Framework Convention on Climate Change (UNFCCC) to prevent anthropogenic gas concentration in the atmosphere exceeding a level that has adverse effects on life on earth.

Malaysia has signed the UNFCCC on 9 June 1993 and subsequently ratified the convention on 13 July 1994. On 12 March 1999, Malaysia signed the ICP and ratified the ICP on 4 September 2002. The Kyoto Protocol now has already come into force on 16 February 2005 subsequently TNB also integrate CDM potential into our business. TNB has identified projects aligible for CDM and is currently pursuing this initiative.

ii. Environmental Education and Awareness: Every year TIIB received visitors from school children's and universities student to visit our operation especially to our power plants. During the visit TIIB demonstrate our environmental management systems and environmental activities implemented by the company. TIIB also conducted environmental awareness camp for youth as our commitment towards producing Green Nation for future generation.



# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

# Directors' Report

The Directors have pleasure in submitting their Report with the audited financial statements of the Group and the Company for the financial year ended 31 August 2008.

# PRINCIPAL ACTIVITIES

The Group and the Company are primarily involved in the business of the generation, transmission, distribution and sale of electricity and those tabulated in Note 15 to the financial statements.

There have been no significant changes in these activities during the financial year under review.

# FINANCIAL RESULTS

|                                     | Group<br>RM'million | Company<br>RM'million |
|-------------------------------------|---------------------|-----------------------|
| Profit for the year attributable to |                     |                       |
| - Equity holders of the Company     | 2,594.0             | 2,663.6               |
| - Minority interests                | 6.4                 | 0                     |
| Profit for the year                 | 2,600.4             | 2,663.6               |

# **DIVIDENDS**

The dividends paid or declared since 31 August 2007 were as follows:

| 522.6 |
|-------|
|       |

For the financial year ended 31 August 2008, the Directors had on 16 October 2008 recommended the payment of a final dividend of 10.0 sen gross per ordinary share, less income tax at 25%, subject to the approval of the shareholders at the forthcoming Annual General Meeting of the Company. The Books Closure and Payment dates will be announced in due course.

### RESERVES AND PROVISIONS

All material transfers to or from reserves and provisions during the financial year are shown in the financial statements.

# **ISSUE OF SHARES**

During the financial year, 2,809,277 new ordinary shares of RM1.00 each were issued by the Company comprising:-

- (a) 2,573,225 ordinary shares of RM1.00 each in TNB pursuant to the Employees' Share Option Scheme II ('ESOS II') at exercise prices of RM6.71, RM6.99, RM7.42, RM7.33, RM11.07 and RM6.33 per share, and
- (b) 236,052 ordinary shares of RM1.00 each in TNB pursuant to the conversion of Unsecured Convertible Redeemable Income Securities at the price of RM9.18 per share.

The new ordinary shares issued during the financial year ranked part passu in all respects with the existing ordinary shares of the Company.

# EMPLOYEES' SHARE OPTION SCHEME ('ESOS')

Options under the ESOS were granted to eligible Directors, employees and retirees of the Group to subscribe for ordinary shares of RM1.00 each in TNB. The first ESOS expired on 11 May 2002.

The Company implemented a new Employees' Share Option Scheme II ('ESOS II') on 8 July 2003 for a period of 10 years. The ESOS II is governed by the bye-laws, which were approved by the shareholders at the Extraordinary General Meeting ('EGM') held on 29 May 2003 and amended at the EGM held on 15 December 2005.

The main features and movements during the financial year in the number of options over the shares of the Company are set out in Note 34 to the financial statements.

The Company has been granted an exemption by the Companies Commission of Malaysia via a letter dated 18 September 2008 from having to disclose in this Report the name of the persons to whom options have been granted during the year and datails of their holdings pursuant to Section 139 (11) of the Companies Act, 1965 except for information on employees who were granted options representing 450,000 ordinary shares and above.

# [ Tenaga Nasional Berhad ] [ Annual Report 2008

# EMPLOYEES' SHARE OPTION SCHEME ('ESOS') (CONT'D.)

The list of employees of the Company who were granted options representing 450,000 ordinary shares and above under ESOS II are as follows:-

| Name  | Designation   | No. of ordinary<br>shares granted<br>and acquired<br>under the options | No. of ordinary<br>shares exercised<br>under the options |
|---|---|--|--|
| Dato' Sri Che Khalib bin Mohamad Noh        | President / Chief Executive<br>Officer                          | 915,000  | 0  |
| Datuk Wira Md Sidek bin Ahmad               | Senior Vice President,<br>Operations and Technical              | 590,000  | 470,000  |
| Dato' Abdul Razak bin Abdul Majid           | Senior Vice President,<br>Corporate Affairs                     | 655,000  | 100,000  |
| Dato' Mohd Izzaddin bin Idris               | Chief Financial Officer / Senior Vice President (Group Finance) | 580,000  | 0  |
| Dato' Ir Aishah binti Dato' Haji Abdul Rauf | Vice President, Distribution                                    | 635,000  | 177,500  |
| Dato' Haji Nik Ibrahim bin Nik Mohamed      | Vice President,<br>Investment Management                        | 597,500  | 352,500  |
| Dato' Kamaruzzaman bin Jusoh                | Vice President,<br>Human Resource                               | 614,000  | 186,500  |

None of the subsidiaries' employees were granted options representing 450,000 ordinary shares and above under ESOS II.

# **DIRECTORS**

The Directors who have held office during the period since the date of the last Report are:

Tan Sri Leo Moggie

Dato' Sri Che Khalib bin Mohamad Noh

Dato' Puteh Rukiah binti Abd Majid

Dato' Mohammad Zainal bin Shaari

Tan Sri Dato' Lau Yin Pin @ Lau Yen Beng

Tan Sri Dato' Hari Narayanan a/l Govindasamy

Dato' Zainal Abidin bin Putih

Dato' Fuad bin Jaafar

Tan Sri Dato' Seri Siti Norma binti Yaakob

Datuk Zalekha binti Hassan

Datuk Mohd Zaid bin Ibrahim

(Appointed on 12 September 2008)

(Resigned as alternate director to Dato' Puteh Rukiah binti Abd Majid on

28 January 2008)

(Resigned on 18 March 2008)

### **DIRECTORS' BENEFITS**

During and at the end of the financial year, no arrangements subsisted to which the Company is a party, being arrangements with the object or objects of enabling Directors of the Company to acquire benefits by means of the acquisition of shares in or debentures of the Company or any other body corporate, except for the options granted to the President/Chief Executive Officer pursuant to the ESOS II.

Since the end of the previous financial year, no Director has received or become entitled to receive a benefit (other than benefits disclosed as Directors' remuneration and benefits in Note 5 to the financial statements) by reason of a contract made by the Company or a related corporation with the Director or with a firm of which the Director is a partner, or with a company in which the Director has a substantial financial interest.

### **DIRECTORS' INTERESTS IN SHARES AND DEBENTURES**

According to the Register of Directors' shareholdings, particulars of the interests of Directors who held office as at the end of the financial year in shares in the Company are as follows:

|                               | Number         | Number of ordinary shares of RM1.00 each |          |                 |  |  |  |  |
|-------------------------------|----------------|--|----------|-----------------|--|--|--|--|
|                               | As at 1.9.2007 | Acquired                                 | Disposed | As at 31.8.2008 |  |  |  |  |
| Tan Sri Leo Moggie            | 40,000         | 0  | 40,000   | 0               |  |  |  |  |
| Dato' Zainal Abidin bin Putih | 1,250          | 0  | 0        | 1,250           |  |  |  |  |
| Dato' Fuad bin Jaafar         | 62,500         | 0  | 0        | 62,500          |  |  |  |  |

|                                      | Options        | Options over ordinary shares of RM1.00 each |           |                 |  |  |  |
|--------------------------------------|----------------|---|-----------|-----------------|--|--|--|
|                                      | As at 1.9.2007 | Granted                                     | Exercised | As at 31.8.2008 |  |  |  |
| Dato' Sri Che Khalib bin Mohamad Noh | 735,000        | 180,000                                     | 0         | 915,000         |  |  |  |

According to the Register of Directors, none of the other Directors held any options over shares in the Company.

No other Directors in office at the end of the financial year held any other interest in shares and debentures of the Company and its related corporations.

### STATUTORY INFORMATION ON THE FINANCIAL STATEMENTS

Before the income statements and balance sheets of the Group and of the Company were made out, the Directors took reasonable steps:

- (a) to ascertain that proper action had been taken in relation to the writing off of bad debts and the making of allowance for doubtful debts and satisfied themselves that all known bad debts had been written off and that adequate allowance had been made for doubtful debts; and
- (b) to ensure that any current assets, other than debts, which were unlikely to be realised in the ordinary course of business their values as shown in the accounting records of the Group and of the Company had been written down to an amount which they might be expected to be realised.

# [ Tenaga Nasional Berhad ] [ Annual Report 2008

### STATUTORY INFORMATION ON THE FINANCIAL STATEMENTS (CONT'D.)

At the date of this Report, the Directors are not aware of any circumstances:

- (a) which would render the amounts written off for bad debts or the amount of the allowance for doubtful debts in the financial attements of the Group and of the Company inadequate to any substantial extent; or
- (b) which would render the values attributed to current assets in the financial statements of the Group and of the Company misleading; or
- (c) which have arisen which render adherence to the existing method of valuation of essets or liabilities of the Group and of the Company misleading or inappropriate.

No contingent or other liability has become enforceable or is likely to become enforceable within the period of twelve months after the end of the financial year which, in the opinion of the Directors, will or may affect the ability of the Group or of the Company to meet their obligations when they fall due.

At the date of this Report, there does not exist:

- (a) any charge on the assets of the Group and of the Company which has arisen since the end of the financial year which secures the liability of any other person; or
- (b) any contingent liability of the Group and of the Company which has arisen since the end of the financial year.

### OTHER STATUTORY INFORMATION

At the date of this Report, the Directors are not aware of any circumstances not otherwise dealt with in this Report or the financial statements which would render any amount stated in the financial statements misleading.

In the opinion of the Directors, there has not arisen in the interval between the end of the financial year and the date of this Report any item, transaction or event of a material and unusual nature likely to affect substantially the results of the operations of the Group or of the Company for the financial year in which this Report is made.

### **AUDITORS**

The auditors, PricewaterhouseCoopers, have expressed their willingness to continue in office.

Signed on behalf of the Board of Directors, in accordance with their resolution dated 3 November 2008.

TAN SRI LEO MOGGIE

ha hogsie

Chairman

DATO' SRI CHE KHALIB BIN MOHAMAD NOH

President/Chief Executive Officer

## Income Statements

for the financial year ended 31 August 2008

|                                  |       | Grou                | р                  | Company  |                    |
|----------------------------------|-------|---------------------|--------------------|--|--------------------|
|                                  | Note  | 2008<br>RM'million  | 2007<br>RM'million | 2008<br>RM'million   | 2007<br>RM'million |
| Revenue                          | 4     | 25,750.6            | 23,320.4           | 23,069.2   | 21,400.6           |
| Operating expenses               | 5     | (22,503.4)          | (18,371.4)         | (20,631.4)   | (17,441.8          |
| Other operating income           | 7     | 794.8               | 593.7              | 1,488.4  | 793.9              |
| Operating profit                 |       | 4,042.0             | 5,542.7            | 3,926.2  | 4,752.7            |
| Foreign exchange gain/(loss)     | 8     | 34.1                | 485.8              | (11.1)   | 341.2              |
| Share of results of associates   |       | 44.9                | 42.4               | 0  | (                  |
| Profit before finance cost       |       | 4,121.0             | 6,070.9            | 3,915.1  | 5,093.9            |
| Finance cost                     | 9     | (1,095.8)           | (1,305.0)          | (811.1)  | (969.5             |
| Profit before taxation and zakat |       | 3,025.2             | 4,765.9            | 3,104.0  | 4,124.4            |
| Taxation and Zakat               | 10    | (424.8)             | (698.3)            | (440.4)  | (609.9             |
| Profit for the year              |       | 2,600.4             | 4,067.6            | 2,663.6  | 3,514.             |
| Attributable to:                 |       |                     |                    |  |                    |
| Equity holders of the Company    |       | 2,594.0             | 4,061.1            | 2,663.6  | 3,514.             |
| Minority interests               |       | 6.4                 | 6.5                | 0  |                    |
| Profit for the year              |       | 2,600.4             | 4,067.6            | 2,663.6  | 3,514.             |
|                                  |       | Sen                 | Sen                |  |                    |
| Earnings per share               |       |                     |                    |  |                    |
| - basic                          | 11(a) | 59.87               | 94.92              |  |                    |
| – diluted                        | 11(b) | 59.84               | 93.00              | 10 May 10 |                    |
| Dividends per share:             |       | 1                   | -                  | Sen  | Sei                |
| Interim dividends (gross)        | 12    | THE PERSON NAMED IN | 3.7                | 10.0   | 20.                |
| Final dividend (gross)           | 12    | AND THE PARTY OF    |                    | 0  | 16.                |
| Proposed final dividend (gross)  | 12    |                     |                    | 10.0   |                    |

The notes set out on pages 187 to 269 form an integral part of these financial statements.

## Balance Sheets

as at 31 August 2008

|  |      | Group              |                    | Com                | Company            |  |  |
|--|------|--------------------|--------------------|--------------------|--------------------|--|--|
|  | Note | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |  |  |
| NON-CURRENT ASSETS                                   |      |                    |                    |                    | Till Illinois      |  |  |
|  |      |                    |                    |                    |                    |  |  |
| Property, plant and equipment                        | 13   | 57,475.2           | 56,405.3           | 47,833.5           | 46,332.8           |  |  |
| Prepaid operating leases                             | 14   | 844.1              | 852.6              | 692.1              | 693.4              |  |  |
| Subsidiaries   | 15   | 0                  | 0                  | 4,558.3            | 4,581.1            |  |  |
| Associates   | 16   | 322.5              | 233.0              | 171.0              | 125.8              |  |  |
| Investments  | 17   | 38.0               | 38.0               | 97.4               | 97.4               |  |  |
| Long term receivables                                | 18   | 0                  | 0                  | 613.3              | 703.1              |  |  |
|  |      | 58,679.8           | 57,528.9           | 53,965.6           | 52,533.6           |  |  |
| CURRENT ASSETS                                       |      |                    |                    |                    |                    |  |  |
| Non-current assets held for sale                     | 19   | 14.1               | 125.0              | 13.5               | 55.8               |  |  |
| Inventories  | 20   | 2,230.3            | 1,769.5            | 1,158.3            | 1,115.4            |  |  |
| Receivables, deposits and prepayments                | 21   | 3,452.2            | 2,921.8            | 2,292.1            | 2,204.6            |  |  |
| Current tax assets                                   |      | 14.4               | 11.6               | 0                  | 0                  |  |  |
| Amount due from subsidiaries                         | 22   | 0                  | 0                  | 1,685.7            | 1,250.1            |  |  |
| Amount due from associates                           |      | 46.1               | 45.3               | 37.8               | 34.6               |  |  |
| Short term investments                               | 23   | 12.6               | 12.6               | 12.6               | 12.6               |  |  |
| Marketable securities                                | 24   | 8.5                | 10.6               | 8.5                | 10.6               |  |  |
| Deposits, bank and cash balances                     | 25   | 5,383.9            | 5,299.3            | 4,212.9            | 4,524.3            |  |  |
|  |      | 11,162.1           | 10,195.7           | 9,421.4            | 9,208.0            |  |  |
| CURRENT LIABILITIES                                  |      |                    |                    |                    |                    |  |  |
| Payables   | 26   | 5,187.4            | 4,301.6            | 3,734.3            | 3,132.7            |  |  |
| Amount due to subsidiaries                           | 22   | 3,107.4            | 4,301.0            | 1,192.9            | 1,403.4            |  |  |
| Amount due to subsidiaries  Amount due to associates | 22   | 346.8              | 226.1              | 345.2              | 224.5              |  |  |
| Current taxation                                     |      | 69.4               | 226.1              | 59.1               | 221.3              |  |  |
| Short term borrowings                                | 27   | 1,058.3            | 2,015.5            | 400.9              | 1,452.7            |  |  |
|  |      | 6,661.9            | 6,769.3            | 5,732.4            | 6,434.6            |  |  |
| NET CURRENT ASSETS                                   |      | 4,500.2            | 3,426.4            | 3,689.0            | 2,773.4            |  |  |
| TOTAL ASSETS LESS CURRENT LIABILITIES                |      | 63,180.0           | 60,955.3           | 57,654.6           | 55,307.0           |  |  |

The notes set out on pages 187 to 269 form an integral part of these financial statements.

|  |      | Gro                 | oup                | Comp                              | pany               |
|--|------|---------------------|--------------------|-----------------------------------|--------------------|
|  | Note | 2003<br>RM taillion | 2007<br>RM'million | 2003<br>AMmillion                 | 2007<br>RM′million |
| NON-CURRENT LIABILITIES  |      |                     |                    |                                   | • •                |
| Borrowings   | 28   | (21,632.1)          | (21,933.9)         | (14,045,0)                        | (14,898.8)         |
| Amount due to subsidiaries   | 22   | 0                   | 0                  | (0,523.0)                         | (3,621.1)          |
| Consumer deposits  | 29   | (2,551,9)           | (2,319.6)          | (2401.0)                          | (2,186.0)          |
| Employee benefits  | 30   | (6,1243)            | (2,730.3)          | ( <b>2,993.1</b> )                | (2,627.4)          |
| Other liabilities  |      | (253.0)             | (1.45.9)           | (E33)                             | (63.7)             |
| Deferred taxation  | 31   | (6,337/4)           | (6,274.4)          | (B <i>49</i> 933)                 | (5,524.8)          |
| Deferred income  | 32   | (2,3334)            | (2,803.5)          | ( <b>2.530.5</b> )                | (2,504.7)          |
| Government development grants                                      | 33   | (569.6)             | (620.5)            | 0                                 | 0                  |
|  |      | ( <b>67/4</b> 03.1) | (36,858.4)         | (E1'10373)                        | (31,426.5)         |
| TOTAL NET ASSETS   |      | 25,761.0            | 24,098.9           | <b>25</b> <i>5</i> /4 <b>5</b> .0 | 23,880.5           |
| CAPITAL AND RESERVES ATTRIBUTABLE TO EQUITY HOLDERS OF THE COMPANY |      |                     |                    |                                   |                    |
| Share capital  | 34   | 4,394.5             | 4,331.7            | 4,394.5                           | 4,331.7            |
| Share premium  | 35   | 52530               | 5,242.0            | 52533                             | 5,242.0            |
| Revaluation and other reserves                                     | 36   | 700.2               | 894.9              | 931.7                             | 1,021.3            |
| Retained profits   | 37   | 15,343.7            | 13,530.0           | 16,1700                           | 13,285.5           |
|  |      | 25,057.2            | 23,999.6           | 257453                            | 23,880.5           |
| MINORITY INTERESTS   |      | 104.7               | 98.3               | ø                                 | 0                  |
| TOTAL EQUITY   |      | 25,731,9            | 24,098.9           | 23,745.8                          | 23,880.5           |
| NET ASSETS PER SHARE*  | -    | Sen<br>53/1.2       | Sen<br>554.0       |                                   |                    |

<sup>\*</sup> The net essets per share attributable to ordinary equity holders of the Company.

The notes set out on pages 187 to 269 form an integral part of these financial statements.

# Statement of Changes in Equity for the financial year ended 31 August 2008

|  | Attributable to equity holders of the Company |   |                                |   |  | any                               |                                     |                             |
|--|---|---|--------------------------------|---|--|-----------------------------------|-------------------------------------|-----------------------------|
| <b>6</b>   | Note  | Ordinary<br>shares of<br>RM1.00<br>each<br>RM'million | Share<br>premium<br>RM'million | Employees' Share Option Scheme reserve RM'million | Revaluation<br>and other<br>reserves<br>RM'million | Retained<br>profits<br>RM'million | Minority<br>interests<br>RM'million | Tota<br>equit<br>RM'million |
| <b>Group</b><br>At 1 September 2007  |   | 4,331.7   | 5,242.0                        | 35.7  | 859.2  | 13,530.0                          | 98.3                                | 24,096.                     |
| Currency translation differences<br>Realisation of revaluation reserve                                   | 36  | 0 0   | 0                              | 0 0   | (138.8)<br>(65.0)                                  | 0<br>65.0                         | 0                                   | (138.                       |
| Income and expense recognised directly in equity Profit for the year Total recognised income and expense |   | 0   | 0                              | 0   | (203.8)  | 65.0<br>2,594.0                   | 0<br>6.4                            | (138.<br>2,600.             |
| for the year   |   | 0   | 0                              | 0   | (203.8)  | 2,659.0                           | 6.4                                 | 2,461.                      |
| Dividends paid for the year ended - 31.08.2007 - 31.08.2008 Employees' Share Option Scheme               | 12<br>12                                      | 0   | 0                              | 0   | 0  | (522.6)<br>(320.7)                | 0                                   | (522.<br>(320.              |
| options granted     suance of share capital     share options and conversion of                          |   | 0   | 0                              | 27.1  | 0  | 0                                 | 0                                   | 27.                         |
| Convertible Redeemable Income Securities   | 34, 35  | 2.8   | 16.8                           | 0   | 0  | 0                                 | 0                                   | 19.                         |
| At 31 August 2008  |   | 4,334.5   | 5,258.8                        | 62.8  | 655.4  | 15,345.7                          | 104.7                               | 25,761.                     |
| At 1 September 2006  |   | 4,135.2   | 3,912.9                        | 0   | 843.6  | 10,533.5                          | 121.3                               | 19,546                      |
| Currency translation differences<br>Realisation of revaluation reserve                                   | 36  | 0   | 0                              | 0   | 42.7<br>(27.1)                                     | 0<br>27.1                         | 0                                   | 42.                         |
| Income and expense recognised directly in equity Profit for the year                                     |   | 0   | 0                              | 0   | 15.6<br>0  | 27.1<br>4,061.1                   | 0<br>6.5                            | 42.<br>4,067.               |
| Total recognised income and expense<br>for the year<br>Transaction with minority interests in            |   | 0   | 0                              | 0   | 15.6   | 4,088.2                           | 6.5                                 | 4,110.                      |
| subsidiaries<br>Dividends paid for the year ended  |   | 0   | 0                              | 0   | 0  | 0                                 | (29.5)                              | (29.                        |
| - 31.08.2006<br>- 31.08.2007   | 12<br>12                                      | 0   | 0                              | 0   | 0  | (459.7)<br>(632.0)                | 0                                   | (459.<br>(632.              |
| Employees' Share Option Scheme<br>– options granted<br>Issuance of share capital                         |   | 0   | 0                              | 35.7  | 0  | 0                                 | 0                                   | 35.                         |
| - share options, GEB and CRIS  | 34, 35  | 196.5   | 1,329.1                        | 0   | 0  | 0                                 | 0                                   | 1,525.                      |
| At 31 August 2007  |   | 4,331.7   | 5,242.0                        | 35.7  | 859.2  | 13,530.0                          | 98.3                                | 24,096                      |

|   |          |   |                                |   |  | Distributable                     |                              |  |
|---|----------|---|--------------------------------|---|--|-----------------------------------|------------------------------|--|
|   | Note     | Ordinary<br>shares of<br>RM1.00<br>each<br>RM'million | Share<br>premium<br>RM'million | Employees' Share Option Scheme reserve RM'million | Revaluation<br>and other<br>reserves<br>RM'million | Retained<br>profits<br>RM'million | Tota<br>equity<br>RM'millior |  |
| Company<br>At 1 September 2007  |          | 4,331.7   | 5,242.0                        | 30.8  | 990.5  | 13,285.5                          | 23,880.5                     |  |
| Realisation of revaluation reserve  | 36       | 0   | 0                              | 0   | (65.0)   | 65.0                              | (                            |  |
| Income and expense recognised directly in equity Profit for the year Total recognised income and                |          | 0   | 0                              | 0 0   | (65.0)<br>0  | 65.0<br>2,663.6                   | 2,663.                       |  |
| expense for the year  Dividends paid for the year ended   |          | 0   | 0                              | 0   | (65.0)   | 2,728.6                           | 2,663.                       |  |
| - 31.08.2007<br>- 31.08.2008  | 12<br>12 | 0   | 0                              | 0 0   | 0 0  | (522.6)<br>(320.7)                | (522.<br>(320.               |  |
| Employees' Share Option Scheme  - options granted  Issuance of share capital  - share options and conversion of |          | 0   | 0                              | 25.4  | 0  | 0                                 | 25.                          |  |
| Convertible Redeemable Income<br>Securities   | 34, 35   | 2.8   | 16.8                           | 0   | 0  | 0                                 | 19.                          |  |
| At 31 August 2008   |          | 4,334.5   | 5,258.8                        | 56.2  | 925.5  | 15,170.8                          | 25,745.                      |  |
| At 1 September 2006   |          | 4,135.2   | 3,912.9                        | 0   | 1,017.6  | 10,835.6                          | 19,901.                      |  |
| Realisation of revaluation reserve  | 36       | 0   | 0                              | 0   | (27.1)   | 27.1                              |                              |  |
| Income and expense recognised<br>directly in equity<br>Profit for the year                                      |          | 0 0   | 0                              | 0 0   | (27.1)   | 27.1<br>3,514.5                   | 3,514.                       |  |
| Total recognised income and expense for the year Dividends paid for the year ended                              |          | 0   | 0                              | 0   | (27.1)   | 3,541.6                           | 3,514.                       |  |
| - 31.08.2006<br>- 31.08.2007  | 12<br>12 | 0   | 0                              | 0   | 0 0  | (459.7)<br>(632.0)                | (459.<br>(632.               |  |
| Employees' Share Option Scheme<br>– options granted   |          | 0   | 0                              | 30.8  | 0  | 0                                 | 30.                          |  |
| Issuance of share capital  – share options, GEB and CRIS  | 34, 35   | 196.5   | 1,329.1                        | 0   | 0  | 0                                 | 1,525.                       |  |
| At 31 August 2007   |          | 4,331.7   | 5,242.0                        | 30.8  | 990.5  | 13,285.5                          | 23,880.                      |  |

# Cash Flow Statements for the financial year ended 31 August 2008

|   | Group       |            | Com                       | pany       |
|---|-------------|------------|---------------------------|------------|
|   | 2003        | 2007       | 2003                      | 2007       |
|   | RMInfillion | RM'million | acillica (MR)             | RM'million |
| CASH FLOWS FROM OPERATING ACTIVITIES                    |             |            |                           |            |
| Profit for the year                                     | 2,600,4     | ئ.7ئ.5 4   | 2,669.6                   | 3,514.5    |
| Adjustments for:  |             |            |                           | ·          |
| Taxation and zakat                                      | 423.8       | 698.3      | 4404                      | 609.9      |
| Depreciation  | 35237       | 3,199.9    | 2,830.8                   | 2,595.2    |
| Amortisation of prepaid operating leases                | 23.6        | 22.1       | 10.2                      | 14.7       |
| Amortisation of coal mining rights                      | 0           | 10.7       | 0                         | 0          |
| Provision for amployee banefita                         | 632.8       | 649.2      | 643.0                     | 33.0 ئ     |
| Provision for share options                             | 27.1        | 35.7       | 254                       | 30.8       |
| Translation (gain)/loss                                 | (50.2)      | (452.3)    | 4.0                       | (288.2)    |
| Release of deferred income                              | (845.0)     | (326.9)    | ( <b>607.</b> 4)          | (291.3)    |
| Gain on disposal of property, plant and equipment       | (0.3)       | (29.1)     | (0.5)                     | (29.0)     |
| Gain on disposal of non-current assets held for sale    | (233.6)     | 0          | ( <b>233.4</b> )          | 0          |
| Gain on disposal of prepaid operating leases            | (0.3)       | (4.0)      | (0.3)                     | (4.Q)      |
| Share of results of associates                          | (23.0)      | (42.4)     | • 0                       | 0          |
| Dividend income   | ((1)(1)     | (4.4)      | (G <b>7/1</b> .0)         | (4.8)      |
| Interest income   | (000.0)     | (201.5)    | (601.0)                   | (463.0)    |
| Interest on borrowings                                  | 9753        | 1,195.0    | 60390                     | 866.7      |
| Property, plant and equipment written off               | 453         | - 5.3 -    | 20.0                      | _ 0        |
| Release of Government development grants                | (53.0)      | (44.5)     | 0                         | 0          |
| Allowance for diminution in value of coal mining rights | 0           | 200.0      | Ō                         | 0          |
| Allowance for/(write-back of) diminution                |             |            |                           |            |
| in value of markatable securities                       | 2.0         | (1.4)      | 2.1                       | (1.4)      |
| Allowance for/(write-back of) diminution                | ·           |            |                           |            |
| in value of investments                                 | <b> </b>    | 0.1        | 0                         | (40.5)     |
| Allowance for/(write-back of) inventory obsolascence    | 0.2         | 5.9        | (0.2)                     | 5.9        |
| Inventories written off                                 | 23.5        | 34.3       | 29.2                      | 33.9       |
| Goodwill written off                                    | •           | (3.4)      | •                         | 0          |
|   | 7,3922      | 9,015.1    | 5,833.3                   | 7,186.8    |
|   | 3           |            |                           |            |
| Inventories   | (0334)      | 128.0      | (632)                     | (41.8)     |
| Receivables   | (4720)      | 561.4      | (03.0)                    | 326.7      |
| Payables  | ଉଦ୍ପର୍ଥ     | 557.9      | 5041                      | 822.2      |
| Amount due from/to subsidiaries                         | 0           | 0          | (6337)                    | (73.6)     |
| Amount due from/to associates                           | 11010       | 12.0       | 007.5                     | 8.2        |
| Cash generated from operations                          | 7,230.0     | 10,274.4   | 5,693.1                   | 8,228.5    |
| Employee benefits paid                                  | (2754)      | (232.7)    | (274.3)                   | (231.9)    |
| Consumer contributions received                         | 4331.0      | 454.6      | ( <b>27</b> 4.3)<br>333.7 | 395.9      |
| Consumer deposits received                              | 2324        | 171.8      | 205.0                     | 153.4      |
| Taxation and callat paid                                | (B190)      | (798.7)    | (4995)                    | (7.7.2)    |
| Taxation refund received                                | 1.3         | 0          | 0                         | 0          |
| Net cash flow from operating activities                 | 7,331.5     | 9,869.4    | 5,503.1                   | 7,751.7    |

|   | Group  |   | Company   |   |  |
|---|--|---|---|---|--|
|   | 2008<br>RWimiliton   | 2007<br>RM'million  | 2008<br>RM/million  | 2007<br>RM'million  |  |
| CASH FLOWS FROM INVESTING ACTIVITIES  |  |   |   |   |  |
| Additional investment in subsidiaries Additional investment in associates Proceeds from redemption of   | 0<br>(51.7)  | (26.1)<br>0   | 0<br>(51.27)  | (42.2)<br>0   |  |
| unsecured loan notes in a subsidiary<br>Proceeds from redemption  | 0  | . 0   | 2243  | 4.2   |  |
| of unsecured loan notes in an associate Proceeds from redemption of redeemable  | 9 <i>3</i>   | 10.0  | 9. <i>2</i> 7   | 10.0  |  |
| preference shares in an associate Dividend income received Interest income received Purchase of property, plant and equipment Payments for prepaid operating leases Proceeds from disposal of property, plant and equipment Proceeds from disposal of prepaid operating leases Proceeds from disposal of prepaid operating leases | මුම<br>මුණ<br>වුනුණ<br>දුණුණුණු<br>දැනුණ<br>දැනුණු<br>මුණුණුණුණුණුණුණුණුණුණුණුණුණුණුණුණුණු | 0<br>3.9<br>253.7<br>(5,043.3)<br>(16.6)<br>47.6<br>0<br>8.5              | මුග<br>සැහුව<br>සැහුව<br>දැල්මැත්<br>ලාලය<br>සැල්ම<br>සැල්ම<br>සැල්ම<br>සැල්ම | 0<br>3.9<br>232.2<br>(4,574.0)<br>(16.3)<br>47.3<br>0<br>8.5      |  |
| Met cash flow from investing activities   | (4,033-5)  | (4,782.6)   | (B,03343)   | (4,325.4)   |  |
| CASH FLOWS FROM FINANCING ACTIVITIES  Proceeds from issuance of shares Proceeds from long term borrowings Repayments of long term borrowings Interest paid Dividends paid to shareholders Proceeds from short term borrowings Repayments of short term borrowings   | 19.6<br>655.4<br>(1,637.9)<br>(1,225.1)<br>(243.3)<br>160.4<br>(37.4)                      | 1,525.5<br>782.1<br>(3,445.0)<br>(1,483.7)<br>(1,091.7)<br>32.4<br>(48.9) | 194<br>9754<br>9754<br>9743<br>9743<br>9783<br>9                              | 1,525.6<br>622.0<br>(2,072.8)<br>(1,008.8)<br>(1,091.7)<br>0<br>0 |  |
| Net cash flow from financing activities   | (B,2003)   | (3,730.2)   | (2,503.0)   | (2,025.7)   |  |
| NET INCREASE/(DECREASE) IN CASH<br>AND CASH EQUIVALENTS<br>EFFECT OF CHANGES IN FOREIGN CURRENCY  | 104 <i>5</i><br>(20.1)   | 1,355.5<br>(7.0)  | (E)714)<br>0  | 1,399.6<br>0  |  |
| CASH AND CASH EQUIVALENTS AT BEGINNING OF THE FINANCIAL YEAR  | 5,299.3  | 3,949.7   | 4 <i>5</i> 243  | 3,124.7   |  |
| CASH AND CASH EQUIVALENTS AT END OF THE FINANCIAL YEAR 25   | 5,333.0  | 5,299.3   | 42120   | 4,524.3   |  |
| Cash at bank, held in trust*  | (203.9)  | (చ5.క)  | 0   | 0   |  |
| CASH AVAILABLE  | 5,073.0  | 5,233.7   | 4,2020  | 4,524.3   |  |

<sup>\*</sup> Deposits and cash at bank held in trust are in respect of a grant given to a subsidiary by the Government for a designated capital project.

## Notes to the Financial Statements

31 August 2008

### 1 GENERAL INFORMATION

The Group and the Company are primarily involved in the business of the generation, transmission, distribution and sale of electricity and those tabulated in Note 15 to these financial statements.

There have been no significant changes in these activities during the financial year.

The Company is a public limited liability company, incorporated and domiciled in Malaysis and liated on the Main Board of Bursa Malaysia Securities Berhad.

The address of the registered office of the Company is 129, Jalan Bangsar, 59200 Kuala Lumpur, Malaysia.

### 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Unless otherwise stated, the following accounting policies have been applied consistently in dealing with items that are considered material in relation to the financial statements. These policies have been consistently applied to all the years presented, unless otherwise stated.

### (a) Basis of preparation

The financial statements of the Group and the Company have been prepared in accordance with the provisions of the Companies Act 1965 and Financial Reporting Standards ("FRS"), the MASE Approved Accounting Standards in Malaysia for Entities Other than Private Entities.

The financial statements have been prepared under the historical cost convention except as disclosed in this summary of significant accounting policies.

The preparation of financial statements in conformity with FRS, requires the use of certain critical accounting estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reported period. It also requires Directors to exercise their judgement in the process of applying the Group's accounting policies. Although these estimates and judgement are based on the Directors' best knowledge of current events and actions, actual results may differ.

The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements, are disclosed in Note 3 to these financial statements.

Standards, amendments to published standards and interpretations that are effective and applicable.

The new accounting standards, amendments to published standards and interpretations to existing standards effective and applicable for the Group's and the Company's financial periods beginning on or after 1 September 2007 are as follows:

FRS 107 - Cash Flow Statements

FRS 111 - Construction Contracts

FRS 112 - Income Taxes

FRS 118 - Revenue

FRS 124 - Related Party Disclosures

FRS 137 - Provisions, Contingent Liabilities and Contingent Assets

- (a) Basis of preparation (Cont'd.)
  - (i) Standards, amendments to published standards and interpretations that are effective and applicable. (Cont'd.)

    IC Interpretation 8 Scope of FRS 2

Amendments to FPS 121 - The Effects of Changes in Foreign Pates - Net Investment in a Foreign Operations

Amendment to FRS 119004 Employee Benefits - Actuarial Gains and Losses, Group Plans and Disclosures

All changes in accounting policies have been made in accordance with the transitional provisions in the respective standards and amendments to published standards. All standards (which are applicable) adopted by the Group and the Company require retrospective application.

The above standards, amendments to published standards and interpretations do not have material impact on the financial statements and policies of the Group and the Company except for additional disclosure requirements under FRS 124 as detailed in Note 40.

- (ii) Standards, amendments to published standards and interpretations to existing standards that are not yet effective and have not been early adopted.
  - FRS 139 Financial Instruments: Recognition and Measurement (effective date yet to be determined by Malaysian Accounting Standards Board). This new standard establishes principles for recognising and measuring financial assets, financial liabilities and certain contracts to buy and sell non-financial items. Hedge accounting is permitted only under strict circumstances. The Group has applied the transitional provision in FRS 139 which exempts entities from disclosing the possible impact arising from the initial application of this standard on the financial statements of the Company. The Group and the Company will apply this standard when it becomes effective.
- (iii) Standards, amendments to published standards and interpretations that are effective but not relevant.
  - FRS 6 Exploration for and Evaluation of Mineral Resources
  - FRS 120 Accounting for Government Grants and Disclosure of Government Assistance
  - FRS 134 Interim Financial Reporting
  - IC Interpretation 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities
  - IC Interpretation 2 Members' Shares in Co-operative Entities and Similar Instruments
  - IC Interpretation 5 Rights to Interests arising from Decommissioning, Restoration and Environment Rehabilitation Funds
  - IC Interpretation 5 Liabilities arising from Participating in a Specific Market Waste Electrical and Electronic Equipment
  - IC Interpretation 7 Applying the Restatement Approach under FRS 1292008 Financial Reporting in Hyperinflationary Economies

### (b) Subsidiaries and basis of consolidation

### (i) Subsidiaries

Subsidiaries are those corporations or other entities (including special purpose entities) in which the Group has power to exercise control over the financial and operating policies so as to obtain benefits from their activities, generally accompanying a shareholding of more than one half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Group controls another entity.

In the Company's separate financial statements, investments in subsidiaries are stated at cost less impairment losses. On disposal of such investments, the difference between net disposal proceeds and their carrying amounts is included in profit and loss.

### (ii) Basis of Consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries as at the balance sheet date. The financial statements of the subsidiaries are prepared for the same reporting date as the Company.

Subsidiaries are consolidated from the data on which the Group obtains control, and continue to be consolidated until the data that such control ceases. In preparing the consolidated financial statements, intragroup balances, transactions and unrealised gains or losses are eliminated in full. Uniform accounting policies are adopted in the consolidated financial statements for like transactions and events in similar circumstances.

Acquisitions of subsidisries are accounted for using the purchase method. The purchase method of accounting involves allocating the cost of acquisition to the fair value of the seests acquired and liabilities and contingent liabilities assumed at the date of acquisition. The cost of an acquisition is measured as the aggregate of the fair values, at the date of exchange, of the assets given, liabilities incurred or assumed, and equity instruments issued, plus any costs directly attributable to the acquisition.

Any access of the cost of acquisition over the Group's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities represents goodwill (see Note 2(s)). Any excess of the Group's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition is recognised immediately in profit and loss.

Minority interests represent that portion of the profit or loss and net sesets of a subsidiary attributable to equity interests that are not owned, directly or indirectly through subsidiaries, by the parent. It is measured at the minorities' share of the fair value of the subsidiaries' identifiable assets and liabilities at the acquisition date and the minorities' share of changes in the subsidiaries' equity since that date.

### (c) Transactions with minority interests

The Group applies a policy of treating transactions with minority interests as transactions with equity owners of the Group. For purchases from minority interests, the difference between any consideration paid and the relevant share of the carrying value of net assets of the subsidiary acquired is deducted from equity. Gains or losses on disposals to minority interests are also recorded in equity. For disposals to minority interests, differences between any proceeds received and the relevant share of minority interests are also recorded in equity.

### (d) Associates

Associates are enterprises in which the Group exercises significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the associates but not control over those policies.

Investments in associates are accounted for in the Consolidated Financial Statements using the equity method of accounting and are initially recognised at cost. The Group's investment in associates includes goodwill identified on acquisition, net of any accumulated impairment loss (see Note 2(a)).

The Group's share of its associates' post-acquisition profits or losses is recognised in the Consolidated Income Statement, and its share of post-acquisition movements in reserves is recognised in reserves. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

Unrealised profits on transactions between the Group and the associates are eliminated partially to the extent of the Group's interest in the associates; unrealised losses are also eliminated unless the transaction provides evidence on impairment of the asset transferred. Where necessary, in applying the equity method, adjustments are made to the financial statements of associates to ensure consistency of accounting policies with those of the Group.

Dilution of gains and losses in associates are recognised in the Consolidated Income Statement.

For incremental interest in an associate, the date of acquisition is date at which significant influence is obtained. Goodwill is calculated at each purchase date based on the fair value of assets and liabilities identified. The previously acquired stake is stepped up to fair value and the share of profits and equity movements for the previously acquired stake are not recognised since they are embedded in the step up.

### (e) Goodwill

Goodwill represents the socies of the cost of the acquisition over the Group share of the fair value of the identifiable net assets including contingent liabilities of subsidiaries, associates and joint ventures at the date of the acquisition.

Capitalised goodwill is tested for impairment at least annually, or if events or circumstances occur indicating that impairment may exist.

Goodwill and fair value adjustment arising from the acquisition from a foreign entity are treated as assets and liabilities of the acquiring entity and are recorded at the exchange rate at the date of acquisition.

### (f) Property, plant and equipment and depreciation

Property, plant and equipment are stated at cost or valuation less accumulated depreciation and impairment losses. Cost includes expenditure that is directly attributable to the construction or acquisition of the items and bringing them to the location and condition so as to render them operational in the manner intended by the Group. The Group allocates the cost of an item of property, plant and equipment to its significant system and component parts.

The Directors have applied the transitional provisions of International Accounting Standard No. 16 (Revised) "Property, Plant and Equipment" as adopted by the Malaysian Accounting Standards Board which allow the freehold land, buildings and civil works to be stated at their previous years' valuations less depreciation.

### (f) Property, plant and equipment and depreciation (Cont'd.)

Surpluses arising on revaluation are credited to the revaluation reserve account. Any deficit arising from revaluation is charged against the revaluation reserve to the extent of a previous surplus held in the revaluation reserve for the same asset. In all other cases, a decrease in the carrying amount is charged to the income statement.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised.

The cost of major overhaul/inspection is recognised in the asset's carrying amount as a replacement and the remaining carrying amount of the previous major overhaul/inspection is derecognised.

Major spare parts and standby equipment are recognised as assets when the Group expects to use them during more than one period. Similarly, if the spare parts and servicing equipment can be used only in connection with an item of property, plant and equipment, they are accounted for as property, plant and equipment.

Gains and losses on disposal of property, plant and equipment are determined by reference to their carrying amount and are taken into account in determining profit/(loss) before taxation. On disposal of revalued assets, the amount in revaluation reserve relating to those property, plant and equipment are transferred to retained profits.

Freehold land and capital project-in-progress are not depreciated.

Depreciation is provided on all other categories of property, plant and equipment on a straight line basis which reflects the estimated useful lives of the assets.

The estimated useful lives of property, plant and equipment are as follows:

| Buildings and civil works                | 10 to 60 years |
|--|----------------|
| Plant and machinery                      | 10 to 40 years |
| Lines and distribution mains             | 25 to 35 years |
| Distribution services                    | 20 years       |
| Meters                                   | 15 years       |
| Public lighting                          | 15 to 25 years |
| Furniture, fittings and office equipment | 3 to 10 years  |
| Motor vehicles                           | 5 to 10 years  |

Where an indication of impairment exists, the carrying amount of the asset is assessed and written down immediately to its recoverable amount (see Note 2(n)).

### (g) Prepaid operating leases

The Directors have applied the transitional provisions of FRS No. 117 "Leases", treating the leasehold land as prepaid operating leases which was previously classified within property, plant and equipment and allow the Group to retain the unamortised revalued amount of the previously revalued leasehold land as the surrogate carrying amount of prepaid operating leases and such prepaid operating leases shall be amortised on a straight line basis over the lease term.

Leasehold land is amortised over the remaining period of the respective leases ranging from 5 to 99 years on a straight line basis.

### (h) Non-current assets held for sale

The Group shall classify a non-current asset as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use.

The assets classified as non-current assets held for sale will be measured at the lower of its carrying amount and fair value less costs to sell.

No depreciation or amortisation is provided against the assets while it is classified as non-current assets held for sale.

The assets shall be derecognised on disposal and the difference between the net disposal proceeds and the carrying amount is recognised as profit or loss in the period of disposal.

An asset that ceases to be classified as non-current assets held for sale shall be measured at the lower of its carrying amount before the asset was classified as non-current assets held for sale, adjusted for any depreciation, amortisation or revaluations that would be recognised had the asset not be classified as non-current assets held for sale, and its recoverable amount at the date of the subsequent decision not to sell.

### (i) Intangible assets

Expenditure on acquired rights, patents, trademarks and licenses is capitalised and amortised using the straight line method over their estimated useful lives. Intangible assets are not revalued.

### (j) Research and development

Expanditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in the income statement as an expense as incurred.

Expenditure on development activities, whereby research findings are applied to a plan or design for the production of new or substantially improved products and processes, is capitalised if the product or process is technically and commercially feasible and the Group has sufficient resources to complete the development.

Capitalised development costs are recognised as intangible assets and amortised from the point at which the asset is ready for use on a straight-line basis over its useful life.

### (k) Capitalisation of interest

Interest incurred on enternal borrowings related to long term projects-in-progress is capitalised until the assets are ready for their intended use.

### (I) Investments

Investments in subsidiaries and associates held for long term are stated at cost, less allowance for any diminution in their value. Diminution in the value of an investment is recognised as an expense in the financial year in which the diminution is identified.

Investments in other non-current investments are shown at cost and an allowance for diminution in value is made where, in the opinion of the Directors, there is a decline other than temporary in the value of such investments. Where there has been a decline other than temporary in the value of an investment, such a decline is recognised as an expense in the financial year.

On disposal of an investment, the difference between net disposal proceeds and the carrying amount is charged or credited to the income statement, as the case may be.

### (m) Marketable securities and short term investment

Marketable securities and short term investment are stated at the lower of cost and market value on an aggregate portfolio basis. Cost is derived at on the weighted average basis. Market value is calculated by reference to the relevant stock exchange quoted selling prices at the close of business at the balance sheet date. Any write downs to the market value of investments or subsequent write backs to cost are dealt with through the income statement.

### (n) Impairment of assets

Property, plant and equipment and other non-current assets, including intangible assets, are reviewed for impairment losses whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Impairment loss is recognised for the amount by which the carrying amount of the asset exceeds its recoverable amount. The recoverable amount is the higher of fair value less cost to sell and its value-in-use. For the purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows.

Impairment loss is charged to the income statement unless it reverses a previous revaluation in which case it is charged to the revaluation surplus. Any subsequent increase in recoverable amount is recognised in the income statement unless it reverses an impairment loss on a revalued asset in which case it is taken to revaluation surplus.

### (c) Deferred income

Contributions received from customers to defray the cost of capital projects are credited to the deferred income account. The amount in this account is released to the income statement on a straight line basis over 15 years, being the average useful life of such projects.

### (p) Operating leases

Assets leased out as operating leases are included within property, plant and equipment in the balance sheet and they are depreciated over their expected useful lives on a basis consistent with similar assets.

### (q) Inventories

Inventories are stated at the lower of cost and net realisable value.

Cost of work-in-progress and finished goods comprise raw materials, direct labour and a proportion of the production overheads. Cost is determined on the weighted average and first-in-first-out basis.

Net realisable value is the estimated selling price in the ordinary course of business, less the costs of completion and selling expenses.

### (r) Trade receivables

Trade receivables are carried at anticipated realisable value. Bad debts are written off in the period in which they are identified. An allowance is made for doubtful receivables based on review of all outstanding amounts at the financial year end.

### (s) Trade payables

Trade payables are stated at cost, which is the fair value of the consideration to be paid in the future for the good and services received.

### (t) Cash and cash equivalents

For the purpose of the cash flow statement, cash and cash equivalents comprise cash in hand, deposits held at call with banks, bank overdrafts and short term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

### (u) Share capital

### (i) Classification

Ordinary shares and non-redeemable preference shares with discretionary dividends are classified as equity. Other shares are classified as equity and/or liability according to the economic substance of the particular instrument.

The portion of a convertible bond representing the value of the conversion option at the time of issue is included in equity (see Note 2(v) on borrowings). The value of the conversion option is not changed in subsequent periods. Upon conversion of the bond to equity shares, the amount credited to share capital and share premium is the aggregate of the amounts classified within liability and equity at the time of conversion. No gain or loss is recognised. If the bond is redeemed, the conversion option is transferred to retained earnings.

Distributions to holders of a financial instrument classified as an equity instrument are charged directly to equity.

### (ii) Share issue costs

Incremental external costs directly attributable to the issuance of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

### (iii) Dividends to shareholders of the Company

Dividends on redesmable preference shares are recognised as a liability and expressed on an accrual basis. Other dividends are recognised as a liability in the period in which they are declared.

### (v) Borrowings

Borrowings are initially recognised based on the proceeds received. The costs of issuing debt instruments are expensed as and when incurred.

Interest and dividends on financial instruments deemed as borrowings are reported within finance cost in the income statement.

### (w) Income tax

Current tax expense is determined according to Malaysia's tax laws.

Deferred tax is recognised in full, using the liability method, on temporary differences arising between the amounts attributed to assets and liabilities for tax purposes and their carrying amounts in the financial statements.

Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, unused tax losses and unutilised tax credits can be utilized.

Deferred tax is recognised on temporary differences arising on invastments in subsidiaries, associates and joint ventures except where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

Tax rates enacted or substantively enacted by the balance sheet data are used to determine deferred tax.

### (x) Employee benefits

(i) Short tarm employee benefits

Wages, salaries, paid annual leave, bonuses, and non-monetary benefits are accrued in the financial year in which the services are randered by employees of the Group.

### (x) Employee benefits (Cont'd.)

### (ii) Post-employment benefits

The Group has various post-amployment benefit schemes which are either defined contribution or defined benefit plans.

### Defined contribution plans

The Group's contributions to defined contribution plans are charged to the income statement in the financial year to which they relate. Once the contributions have been paid, the Group has no further payment obligations.

### Definéd benefit plans

The Group makes contributions to the Company's Retirement Benefit Plan, a defined benefit plan and approved fund independent of the Company's finances. A book provision is also provided by the Company as the contribution rate required to fund the benefits under the said plan is in excess of the Inland Revenue maximum limit. The Group and the Company also provide for a post retirement medical plan for certain employees.

The liability in respect of a defined benefit plan is the present value of the defined benefit obligation at the balance sheet date minus the fair value of plan assets, together with adjustments for actuarial gains/losses and past service cost. The Group determines the present value of the defined benefit obligation and the fair value of any plan assets with sufficient regularity such that the amounts recognised in the financial statements do not differ materially from the amounts that would be determined at the balance sheet date.

The defined benefit obligation, calculated using the Projected Unit Credit Method, is determined by an independent actuarial firm, considering the estimated future cash outflows using market yields at balance sheet date of Government securities which have currency and terms to maturity approximating the terms of the related liability. The last revaluation was done in February 2007.

The amount of net actuarial gains and losses are credited or charged to the income statement, as the case may be, over the expected average remaining service lives of the participating employees.

### (iii) Share-based compensation

The Group has applied the provision of FRS 2 to all equity instruments granted after 31 December 2004 but not yet vested as at 1 September 2004, the effective date the Group adopted this FRS.

The Group operates an equity-settled, share-based compensation plan for the employees of the Group. Employees services received in exchange for the grant of the share options is recognised as an expense in the income statement over the vesting periods of the grant with a corresponding increase in equity.

The total amount to be expensed over the vesting period is determined by reference to the fair value of the share options granted, excluding the impact of any non-market vesting conditions (for example, profitability and sales growth targets). Non-market vesting conditions are included in assumptions about the number of options that are expected to be vested. At each balance sheet date, the Group revises its estimates of the number of share options that are expected to be vested. It recognises the impact of the revision of original estimates, if any, in the income statement, with a corresponding adjustment to equity.

The proceeds received net of any directly attributable transaction costs are credited to share capital (nominal value) and share premium when the options are exercised.

### (y) Government development grants

Government development grants relating to the construction of property, plant and equipment are included in long term liabilities and are credited to the income statement on a straight line basis over 15 years, \_\_\_\_

### (z) Contingent liabilities

The Group does not recognise a contingent liability but discloses its existence in the financial statements. A contingent liability is a possible obligation that arises from past events whose existence will be confirmed by uncertain future events beyond the control of the Group or a present obligation that is not recognised because it is not probable that an outflow of resources will be required to settle the obligation.

### (aa) Revenue recognition

Sales are recognised upon invoiced value of services delivered net of billing adjustments.

Other operating income earned by the Group and the Company comprises interest and leasing income as well as dividend income. Leasing income is accrued, unless collectibility is in doubt. Dividend income is recognised when the shareholders' rights to receive payment is established.

Interest income is recognised on a time proportion basis that takes into account the effective yield on the asset.

### (ab) Foreign currencies

### (i) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The financial statements are presented in Ringgit Malaysia, which is the Company's functional and presentation currency.

### (ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities in foreign currencies are translated at exchange rates ruling at the balance sheet date. All exchange differences are dealt with through the income statement.

### (iii) Group companies

The results and financial position of all the group entities (none of which has the currency of a hyperinflationary economy) that have functional currencies different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;
- income and expenses for each income statement are translated at average exchange rates (unless
  this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the
  transaction dates, in which case income and expenses are translated at the rate on the dates of the
  transactions); and
- all resulting exchange differences are recognised as a separate component of equity.

On consolidation, exchange differences arising from the translation of the net investment in foreign operations are taken to shareholders' equity. When a foreign operation is partially disposed of or sold, exchange differences that were recorded in equity are recognised in the income statement as part of the gain or loss on sale.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

### (ab) Foreign currencies (Cont'd.)

### (iii) Group companies (Cont'd.)

The principal closing rates used in translation of foreign currency amounts were as follows:

| Foreign gurrengy    | 2008<br>RM | 2007<br>RM |
|---------------------|------------|------------|
| Foreign currency    | RIVI       | KIVI       |
| 1 US Dollar         | 3.3937     | 3.5090     |
| 100 Japanese Yen    | 3.1250     | 3.0370     |
| 1 Sterling Pound    | 6.2067     | 7.0582     |
| 100 Pakistani Rupee | 4.4500     | 5.7749     |
| 1 EURO              | 5.0043     | 4.7843     |

### (ac) Financial instruments

### (i) Description

Financial instruments carried on the balance sheet include cash and bank balances, investments, receivables, payables, leases and borrowings. The particular recognition methods adopted are disclosed in the individual policy statements associated with each item.

The Group and the Company are also parties to financial instruments that manage exposure to fluctuations in foreign currency exchange and interest rate. These financial instruments, which mainly comprise foreign currency forward contracts, cross currency swap contracts and interest rate swap contracts, are not recognised in the financial statements. Derivative financial instruments are used in the Group and the Company's risk management of foreign currency and interest rate risk exposure of its financial liabilities.

### (ii) Financial instruments not recognised on the balance sheet

### Foreign currency forward contracts

The Group enters into foreign currency forward contracts to protect the Group from movements in exchange rates by establishing the rate at which a foreign currency asset or liability will be settled.

Exchange gains and losses on contracts are recognised in the income statement at time of settlement.

### Cross currency swap contracts

Cross currency swaps are entered into to manage exposure to movements in exchange rates by establishing the currency at which a foreign currency liability will be settled.

The notional principal of these contracts are off balance sheet. Any differential in terms of exchange gains or losses are recognised in the income statement in the same period as the exchange differences on the underlying hedged items.

### Currency options

Currency options are designed to manage the Group's exposure to protect the Group from movements in foreign currency. The notional principal of the contract is off balance sheet. The premium paid is expensed to the income statement when it is incurred. Gains or losses on early termination of currency options or on repayment of the borrowing are taken to the income statement.

### (ac) Financial instruments (Cont'd.)

(ii) Financial instruments not recognised on the balance sheet (Cont'd.)

### Interest rate swap contracts

Interest rate swaps, collars and caps agreements are designed to manage the Group's exposure to protect the Group from movements in interest rates. The notional principal of these contracts are off balance sheet. Any differential to be paid or received on an interest rate swap contract is recognised as a component of interest income or expense over the period of the contract. Gains and losses on early termination of interest rate swaps or on repayment of the borrowing are taken to the income statement.

### (iii) Fair value estimation for disclosure purposes

In assessing the fair value of financial instruments, the Group and the Company make certain assumptions and apply the discounted cash flow method to discount future cash flows to determine the fair value of financial instruments. The fair values of financial liabilities are estimated by discounting future cash flows at current market interest rate available to the Group and the Company.

Fair value of publicly traded derivatives and securities is based on quoted market prices at balance sheet date whereas the fair value of foreign currency forward contracts is calculated using spot rates, as published by Reuters, at balance sheet date.

The fair value of cross currency swaps and currency options are calculated as the present value of the estimated future cash flows and/or valuation from the banks.

The carrying amount for financial assets and liabilities with a maturity of less than one year are assumed to approximate their fair values.

### (ad) Rural electrification and projects under the Malaysia Plan

- (i) Rural electrification projects are capitalised as property, plant and equipment.
- (ii) The costs of the projects under the Malaysia Plan in the State of Sabah are only capitalised and accounted for as property, plant and equipment upon receipt of formal handover documentation. The corresponding amounts are recorded as Government development grants and such grants are credited to the income statement on a straight line basis over the same period as the expected aconomic life of the projects.

### 3 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Estimates and judgements are continually evaluated by the Directors and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

### (a) Critical judgement in applying the Group's accounting policies

In determining and applying accounting policies, judgement is often required in respect of items where the choice of specific policy could materially affect the reported results and financial position of the Group. The accounting policy to classify between investment properties and property, plant and equipment requires subjective judgements, often as a result of the need to make estimates about the effect of matters that are inherently uncertain.

Investment property is a property held to earn rentals or for capital appreciation or both.

Several properties comprise a portion that is held to earn rentals or for capital appreciation and another portion that is held for use in the production or supply of goods or services or for administrative purposes. If these portions could be sold (or leased out under a finance lease) separately, then these portions would be accounted separately by the Group.

### 3 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONT'D.)

### (a) Critical judgement in applying the Group's accounting policies (Cont'd.)

If the portions could not be sold separately, the property is an investment property only if an insignificant portion is held for use in the production or supply of goods or services or for administrative purposes. Judgement is made on an individual property basis to determine whether ancillary services are so significant that a property does not qualify as an investment property.

During the year, the Group has leased out several land and office space but these do not meet the definition of an investment property either due to immateriality or classification. Accordingly, these properties continue to be classified as property, plant and equipment.

### (b) Critical accounting estimates and assumptions

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, rarely equate to the related actual results. To enhance the information content of the estimates, certain key variables that are anticipated to have a material impact on the Group's results and financial position are tested for sensitivity to changes in the underlying parameters. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below.

### (i) Impairment of Property, Plant and Equipment

The Group assesses impairment of assets whenever the events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable i.e. the carrying amount of the asset is more than the recoverable amount.

Recoverable amount is measured at the higher of the fair value less cost to sell for that asset and its value-in-use. The value-in-use is the net present value of the projected future cash flow derived from that asset discounted at an appropriate discount rate. Projected future cash flows are based on Group's estimates calculated based on historical, sector and industry trends, general market and economic conditions, changes in technology and other available information. The assumptions used, results and conclusion of the impairment assessment are stated in the Note 13 to these financial statements.

### (ii) Estimated Useful Lives of Property, Plant and Equipment

The Group regularly reviews the estimated useful lives of property, plant and equipment based on factors such as business plan and strategies, expected level of usage and future technological developments. Future results of operations could be materially affected by changes in these estimates brought about by changes in the factors mentioned above. A reduction in the estimated useful lives of property, plant and equipment would increase the recorded depreciation and decrease the value of property, plant and equipment.

### (iii) Share-based Payment

Equity settled share-based payment (share options) is measured at fair values at the date they are granted. The assumptions used in the valuation to determine these fair values are explained in Note 34 to these financial statements.

### (iv) Contingent Liabilities

Determination of the treatment of contingent liabilities is based on management's view of the expected routcome of the contingencies after consulting legal counsel for litigation cases and internal and external experts to the Group for matters in the ordinary course of business.

### 3 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONT'D.)

### (b) Critical accounting estimates and assumptions (Cont'd.)

### (v) Allowance for Receivables

The allowance is established when there is objective evidence that the Group will not be able to collect all amount dues according to the original term of receivables. This is determined based on the ageing profile and collection patterns.

### 4 REVENUE

|                                      | Gro         | Group        |           | pany       |
|--------------------------------------|-------------|--------------|-----------|------------|
|                                      | 2003        | 2007         | 2003      | 2007       |
|                                      | RIM million | RM'million   | RMmillion | RM′million |
| Sales – electricity                  | 24,199.1    | 22,384.0     | 22,761.6  | 21,108.8   |
| – goods and services                 | 1,215.4     | <b>609.5</b> | 0         | 0          |
| Release of deferred income (Note 32) | 345.1       | 326.9        | 337.6     | 291.8      |
|                                      | 25,750.3    | 23,320.4     | 29,039,2  | 21,400.6   |

### 5 OPERATING EXPENSES

|  | Gr       | oup        | Com            | pany       |
|--|----------|------------|----------------|------------|
|  | 2003     | 2007       | 2003           | 2007       |
|  | RMmillen | RM'million | බ්රුණික්ම්මික  | RM'million |
| Energy coat Transmission coat Distribution coat Administrative expenses Other operating expenses   | 15,117.6 | 12,198.6   | 15,1846        | 12,705.5   |
|  | 1,150.3  | 980.9      | 1,1496         | 979.6      |
|  | 3,123.7  | 2,712.4    | 3,113.1        | 2,708.2    |
|  | 1,533.3  | 1,340.2    | 8 <b>72</b> .4 | 854.4      |
|  | 1,573.5  | 1,139.3    | 30 <b>7.</b> 7 | 194.1      |
|  | 22,503.4 | 18,371.4   | 20,631.4       | 17,441.8   |
| Operating expenses include the following items:  Directors' remuneration  - fees  - other emoluments  Auditors remuneration - PricewsterhouseCoopers  - statutory audit fees | 1.0      | 0.7        | 0.9            | 0.5        |
|  | 1.2      | 1.1        | 1.2            | 1.1        |
| <ul> <li>– Malaysia</li> <li>– Malaysia's affiliates** #</li> <li>– non-audit fees</li> </ul>  | 1.43     | 1.2        | 927            | 0.6        |
|  | 0        | 0          | 0              | 0          |
| – Malaysia   | 945      | 1.3        | 0.5            | 1.3        |
| – Malaysia's affiliates:"  | 9        | 0.3        | 0              |            |

### 5 OPERATING EXPENSES (CONT'D.)

|   | Gro                | oup                | Comp               | pany               |
|---|--------------------|--------------------|--------------------|--------------------|
| <del></del>                                       | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Allowance for doubtful debts                      | 33.5               | <b>66.6</b>        | 26.5               | 52.0               |
| Amortisation of coal mining rights                | 0                  | 10.7               | 0                  | 0                  |
| Depreciation                                      | 3,528.7            | 3,199.9            | 2,860.8            | 2,595.2            |
| Amortisation of prepaid operating leases          | 26.6               | 22.1               | 19.2               | 14.7               |
| Rental of land and buildings                      | 63.4               | 51.5               | 39.2               | 39.0               |
| Rental of plant and machinary                     | 19.2               | 22.2               | 19.1               | 21.9               |
| Research and development expenses                 | 47.1               | 17.0               | 46.1               | 16.7               |
| Property, plant and equipment written off         | 45.3               | 5.3                | 29.9               | 0                  |
| Inventories written off                           | 23.5               | 34.3               | 23.2               | 33.9               |
| Allowance for/(write-back of) diminution          |                    |                    |                    |                    |
| in value of markstable securities                 | 2.1                | (1.4)              | 2.1                | (1.4               |
| Allowance for diminution in value                 |                    |                    |                    |                    |
| of coal mining rights                             | . 0                | 200.0              | 0                  | 0                  |
| Allowance for/(write-back of) diminution in       |                    |                    |                    |                    |
| value of amount due from subsidiaries             | 0                  | 0                  | 68.2               | (13.5              |
| (Write-back) of diminution in value of investment | 0                  | (0.1)              | 0                  | (40.3              |
| (Write-back) of allowance for doubtful debts      | (32.5)             | (213.4)            | (26.2)             | (207.7             |
| Allowance for/(write-back of) inventory           |                    |                    |                    |                    |
| obsolescence                                      | 0.2                | 5.9                | (0.9)              | 5.9                |
| Receipt of Government subsidies*                  | (535.3)            | (435.7)            | 0                  | 0                  |
| Staff cost (flots 5)                              | 2,582.8            | 2,392.1            | 2,236.5            | 2,104.4            |

<sup>\*</sup> This represents the subsidies that Sabah Electricity Sdn Bhd ("SESB") received for diesel and medium fuel oil from the Government of Malaysia. The total amount credited in the current year was RM535.3 million (2007: RM435.7 million) and it has been offset against energy cost.

The estimated monetary value of benefits-in-kind received by the Directors was PM254,520 (2007; RM180,806) for the Group and the Company.

The estimated monetary value of amounts paid and payable to a firm, of which a Director is a partner, for professional services rendered to the Group and the Company was PM458,243 (2007; RM673,864).

<sup>\*\*</sup> This represents the audit fees for Liberty Power Ltd amounting to RM37,881 (2007: RM42,956).

<sup>#</sup> PricewaterhouseCoopers Malaysis and other member firms of PricewaterhouseCoopers International Limited are separate and independent legal entities.

### 6 STAFF COST

|                                      | Grou               | р                  | Compa              | any                |
|--------------------------------------|--------------------|--------------------|--------------------|--------------------|
|                                      | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Wages, salaries and bonuses          | 1,561.7            | 1,429.1            | 1,311.7            | 1,207.1            |
| Defined contribution retirement plan | 160.0              | 152.0              | 129.5              | 124.6              |
| Retirement benefit plan              | 246.6              | 249.0              | 245.1              | 246.2              |
| Retirement medical plan              | 423.0              | 400.2              | 400.9              | 391.8              |
| Employees' Share Option Scheme II    | 27.1               | 35.7               | 25.4               | 30.8               |
| Other employee benefits              | 164.4              | 126.1              | 123.9              | 103.9              |
|                                      | 2,582.8            | 2,392.1            | 2,236.5            | 2,104.4            |

Details of the retirement benefit and retirement medical plans of the Group and the Company are set out in Note 30 to these financial statements.

### 7 OTHER OPERATING INCOME

|  | Grou               | ıp                 | Comp               | any                |
|--|--------------------|--------------------|--------------------|--------------------|
|  | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Dividend income from investments in:               |                    |                    |                    |                    |
| - quoted shares                                    | 0.5                | 0.7                | 0.5                | 0.7                |
| - unquoted shares                                  | 3.6                | 3.7                | 671.4              | 4.1                |
| Leasing income                                     | 4.5                | 1.1                | 4.5                | 1.1                |
| Interest income                                    | 191.0              | 201.6              | 301.0              | 463.0              |
| Rental income                                      | 8.4                | 8.8                | 31.6               | 20.2               |
| Release of Government development grants (Note 33) | 56.9               | 44.5               | 0                  | 0                  |
| Gain on disposal of property, plant and equipment  | 9.8                | 29.1               | 9.7                | 29.0               |
| Gain on disposal of prepaid operating leases       | 1.3                | 4.0                | 1.3                | 4.0                |
| Gain on disposal of non-current assets             |                    |                    |                    |                    |
| held for sale                                      | 238.6              | 0                  | 238.6              | 0                  |
| Interest on late payments                          | 63.1               | 72.4               | 63.1               | 72.4               |
| Minimum make up charges                            | 34.2               | 36.0               | 34.2               | 36.0               |
| Other income                                       | 182.9              | 191.8              | 132.5              | 163.4              |
|  | 794.8              | 593.7              | 1,488.4            | 793.9              |

|  | Grou       | ıp                 | Compa      | any                |
|--|------------|--------------------|------------|--------------------|
|  | 2008       | 2007<br>RM'million | 2008       | 2007<br>RM'million |
|  | RM'million | KIVI MIIIION       | RM'million | KIVI MIIIION       |
| Foreign exchange gain/(loss) comprises:<br>Translation gain – foreign currency |            |                    |            |                    |
| denominated term loans   | 83.0       | 427.4              | 19.1       | 263.2              |
| Translation gain/(loss) – others   | (29.8)     | 24.9               | (23.9)     | 25.0               |
| Transaction gain/(loss)  | (19.1)     | 33.5               | (6.3)      | 53.0               |
|  | 34.1       | 485.8              | (11.1)     | 341.2              |

### FINANCE COST

|  | Grou               | ıp                 | Comp               | any                |
|--|--------------------|--------------------|--------------------|--------------------|
|  | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM′million |
| Interest on borrowings Less: Amount capitalised into property, | 1,278.7            | 1,505.5            | 1,000.7            | 1,176.2            |
| plant and equipment  | (301.8)            | (309.5)            | (301.8)            | (309.5)            |
| Interest on consumer deposits                                  | 976.9<br>118.9     | 1,196.0<br>109.0   | 698.9<br>112.2     | 866.7<br>102.8     |
|  | 1,095.8            | 1,305.0            | 811.1              | 969.5              |

### 10 TAXATION AND ZAKAT

|   | Grou       | р          | Comp       | any        |
|---|------------|------------|------------|------------|
|   | 2008       | 2007       | 2008       | 2007       |
|   | RM'million | RM'million | RM'million | RM'million |
| Current tax:  Malaysian corporate income tax  Deferred tax (Note 31)  Real Property Gains Tax | 349.8      | 815.1      | 453.9      | 810.1      |
|   | 63.0       | (150.2)    | (25.5)     | (233.6)    |
|   | 4.0        | 1.3        | 4.0        | 1.3        |
| Tax expense   | 416.8      | 666.2      | 432.4      | 577.8      |
| Zakat   | 8.0        | 32.1       | 8.0        | 32.1       |
|   | 424.8      | 698.3      | 440.4      | 609.9      |

### 10 TAXATION AND ZAKAT (CONT'D.)

|   | Grou               | ıp                 | Compa              | any                |
|---|--------------------|--------------------|--------------------|--------------------|
|   | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM′million | 2007<br>RM'million |
| The analysis of the tax expense is as follows:  |                    |                    |                    |                    |
| Current year                                    | 393.7              | 806.2              | 506.1              | 799.5              |
| (Over)/under accrual in prior years             | (43.9)             | 8.9                | (52.2)             | 10.6               |
| Deferred tax:                                   | 349.8              | 815.1              | 453.9              | 810.1              |
| Origination/(reversal) of temporary differences | 63.0               | (150.2)            | (25.5)             | (233.6)            |
| Real Property Gains Tax                         | 4.0                | 1.3                | 4.0                | 1.3                |
|   | 416.8              | 666.2              | 432.4              | 577.8              |

The explanation of the relationship between tax expense and profit before taxation is as follows:

|   | Group              |                    | Company            |                    |
|---|--------------------|--------------------|--------------------|--------------------|
|   | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Profit before taxation and zakat  | 3,025.2            | 4,765.9            | 3,104.0            | 4,124.4            |
| Tax calculated at the Malaysian   |                    |                    | w                  |                    |
| corporate income tax rate   | - 基础等              |                    | A - B Marie        |                    |
| of 26% (2007: 27%)  | 786.6              | 1,286.8            | 807.1              | 1,113.6            |
| Tax effects of:   |                    |                    |                    |                    |
| - change in corporate income tax rate   | (232.8)            | (456.3)            | (217.1)            | (450.3)            |
| - share of results of associates  | 2.9                | 4.9                | 0                  | 0                  |
| - income not subject to tax   | (175.5)            | (286.8)            | (141.1)            | (186.3)            |
| - expenses not deductible for tax purpose   | 45.1               | 116.3              | 37.6               | 94.6               |
| - current year's tax loss not recognised  | 10.4               | 4.3                | 0                  | 0                  |
| - expenses qualifying for double deduction  | (6.6)              | (6.0)              | (5.9)              | (5.7)              |
| (Over)/under provision of current tax in prior years<br>Benefits from previously unrecognised tax | (43.9)             | 8.9                | (52.2)             | 10.6               |
| losses  | (4.6)              | 0                  | 0                  | 0                  |
| Current year unrecognised temporary differences   | 31.2               | (7.2)              | 0                  | 0                  |
| Real Property Gains Tax   | 4.0                | 1.3                | 4.0                | 1.3                |
| Zakat   | 8.0                | 32.1               | 8.0                | 32.1               |
| Tax and zakat charge  | 424.8              | 698.3              | 440.4              | 609.9              |
| Average effective tax rate (%)  | 14.0               | 14.7               | 14.2               | 14.8               |

# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

### 11 EARNINGS PER SHARE

### (a) Basic earnings per share

Basic earnings per share is calculated by dividing the profit attributable to ordinary equity holders of the Company for the financial year by the weighted average number of ordinary shares in issue during the financial year.

|  | Group     |           |
|--|-----------|-----------|
|  | 2008      | 2007      |
| Profit attributable to ordinary equity holders of the Company (RM'million) | 2,594.0   | 4,061.1   |
| Weighted average number of ordinary shares in issue ('000)                 | 4,333,012 | 4,278,527 |
| Basic earnings per share (sen)   | 59.87     | 94.92     |

### (b) Diluted earnings per share

|   | Grou                    | р                             |
|---|-------------------------|-------------------------------|
|   | 2008<br>RM'million      | 2007<br>RM'million            |
| Profit attributable to ordinary equity holders of the Company<br>Elimination of interest expense on:  | 2,594.0                 | 4,061.1                       |
| Guaranteed Exchangeable Bonds, net of tax effect Unsecured Convertible Redeemable Income Securities   | 0                       | (6.8<br>4.5                   |
| Profit used to determine diluted earnings per share   | 2,594.0                 | 4,058.8                       |
|   | ′000                    | ′000                          |
| Weighted average number of ordinary shares in issue Adjustment for share options Adjustment for Guaranteed Exchangeable Bonds Adjustment for Unsecured Convertible Redeemable | 4,333,012<br>2,172<br>0 | 4,278,527<br>53,272<br>17,988 |
| Income Securities   | 0                       | 14,359                        |
| Weighted average number of ordinary shares for diluted earnings per share   | 4,335,184               | 4,364,146                     |
| Diluted earnings per share (sen)  | 59.84                   | 93.00                         |

### 12 DIVIDENDS

|   | Grou               | р                  |
|---|--------------------|--------------------|
|   | 2008<br>RM'million | 2007<br>RM'million |
| Interim dividend of 10.0 sen gross per ordinary share,          |                    |                    |
| less income tax at 26% (2007: interim dividend of 20.0 sen      |                    |                    |
| gross per ordinary share, less income tax at 27%)               | 320.7              | 632.0              |
| Proposed:   |                    |                    |
| Proposed final dividend of 10.0 sen gross per ordinary share,   |                    |                    |
| less income tax at 25% (2007: final dividend of 16.3 sen gross  |                    |                    |
| per ordinary share, less income tax at 26%)                     | 325.1              | 522.6              |
| Dividends recognised as distribution to ordinary equity holders |                    |                    |
| of the Company  | 645.8              | 1,154.6            |

Interim dividends are paid and accounted for in shareholders' equity as an appropriation of retained profits in the financial year.

At the forthcoming Annual General Meeting, a final dividend in respect of the financial year ended 31 August 2008 of 10.0 sen gross per ordinary share, less income tax at 25%, will be proposed for shareholders' approval. This final dividend will be accrued as a liability in the financial year ending 31 August 2009 when approved by the shareholders.

In respect of the financial year ended 31 August 2007, a final dividend of 16.3 sen gross per ordinary share, less income tax at 26% was declared and approved by the shareholders in the Annual General Meeting held on 13 December 2007.

### 13 PROPERTY, PLANT AND EQUIPMENT

|   | As at<br>1.9.2007<br>RM'million | Exchange<br>rate<br>adjustment<br>RM'million | Additions<br>RM'million | Disposals<br>RM'million | Transfers/<br>reclassi-<br>fication<br>RM'million | As at<br>31.8.2008<br>RM'million |
|---|---------------------------------|--|-------------------------|-------------------------|---|----------------------------------|
| Group   |                                 |  |                         |                         |   |                                  |
| 2008  |                                 |  |                         |                         |   |                                  |
| Cost/valuation                                |                                 |  |                         |                         |   |                                  |
| At 1984 and earlier                           |                                 |  |                         |                         |   |                                  |
| valuations:<br>Buildings and civil works      | 5.6                             | 0  | 0                       | 0                       |   | -                                |
| Buildings and civil works                     | 5.0                             | U  | U                       | 0                       | 0   | 5.6                              |
|   | 5.6                             | 0  | 0                       | 0                       | 0   | 5.6                              |
| At 1994 valuation:                            |                                 |  |                         |                         |   |                                  |
| Freehold land                                 | 608.6                           | 0  | 0                       | (0.6)                   | (35.5)  | 572.5                            |
| Buildings and civil works                     | 446.0                           | 0  | 0                       | (8.0)                   | 0   | 445.2                            |
|   | 1,060.2                         | 0  | 0                       | (1.4)                   | (35.5)  | 1,023.3                          |
| At cost:                                      |                                 |  |                         |                         |   |                                  |
| Freehold land                                 | 358.9                           | (1.9)  | 15.9                    | (1.6)                   | (2.5)   | 368.8                            |
| Buildings and civil works                     | 11,535.0                        | (1.1)  | 351.1                   | (0.9)                   | 47.5  | 11,931.6                         |
|   | 12,954.1                        | (3.0)  | 367.0                   | (3.9)                   | 9.5   | 13,323.7                         |
| Plant and machinery<br>Lines and distribution | 36,391.9                        | (229.9)                                      | 2,225.5                 | (272.6)                 | 220.4   | 38,335.3                         |
| mains   | 22,889.2                        | 0  | 1,874.0                 | 0                       | 354.0   | 25,117.2                         |
| Distribution services                         | 2,350.5                         | 0  | 154.4                   | 0                       | 5.4   | 2,510.3                          |
| Meters  | 1,267.0                         | 0  | 145.7                   | 0                       | 0.1   | 1,412.8                          |
| Public lighting                               | 276.1                           | 0  | 18.4                    | 0                       | (0.1)   | 294.4                            |
| Furniture, fittings and                       |                                 |  |                         |                         |   |                                  |
| office equipment                              | 1,100.7                         | (1.4)  | 59.8                    | (7.6)                   | (16.1)  | 1,135.4                          |
| Motor vehicles                                | 255.8                           | 0.5  | 11.3                    | (5.9)                   | 17.6  | 279.3                            |
|   | 77,485.3                        | (233.8)                                      | 4,856.1                 | (290.0)                 | 590.8   | 82,408.4                         |
| Capital project-in-<br>progress               | 7,306.3                         | (0.1)  | 5,034.7                 | 0                       | (5,672.5)   | 6,668.4                          |
|   | 84,791.6                        | (233.9)                                      | 9,890.8                 | (290.0)                 | (5,081.7)   | 89,076.8                         |

# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

|   | As at<br>1.9.2007<br>RM'million                    | Charged<br>for the<br>financial year<br>RM'million | Release on<br>disposals/<br>transfers<br>RM'million | As at<br>31.8.2008<br>RM'million                  |
|---|--|--|---|---|
| Group 2008 Accumulated depreciation At 1984 and earlier                       |  |  |   |   |
| valuations: Buildings and civil works At 1994 valuation: Freehold land        | 94<br>0  | 0  | <u>а</u> .<br>О                                     | 3£9<br>0  |
| Buildings and civil works   | 19 <u>00</u><br>19 <u>3</u> 4                      | 19.0   | (D.3)<br>0.2  | 2001.6<br>20743                                   |
| At cost: Freehold land Buildings and civil works                              | 2)3251)  | 0<br>3 <u>22</u> 29                                | 0<br>(ඩුයු)   | 3,1441 <b>.</b> 7                                 |
| Plant and machinery Lines and distribution mains Distribution services Meters | 3,016.5<br>13,147.9<br>8,892.4<br>1,186.1<br>616.6 | 3358<br>1,3242<br>1,037-5<br>107-0<br>79-6         | (U.U)<br>(E003)<br>0<br>0                           | 3,3522<br>14,674.6<br>9,369,9<br>1,293.1<br>633.2 |
| Public lighting Furniture, fittings and office equipment Motor vehicles       | 94349<br>90449<br>93449<br>27,2434                 | 1410<br>1014<br>232<br>3523                        | ©<br>(A.B)<br>(B.D)                                 | 1326<br>7036<br>2072<br>31,1314                   |
| Accumulated impairment losses Plant and machinery                             | 4402   | 0  | 0   | 4402  |

|  | As at<br>1.9.2006<br>RM'million | Exchange<br>rate<br>adjustment<br>RM'million | Additions<br>RM'million | Disposals<br>RM'million | Transfers/<br>reclassi-<br>fication<br>RM'million | As at<br>31.8.2007<br>RM'million |
|--|---------------------------------|--|-------------------------|-------------------------|---|----------------------------------|
| Group                                      |                                 |  |                         |                         |   |                                  |
| 2007                                       |                                 |  |                         |                         |   |                                  |
| Cost/valuation                             |                                 |  |                         |                         |   |                                  |
| At 1984 and earlier valuations:            |                                 |  |                         |                         |   |                                  |
| Buildings and civil works                  | 5.6                             | 0  | 0                       | 0                       | 0   | 5.6                              |
|  | 5.6                             | 0  | 0                       | 0                       | 0   | 5.6                              |
| At 1994 valuation:                         |                                 |  |                         |                         |   |                                  |
| Freehold land                              | 680.4                           | 0  | 0                       | (16.4)                  | (55.4)  | 608.6                            |
| Buildings and civil works                  | 439.5                           | 0  | 0                       | (2.5)                   | 9.0   | 446.0                            |
|  | 1,125.5                         | 0  | 0                       | (18.9)                  | (46.4)  | 1,060.2                          |
| At cost:                                   |                                 |  |                         |                         |   |                                  |
| Freehold land                              | 305.0                           | (0.2)  | 88.9                    | (0.1)                   | (34.7)  | 358.9                            |
| Buildings and civil works                  | 11,200.8                        | (0.2)  | 336.2                   | (0.2)                   | (1.6)   | 11,535.0                         |
| p 1  | 12,631.3                        | (0.4)  | 425.1                   | (19.2)                  | (82.7)  | 12,954.1                         |
| Plant and machinery Lines and distribution | 33,938.7                        | (52.3)                                       | 2,397.6                 | 0                       | 107.9   | 36,391.9                         |
| mains                                      | 21,523.8                        | 0  | 1,284.8                 | 0                       | 80.6  | 22,889.2                         |
| Distribution services                      | 2,221.6                         | 0  | 124.2                   | 0                       | 4.7   | 2,350.5                          |
| Meters                                     | 1,118.3                         | 0  | 148.7                   | 0                       | 0   | 1,267.0                          |
| Public lighting                            | 265.5                           | 0  | 10.6                    | 0                       | 0   | 276.1                            |
| Furniture, fittings and                    |                                 |  |                         |                         |   |                                  |
| office equipment                           | 1,015.5                         | (0.3)  | 89.2                    | (3.6)                   | (0.1)   | 1,100.7                          |
| Motor vehicles                             | 233.1                           | (0.3)  | 37.3                    | (13.2)                  | (1.1)   | 255.8                            |
|  | 72,947.8                        | (53.3)                                       | 4,517.5                 | (36.0)                  | 109.3   | 77,485.3                         |
| Capital project-in-<br>progress            | 6,610.9                         | (0.1)  | 5,395.0                 | 0                       | (4,699.5)   | 7,306.3                          |
|  | 79,558.7                        | (53.4)                                       | 9,912.5                 | (36.0)                  | (4,590.2)   | 84,791.6                         |

# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

|  | As at<br>1.9.2006<br>RM'million | Charged<br>for the<br>financial year<br>RM'million | Release on<br>disposals/<br>transfers<br>RM'million | As at<br>31.8.2007<br>RM'million |
|--|---------------------------------|--|---|----------------------------------|
| Group                                    |                                 |  |   |                                  |
| 2007                                     |                                 |  |   |                                  |
| Accumulated depreciation                 |                                 |  | 4-1-1-1-1-1   |                                  |
| At 1984 and earlier                      |                                 |  |   |                                  |
| valuations:                              |                                 |  |   |                                  |
| Buildings and civil works                | 3.4                             | 0  | 0   | 3.4                              |
| At 1994 valuation:                       |                                 |  |   |                                  |
| Freehold land                            | 0                               | 0  | 0   | 0                                |
| Buildings and civil works                | 172.1                           | 14.0   | 3.9   | 190.0                            |
|  | 175.5                           | 14.0   | 3.9   | 193.4                            |
| At cost:                                 |                                 |  |   |                                  |
| Freehold land                            | 0                               | 0  | 0   | 0                                |
| Buildings and civil works                | 2,510.2                         | 306.1  | - 6.8   | 2,823.1                          |
|  | 2,685.7                         | 320.1  | 10.7  | 3,016.5                          |
| Plant and machinery                      | 11,525.5                        | 1,638.3  | (15.9)  | 13,147.9                         |
| Lines and distribution mains             | 7,909.3                         | 930.0  | (6.9)   | 8,832.4                          |
| Distribution services                    | 1,085.2                         | 100.9  | 0   | 1,186.1                          |
| Meters                                   | 545.4                           | 71.0   | 0.2   | 616.6                            |
| Public lighting                          | 135.0                           | 13.3   | 0.3   | 148.6                            |
| Furniture, fittings and office equipment | 707.2                           | 106.5  | 0.3   | 814.0                            |
| Motor vehicles                           | 180.7                           | 19.8   | (16.5)  | 184.0                            |
|  | 24,774.0                        | 3,199.9  | (27.8)  | 27,946.1                         |
| Accumulated impairment losses            |                                 |  |   |                                  |
| Plant and machinery                      | 440.2                           | 0  | 0   | 440.2                            |

|                           | As at<br>1.9.2007<br>RM'million | •<br>Additions<br>RM'million | Disposals<br>RM'million | Transfers/<br>reclassi-<br>fication<br>RM'million | As at<br>31.8.2008<br>RM'million |
|---------------------------|---------------------------------|------------------------------|-------------------------|---|----------------------------------|
| Company                   |                                 |                              |                         |   |                                  |
| 2008                      | ALL STRUCK                      |                              |                         |   |                                  |
| Cost/valuation            |                                 |                              |                         |   |                                  |
| At 1994 valuation:        |                                 |                              |                         |   |                                  |
| Freehold land             | 608.6                           | 0                            | (0.6)                   | (35.6)  | 572.4                            |
| Buildings and civil works | 445.9                           | 0                            | (8.0)                   | 0   | 445.1                            |
|                           | 1,054.5                         | 0                            | (1.4)                   | (35.6)  | 1,017.5                          |
| At cost:                  |                                 |                              |                         |   |                                  |
| Freehold land             | 306.3                           | 8.8                          | 0                       | (6.2)   | 308.9                            |
| Buildings and civil works | 10,063.3                        | 295.6                        | (0.5)                   | (2.3)   | 10,356.1                         |
|                           | 11,424.1                        | 304.4                        | (1.9)                   | (44.1)  | 11,682.5                         |
| Plant and machinery       | 26,139.4                        | 2,038.8                      | (181.7)                 | (14.0)  | 27,982.5                         |
| Lines and distribution    |                                 |                              |                         |   |                                  |
| mains                     | 22,182.1                        | 1,819.5                      | 0                       | 3.2   | 24,004.8                         |
| Distribution services     | 2,239.7                         | 154.1                        | 0                       | 0   | 2,393.8                          |
| Meters                    | 1,242.8                         | 140.7                        | 0                       | 0   | 1,383.5                          |
| Public lighting           | 276.1                           | 18.4                         | 0                       | 0   | 294.5                            |
| Furniture, fittings and   |                                 |                              |                         |   |                                  |
| office equipment          | 985.8                           | 39.6                         | (2.0)                   | (13.3)  | 1,010.1                          |
| Motor vehicles            | 211.6                           | 8.3                          | (3.4)                   | 17.9  | 234.4                            |
| Capital project-in-       | 64,701.6                        | 4,523.8                      | (189.0)                 | (50.3)  | 68,986.1                         |
| progress                  | 6,545.9                         | 4,439.6                      | 0                       | (4,523.8)   | 6,461.7                          |
|                           | 71,247.5                        | 8,963.4                      | (189.0)                 | (4,574.1  | 75,447.8                         |

| Company   |   | ī i   |  |  |
|---|---|---|--|--|
| 2008 Accumulated depreciation At 1994 valuation:  |   | :   | :  |  |
| Buildings and civil works   | 16349   | 140   | <b>(D3)</b>  | 203.6  |
| At cost:<br>Freehold land<br>Buildings and civil works  | 13349<br>0<br>2455345   | 14.0<br>0<br>26246  | (0.3)<br>0<br>(0.2)                                    | 203.6<br>0<br>2,821.6  |
| Plant and machinery Lines and distribution mains Distribution services Meters Public lighting Furniture, fittings and office equipment Motor vehicles | 2,743,4<br>10,841,5<br>8,533,3<br>1,110,4<br>603,7<br>143,3<br>723,2<br>143,9 | 2706<br>1,237.6<br>933.2<br>102.7<br>77.3<br>13.9<br>90.1<br>24.4 | (0.5)<br>(0.53.2)<br>0<br>0<br>0<br>0<br>1.37<br>(0.2) | 3,023.5<br>11,232.9<br>9,573.5<br>1,213.1<br>633.0<br>132.2<br>6113.0<br>171.1 |

|                                   | As at<br>1.9.2006<br>RM'million | Additions<br>RM'million | Disposals<br>RM'million | Transfers/<br>reclassi-<br>fication<br>RM'million | As at<br>31.8.2007<br>RM'million |
|-----------------------------------|---------------------------------|-------------------------|-------------------------|---|----------------------------------|
| Company                           |                                 |                         |                         |   |                                  |
| 2007                              |                                 |                         |                         |   |                                  |
| Cost/valuation At 1994 valuation: |                                 |                         | •                       |   |                                  |
| Freehold land                     | 680.4                           | 0                       | (1ć. <del>4</del> )     | (55.4)  | <b>&amp;0</b> 8.5                |
| Buildings and civil works         | 439.4                           | 0                       | (2.5)                   | 9.0   | 445.9                            |
|                                   | -107.1                          | -                       | \5)                     | 7.0   |                                  |
|                                   | 1,119.8                         | 0                       | (18.9)                  | (46.4)  | 1,054.5                          |
| At cost:                          |                                 |                         |                         | , ,   | ·                                |
| Freehold land                     | 254.2                           | <u> </u> ୧୨.୦           | (0.1)                   | (36.8)  | 306.3                            |
| Buildings and civil works         | 9,753.6                         | 321.5                   | 0                       | (11.3)  | 10,063.3                         |
|                                   | 11,127.6                        | 410.5                   | (19.0)                  | (95.0)  | 11,424.1                         |
| Plant and machinary               | 24,007.6                        | 2,140.5                 | 0                       | (28.7)  | 23,139.4                         |
| Lines and distribution            | ]                               |                         |                         |   |                                  |
| mains                             | 20,876.3                        | 1,270.9                 | 0                       | 34.9  | 22,182,1                         |
| Distribution services             | 2,115.7                         | 124.0                   | 0                       | 0   | 2,239.7                          |
| Meters                            | 1,097.0                         | 145.8                   | 0                       | Ü   | 1,242.8                          |
| Public lighting                   | 265.6                           | 10.5                    | 0                       | Û   | 276.1                            |
| Furniture, fittings and           | 040 /                           | 75.0                    | (2.2)                   |   | 205.0                            |
| office equipment                  | 913.6                           | 75.0                    | (0.2)                   | (2.3)   | 985.8                            |
| Motor vehicles                    | 188.7                           | 35.1                    | (12.0)                  | (0.2)   | 211.6                            |
|                                   | 60,592.1                        | 4,232.3                 | (31.2)                  | (91.6)  | 64,701.6                         |
| Capital project-in-<br>progress   | 5,888.1                         | 4,906.7                 | 0                       | (4,248.9)   | 6,545.9                          |
|                                   | 65,480.2                        | 9,139.0                 | (31.2)                  | (4,340.5)   | 71,247.5                         |

# 13 PROPERTY, PLANT AND EQUIPMENT (CONT'D.)

|  | As at<br>1.9.2006<br>RM'million | Charged<br>for the<br>financial year<br>RM'million | Release on<br>disposals/<br>transfers<br>RM'million | As at<br>31.8.2007<br>RM'million |
|--|---------------------------------|--|---|----------------------------------|
| Company                                  |                                 |  |   |                                  |
| 2007                                     |                                 |  |   |                                  |
| Accumulated depreciation                 |                                 | +  |   |                                  |
| At 1994 valuation:                       |                                 |  |   |                                  |
| Buildings and civil works                | 172.1                           | 14.0   | 3.8   | 189.9                            |
|  | 172.1                           | 14.0   | 3.8   | 189.9                            |
|  |                                 |  |   |                                  |
| At cost:                                 |                                 |  |   |                                  |
| Freehold land                            | 0                               | 0  | 0   | 0                                |
| Buildings and civil works                | 2,306.4                         | 245.9  | 7.2   | 2,559.5                          |
|  | 2,478.5                         | 259.9  | 11.0  | 2,749.4                          |
| Plant and machinery                      | 9,711.7                         | 1,152.5  | (22.7)  | 10,841.5                         |
| Lines and distribution mains             | 7,692.0                         | 893.3  | 0   | 8,585.3                          |
| Distribution services                    | 1,013.8                         | 96.6   | 0   | 1,110.4                          |
| Meters                                   | 536.5                           | 69.2   | 0   | 605.7                            |
| Public lighting                          | 135.0                           | 13.3   | 0   | 148.3                            |
| Furniture, fittings and office equipment | 627.0                           | 95.6   | 1.6   | 724.2                            |
| Motor vehicles                           | 149.5                           | 14.8   | (14.4)  | 149.9                            |
|  | 22,344.0                        | 2,595.2  | (24.5)  | 24,914.7                         |

# 13 PROPERTY, PLANT AND EQUIPMENT (CONT'D.)

|  | Grou               | up                 | Comp               | any                |
|--|--------------------|--------------------|--------------------|--------------------|
|  | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Net book value                           | <b>建筑建筑</b>        |                    |                    |                    |
| At 1984 and earlier valuations:          | <b>在李龙里</b>        |                    | 14 美国的             |                    |
| Buildings and civil works                | 1.7                | 2.2                | 0                  | 0                  |
| At 1994 valuation:                       |                    |                    |                    |                    |
| Freehold land                            | 572.5              | 608.6              | 572.4              | 608.6              |
| Buildings and civil works                | 241.6              | 256.0              | 241.5              | 256.0              |
|  | 815.8              | 866.8              | 813.9              | 864.6              |
| At cost:                                 |                    |                    |                    |                    |
| Freehold land                            | 368.8              | 358.9              | 308.9              | 306.3              |
| Buildings and civil works                | 8,786.9            | 8,711.9            | 7,534.2            | 7,503.8            |
| Total land and buildings                 | 9,971.5            | 9,937.6            | 8,657.0            | 8,674.7            |
| Plant and machinery                      | 23,223.5           | 22,803.8           | 16,012.6           | 15,297.9           |
| Lines and distribution mains             | 15,247.3           | 14,056.8           | 14,431.3           | 13,596.8           |
| Distribution services                    | 1,217.2            | 1,164.4            | 1,180.7            | 1,129.3            |
| Meters                                   | 716.6              | 650.4              | 700.5              | 637.1              |
| Public lighting                          | 131.8              | 127.5              | 132.3              | 127.8              |
| Furniture, fittings and office equipment | 226.8              | 286.7              | 194.1              | 261.6              |
| Motor vehicles                           | 72.1               | 71.8               | 63.3               | 61.7               |
|  | 50,806.8           | 49,099.0           | 41,371.8           | 39,786.9           |
| Capital project-in-progress              | 6,668.4            | 7,306.3            | 6,461.7            | 6,545.9            |
|  | 57,475.2           | 56,405.3           | 47,833.5           | 46,332.8           |

### 13 PROPERTY, PLANT AND EQUIPMENT (CONT'D.)

Had the revalued property, plant and equipment been included in the financial statements at cost less depreciation, the net book value of the revalued property, plant and equipment would have been as follows:

|                           | Gro        | Group      |            | Company    |  |
|---------------------------|------------|------------|------------|------------|--|
|                           | 2008       | 2007       | 2008       | 2007       |  |
|                           | RM'million | RM'million | RM'million | RM'million |  |
| Freehold land             | 50.6       | 50.7       | 43.7       | 43.8       |  |
| Buildings and civil works | 103.5      | 110.5      | 103.5      | 110.5      |  |
|                           | 154.1      | 161.2      | 147.2      | 154.3      |  |

The valuations of freehold land, buildings and civil works of the Company was based on an independent valuation by a professional firm of valuars on the open market value basis in 1994. The net surplus on revaluation was incorporated into the financial statements at 31 August 1996 and transferred to revaluation reserve.

The valuations of buildings of a subsidiary were carried out in 1982 and 1984 respectively based on independent valuations by professional firms of valuers on the open market value basis. The net surplus on revaluation was transferred to revaluation reserve.

The title deeds of certain land are in the process of being registered in the name of the Company and certain subsidiaries.

Included in transfers/reclassification, in 2008 for the Group and the Company was RM20.4 million being the carrying amount of land and building reclassified as non-current assets held for sale (see Note 19).

Interest capitalised during the financial year in capital project-in-progress amounted to RM301.8 million (2007: RM309.5 million) for the Group and the Company.

The capitalisation rate used to determine the amount of borrowing cost eligible for capitalisation is 5.34% (2007: 5.63%) for the Group and the Company.

### Impairment test for property, plant and equipment

During the year, two subsidiary companies undertool: snoual impairment test for property, plant and equipment. The results of the test are as follows:-

- a) TNB Liberty Power Limited has recognised in prior years, a provision for impairment totalling RM440.2 million. The sessessment showed that no further impairment loss is required for the carrying amount of property, plant and equipment assessed, including where realistic variations are applied to key assumptions. The carrying value of the property, plant and equipment at balance sheet data is PM520.1 million (2007: PM725.2 million).
- b) For Sabah Electricity Sdn Bhd (SESB), no impairment loss was required for the carrying amount of property, plant and equipment assessed based on certain assumptions applied for the test, which includes the company's expectation of revenue growth, operating costs and cost of funds, drawing on from past experience and current assessment of the market and industry growth as well as the maximum capacity available. The carrying value of the property, plant and equipment at balance sheet date is EM2,269.8 millionn (2007: PM2,101.6 million).

### 14 PREPAID OPERATING LEASES

|  | Grou       | ıp         | Company    |            |
|--|------------|------------|------------|------------|
|  | 2008       | 2007       | 2008       | 2007       |
|  | RM'million | RM'million | RM'million | RM'million |
| Cost/Valuation                             |            |            |            |            |
| As at the beginning of the financial year  | 1,043.8    | 1,029.6    | 839.6      | 825.5      |
| Additions                                  | 0.3        | 16.6       | 0.1        | 16.6       |
| Disposals                                  | (0.7)      | (5.4)      | (0.7)      | (5.4)      |
| Reclassified to non-current assets         |            |            |            |            |
| held for sale (Note 19)                    | (3.0)      | (2.7)      | (3.0)      | (2.7)      |
| Reclassification                           | 19.5       | 5.7        | 19.5       | 5.6        |
| As at the end of the financial year        | 1,059.9    | 1,043.8    | 855.5      | 839.6      |
|  |            |            |            |            |
| Accumulated amortisation                   |            |            |            |            |
| As at the beginning of the financial year  | 191.2      | 172.8      | 146.2      | 135.3      |
| Charged for the financial year             | 26.6       | 22.1       | 19.2       | 14.7       |
| Released on disposals                      | (0.1)      | (0.9)      | (0.1)      | (0.9)      |
| Released on reclassification to            |            |            |            |            |
| non-current assets held for sale (Note 19) | (1.9)      | (1.2)      | (1.9)      | (1.2)      |
| Released on reclassification               | 0          | (1.6)      | 0          | (1.7)      |
| As at the end of the financial year        | 215.8      | 191.2      | 163.4      | 146.2      |
| Net book value as at the end               |            |            |            |            |
| of the financial year                      | 844.1      | 852.6      | 692.1      | 693.4      |

Prepaid operating leases were previously classified as leasehold land within property, plant and equipment and comprise long leasehold land and short leasehold land.

Included in the transfers/reclassification for 2008 was RM1.1 million being the carrying amount of prepaid operating lease reclassified as assets held for sale (see Note 19).

The last revaluation of the leasehold land was in 1994.

## 15 SUBSIDIARIES

|   | Comp                      | any                       |
|---|---------------------------|---------------------------|
|   | 2008<br>RM'million        | 2007<br>RM'million        |
| Unquoted ordinary shares, at cost<br>Redeemable unsecured loan stocks, at cost<br>Redeemable preference shares, at cost | 296.7<br>547.5<br>4,600.2 | 296.7<br>570.3<br>4,300.2 |
| Less: Allowance for diminution in value   | 5,444.4<br>(886.1)        | 5,167.2<br>(586.1)        |
|   | 4,558.3                   | 4,581.1                   |

| Name of subsidiary                    | Group's<br>2008 | interest<br>2007 | Principal activities  | Country of incorporation |
|---------------------------------------|-----------------|------------------|---|--------------------------|
| TNB Janamanjung Sdn Bhd               | 100%            | 100%             | Operation of power plant and generation of electricity  | Malaysia                 |
| TNB Power Daharki Ltd*                | 100%            | 100%             | Investment holding  | Mauritius                |
| TNB Fuel Services Sdn Bhd             | 100%            | 100%             | Purchase and supply of fuel and coal for power generation   | Malaysia                 |
| TNB Energy Services Sdn Bhd           | 100%            | 100%             | Generation and supply of various energy sources and provision of related technical services   | Malaysia                 |
| TNB Research Sdn Bhd                  | 100%            | 100%             | Research and development, consultancy and other services  | Malaysia                 |
| TNB Ventures Sdn Bhd                  | 100%            | 100%             | Investment holding for domestic and international ventures  | Malaysia                 |
| TNB Engineering Corporation Sdn Bhd   | 100%            | 100%             | Project management and consultancy, engineering works and energy project development services specialising in district cooling and cogeneration | Malaysia                 |
| TNB Repair and<br>Maintenance Sdn Bhd | 100%            | 100%             | Repair, maintenance and testing of power plants   | Malaysia                 |

| Name of subsidiary  | Group's<br>2008 | interest<br>2007 | Principal activities  | Country of incorporation |
|---|-----------------|------------------|---|--------------------------|
| TNB Engineers Sdn Bhd   | 100%            | 100%             | Providing engineering, procurement and construction services for power related projects | Malaysia                 |
| TNB Capital (L) Ltd   | 100%            | 100%             | Investment holding  | Malaysia                 |
| Universiti Tenaga Nasional<br>Sdn Bhd   | 100%            | 100%             | Providing higher education  | Malaysia                 |
| Malaysia Transformer<br>Manufacturing Sdn Bhd   | 100%            | 100%             | Manufacturing, selling and repairing of transformers                                    | Malaysia                 |
| TNB Coal International Ltd*   | 100%            | 92.5%            | Investment holding  | Mauritius                |
| Power and Energy<br>International (Mauritius) Ltd*  | 100%            | 100%             | Investment holding  | Mauritius                |
| Orion Mission Sdn Bhd   | 100%            | 0%               | Investment holding  | Malaysia                 |
| Sabah Electricity Sdn Bhd   | 80%             | 80%              | Generation, transmission,<br>distribution and sale<br>of electricity in Sabah           | Malaysia                 |
| Tenaga Switchgear Sdn Bhd   | 60%             | 60%              | Assemble and manufacture high voltage switchgears                                       | Malaysia                 |
| Kapar Energy Ventures<br>Sdn Bhd  | 60%             | 60%              | Generate and deliver<br>electricity energy and<br>generating capacity to TNB            | Malaysia                 |
| TNB Integrated Learning Solution Sdn Bhd (formerly known as TNB Kulim Distribution Sdn Bhd) | 100%            | 100%             | Providing training and related services (Formerly was distribution of electricity)      | Malaysia                 |
| TNB Generation Sdn Bhd  | 100%            | 100%             | Dormant   | Malaysia                 |
| TNB Transmission Network<br>Sdn Bhd   | 100%            | 100%             | Dormant   | Malaysia                 |
| TNB Distribution Sdn Bhd  | 100%            | 100%             | Dormant   | Malaysia                 |

| Name of subsidiary                                    | Group's | interest<br>2007 | Principal activities  | Country of Incorporation |
|---|---------|------------------|---|--------------------------|
| - Ivalle of substatially                              | 2000    | 2007             | r micipal activities  | incorporation            |
| TNB Risk Management Sdn Bhd                           | 100%    | 100%             | Dormant   | Malaysia                 |
| TMB Logistics Sdn Bhd                                 | 100%    | 100%             | Dormant   | Malaysia                 |
| TNB - IT Sdn Bhd                                      | 100%    | 100%             | Dormant   | . Malaysia               |
| TNB Workshop Services<br>Sdn Bhd                      | 100%    | 100%             | Dormant   | Malaysia                 |
| TNB Katal Sdn Bhd**                                   | 100%    | 100%             | Dormant   | Malaysia                 |
| TNB Matering Services Sdn Bhd                         | 100%    | 100%             | . Dormant   | Malaysia                 |
| TNB Hidro Sdn Bhd                                     | 100%    | 100%             | Dormant   | Malaysia                 |
| Sumber Hidro Management<br>Sdn Bhd**                  | 100%    | 100%             | Dormant ·   | Malaysia                 |
| THB Kapar Sdn Bhd**                                   | 100%    | 100%             | Dormsnit  | Malaysia                 |
| TNB Prai Sdn Bhd                                      | 100%    | 100%             | Dormant   | Malaysia                 |
| TNB Paka Sdn Bhd**                                    | 100%    | 100%             | Dormant   | Malaysia                 |
| TMB Properties Sdn Bhd                                | 100%    | 100%             | Dormant   | Malaysia                 |
| TNB Kulim Generation<br>Sdn Bhd                       | 100%    | 100%             | Dormant '   | Malaysia                 |
| Sepang Power Sdn Bhd                                  | 70%     | 70%              | Dormant   | Malaysia                 |
| Subsidiaries of TNB  Engineering Corporation  Sdn Bhd |         |                  |   |                          |
| Bangsar Energy Systems<br>Sdn Bhd                     | 100%    | 100%             | Operating an integrated district cooling system for air conditioning systems of office building | Malaysia                 |
| TNEC Construction Sdn Bhd                             | 100%    | 100%             | Construction contractor   | Malaysia                 |
| TNEC Operations and<br>Maintenance Sdn Bhd            | 100%    | 100%             | Operations and maintenance of cooling and power plant   | Malaysia                 |

| Name of subsidiary  | Group's<br>2008 | interest<br>2007     | Principal activities   | Country of incorporation |
|---|-----------------|----------------------|--|--------------------------|
| Subsidiary of Power and Energy International (Mauritius) Ltd Independent Power International Ltd* | 100%            | 100%                 | Invastment holding   | Mauritius                |
| Subsidiary of Bangsar Energy Systems Sdr Bhd Selesa Energy Systems Sdn Bhd                        | 70%             | 100%                 | Operations and maintenance of cooling plant  | Malaysia                 |
| Subsidiary of TNEC  Operations and Maintenance Sdn Bhd  Tomest Energy Management Sdn Bhd          | 51%             | 51%                  | Dormant  | Malaysia                 |
| Subsidiary of TNB  Generation Sdn Bhd  TNBG Power Services 3dn Bhd**  Subsidiary of TNB Power     | 100%            | 100%<br><del>=</del> | Dormant  | Malaysia                 |
| Daharki Ltd TNB Liberty Power Ltd#  | 100%            | 100%                 | Operation of power plant and generation of electricity   | Pakistan                 |
| Subsidiary of TNB Properties Sdn Bhd TNP Construction Sdn Bhd                                     | 100%            | 100%                 | Dormant  | Malaysia                 |
| Subsidiary of TNB Research Sdn_Bhd Tenaga Microwave   | ,<br>70%        | 70%                  | Supplier and manufacturer  | Malaysia                 |
| Technologies Sdn Bhd*^  Subsidiary of TNB Energy  Services Sdn Bhd                                |                 | <del>-</del>         | of electrical components   |                          |
| Jana Landfill Sdn Bhd   | 70%             | 70%                  | Generation and distribution of heat<br>and electricity using landfill gas<br>and/or other renewable anergy<br>resources in Peninsular Malaysia<br>and/or elsewhere | Malaysia                 |

|  |      | interest | and the same  | Country of    |
|--|------|----------|---|---------------|
| Name of subsidiary   | 2008 | 2007     | Principal activities  | incorporation |
| Subsidiaries of TNB Repair<br>and Maintenance Sdn Bhd        |      |          |   |               |
| Trichy Power Ltd*  | 100% | 100%     | Power Generation  | India         |
| Trichy Energy Ltd*   | 100% | 100%     | Power Generation  | India         |
| TNB Operations & Maintenance<br>International Ltd            | 100% | 100%     | Investment holding  | Mauritius     |
| Subsidiary of TNB Operations & Maintenance International Ltd |      |          |   |               |
| Oasis Parade Sdn Bhd   | 100% | 100%     | Investment holding  | Malaysia      |
| Subsidiary of TNB  Ventures Sdn Bhd                          |      |          |   |               |
| Tenaga Cable Industries<br>Sdn Bhd                           | 76%  | 76%      | Manufacturing and distribution of power and general cables, aluminium rods and related activities | Malaysia      |
|  |      |          |   |               |
| Subsidiary of TNB Coal International Ltd                     |      |          |   |               |
| Dynamic Acres Sdn Bhd*                                       | 100% | 100%     | Coal trading  | Malaysia      |
| Subsidiary of Orion Mission Sdn Bhd                          |      |          |   |               |
| Lahad Datu Holdings<br>Sdn Bhd                               | 100% | 0%       | Dormant   | Malaysia      |
| Subsidiary of Lahad Datu<br>Holdings Sdn Bhd                 |      |          |   |               |
| Lahad Datu Energy<br>Sdn Bhd                                 | 100% | 0%       | Dormant   | Malaysia      |

- \* Not audited by PricewaterhouseCoopers
- # Audited by a member firm of PricewaterhouseCoopers International Limited which is a separate and independent legal entity from PricewaterhouseCoopers Malaysia.
- ^ On 23 August 2002, the High Court has granted the liquidation petition of Tenaga Microwave Technologies Sdn Bhd brought by the Company and TNB Research Sdn Bhd. The liquidation process is still in progress as at 31 August 2008.
- \*\* These companies are in the process of being wound up.

|                                   | Grou               | р                  |
|-----------------------------------|--------------------|--------------------|
|                                   | 2008<br>RM'million | 2007<br>RM'million |
| Share of net assets of associates | 322.5              | 233.0              |

|   | Compa              | any                |
|---|--------------------|--------------------|
|   | 2008<br>RM'million | 2007<br>RM'million |
| Unquoted shares, at cost                | 60.2               | 59.2               |
| Less: Allowance for diminution in value | (9.6)              | (9.6               |
|   | 50.6               | 49.6               |
| Redeemable preference shares, at cost   | 33.2               | 34.0               |
| Unsecured loan notes                    | 87.2               | 42.2               |
|   | 171.0              | 125.8              |

The Group's share of revenue, profit, assets and liabilities of associates are as follows:

|   | 2008<br>RM'million                  | 2007<br>RM'million                   |
|---|-------------------------------------|--------------------------------------|
| Revenue<br>Profit after taxation  | 284.2<br>44.9                       | 224.3<br>42.4                        |
| Non-current assets Current assets Current liabilities Non-current liabilities | 592.9<br>302.3<br>(96.2)<br>(476.5) | 606.8<br>270.8<br>(137.9)<br>(506.7) |
| Net assets  | 322.5                               | 233.0                                |

# 16 ASSOCIATES (CONT'D.)

Details of the associates are as follows:

| Name of associate   | Group's<br>2008 | interest<br>2007 | Principal activities  | Country of incorporation |
|---|-----------------|------------------|---|--------------------------|
| Teknologi Tenaga Perlis<br>Consortium Sdn Bhd                         | 20%             | 20%              | Ownership, operation,<br>maintenance of electricity<br>generating plant                     | Malaysia                 |
| Perusahaan Otomobil Elektrik<br>(Malaysia) Sdn Bhd                    | 20%             | 20%              | Dormant   | Malaysia                 |
| GB3 Sdn Bhd   | 20%             | 20%              | Design, develop, construction, operation and maintenance of electricity generating facility | Malaysia                 |
| Fibrecomm Network<br>(M) Sdn Bhd                                      | 49%             | 49%              | Provision of fibre optic transmission network   | Malaysia                 |
| Jimah Energy Ventures<br>Holdings Sdn Bhd                             | 20%             | 0%               | Generate electric power and investment holding  | Malaysia                 |
| Associates of TNB  Properties Sdn Bhd                                 |                 |                  |   |                          |
| HICOM-TNB Properties Sdn Bhd  | 40%             | 40%              | Construction contractors  | Malaysia                 |
| INDERA-TNB<br>Properties Sdn Bhd                                      | 40%             | 40%              | Property development and construction   | Malaysia                 |
| KM Metro-TNB<br>Properties Sdn Bhd                                    | 40%             | 40%              | Property development and construction   | Malaysia                 |
| TNB Properties-JB<br>Citytowers Sdn Bhd                               | 40%             | 40%              | Property development and construction   | Malaysia                 |
| ZEUS-TNB<br>Properties Sdn Bhd  | 40%             | 40%              | Property development and construction   | Malaysia                 |
| Associate of TNB Ventures Sdn Bhd                                     |                 |                  |   |                          |
| Northern Utility Resources Sdn Bhd (Receivers and Managers appointed) | 20%             | 20%              | Operation of power plant, generation and supply of electricity                              | Malaysia                 |

### 16 ASSOCIATES (CONT'D.)

| Name of associate   | Group's<br>2008 | interest<br>2007 | Principal activities | Country of incorporation |
|---|-----------------|------------------|----------------------|--------------------------|
| Associate of Independent Power International Ltd Malaysian Shoaiba Consortium Sdn Bhd               | 20%             | 20%              | Investment holding   | Malaysia                 |
| Associate of Oasis Parade Sdn Bhd Saudi-Malaysia Operation and Maintenance Services Company Limited | 30%             | 30%              | Investment holding   | Saudi Arabia             |

### 17 INVESTMENTS

|   | Group              |                    | Company            |                    |
|---|--------------------|--------------------|--------------------|--------------------|
|   | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Unquoted shares, at cost<br>Unquoted unsecured loan stocks, at cost | 75.7<br>0          | 75.7<br>0          | 75.7<br>59.4       | 75.7<br>59.4       |
| Allowance for diminution in value:                                  | 75.7               | 75.7               | 135.1              | 135.1              |
| - unquoted shares   | (37.7)             | (37.7)             | (37.7)             | (37.7)             |
|   | 38.0               | 38.0               | 97.4               | 97.4               |

### 18 LONG TERM RECEIVABLES

|                               | Company            |                    |
|-------------------------------|--------------------|--------------------|
|                               | 2008<br>RM'million | 2007<br>RM'million |
| Amounts due from subsidiaries | 613.3              | 703.1              |

The amounts due from subsidiaries comprise advances and other receivables from TNB Liberty Power Limited ('TLPL') and TNB Power Daharki Ltd ('TPD') amounting to RM52.8 million (2007: RM54.6 million) and RM560.5 million (2007: RM648.5 million) respectively.

### 18 LONG TERM RECEIVABLES (CONT'D.)

These amounts are unsecured and the Company has given an undertaking to the subsidiaries not to recall the amount within 12 months from the balance sheet date. The amount due from TLPL is interest free. The amount due from TPD is subject to interest at rates ranging from 4.2% to 8.4% (2007: 6.7% to 8.4%) per annum.

### 19 NON-CURRENT ASSETS HELD FOR SALE

|  | Group              |                    | Company            |                    |
|--|--------------------|--------------------|--------------------|--------------------|
|  | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Cost/Valuation   |                    |                    |                    |                    |
| Opening  | 126.4              | 0                  | 57.2               | 0                  |
| Amount transferred from                                    |                    |                    |                    |                    |
| property, plant & equipment (Note 13)                      | 20.4               | 54.5               | 20.4               | 54.5               |
| Amount transferred from prepaid operating leases (Note 14) | 3.0                | 2.7                | 20                 | 2.7                |
| Amount transferred from                                    | 3.0                | 2.7                | 3.0                | 2.7                |
| coal mining rights   | 0                  | 69.2               | 0                  | 0                  |
| Amount transferred from                                    | 1. 法连              |                    | 10.44              |                    |
| investment in associates (Note 16)                         | 0.6                | 0                  | 0                  | 0                  |
| Disposals  | (135.7)            | 0                  | (66.5)             | 0                  |
| Closing  | 14.7               | 126.4              | 14.1               | 57.2               |
| Damus distinct (Amountination                              |                    |                    |                    | -                  |
| <b>Depreciation/Amortisation</b> Opening                   | 1.4                | 0                  | 1.4                | 0                  |
| Amount transferred from                                    |                    | O                  |                    | O                  |
| property, plant & equipment (Note 13)                      | 0                  | 0.2                | 0                  | 0.2                |
| Amount transferred from                                    |                    |                    |                    |                    |
| prepaid operating leases (Note 14)                         | 1.9                | 1.2                | 1.9                | 1.2                |
| Disposals  | (2.7)              | 0                  | (2.7)              | 0                  |
| Closing  | 0.6                | 1.4                | 0.6                | 1.4                |
|  |                    |                    |                    |                    |
| Net book amount  |                    |                    |                    |                    |
| At 31 August   | 14.1               | 125.0              | 13.5               | 55.8               |

During the year, the Company entered into several sale and purchase agreements with various parties, for which the disposals are still in progress.

### **20 INVENTORIES**

|                                     | Group      |            | Company    |            |
|-------------------------------------|------------|------------|------------|------------|
|                                     | 2008       | 2007       | 2008       | 2007       |
|                                     | RM'million | RM'million | RM'million | RM'million |
| Raw materials, fuel and consumables | 2,133.4    | 1,692.3    | 1,158.3    | 1,115.4    |
| Work-in-progress                    | 61.0       | 51.2       | 0          | 0          |
| Finished goods                      | 35.9       | 26.0       | 0          | 0          |
|                                     | 2,230.3    | 1,769.5    | 1,158.3    | 1,115.4    |

### 21 RECEIVABLES, DEPOSITS AND PREPAYMENTS

|  | Gro                             | Group                            |                                 | Company                        |  |
|--|---------------------------------|----------------------------------|---------------------------------|--------------------------------|--|
|  | 2008<br>RM'million              | 2007<br>RM'million               | 2008<br>RM'million              | 2007<br>RM'million             |  |
| Trade receivables Less: Allowance for doubtful debts                                   | 2,501.1<br>(418.4)              | 2,045.1<br>(504.0)               | 1,702.4<br>(342.8)              | 1,639.1<br>(415.6)             |  |
|  | 2,082.7                         | 1,541.1                          | 1,359.6                         | 1,223.5                        |  |
| Rechargeable debtors<br>Less: Allowance for doubtful debts                             | 67.6<br>(64.8)                  | 92.3<br>(83.8)                   | 58.7<br>(54.3)                  | 91.0<br>(73.3)                 |  |
|  | 2.8                             | 8.5                              | 4.4                             | 17.7                           |  |
| Staff advances/loans Advance to contractors Deposits and prepayments Other receivables | 566.5<br>193.6<br>67.3<br>539.3 | 620.6<br>114.5<br>109.3<br>527.8 | 562.5<br>133.8<br>24.7<br>207.1 | 616.5<br>98.1<br>21.2<br>227.6 |  |
| and the contract of  | 1,366.7                         | 1,372.2                          | 928.1                           | 963.4                          |  |
|  | 3,452.2                         | 2,921.8                          | 2,292.1                         | 2,204.6                        |  |

The Group's and the Company's credit policy provides trade receivables with a 30 days (2007: 30 days) credit period. The Group and the Company have no significant exposures to any individual customer, geographical location or industry category. All credit and recovery risks associated with receivables have been provided for in the financial statements.

Included in staff advances/loans are staff housing and car loans amounting to RM490.6 million (2007: RM536.5 million) which are not recoverable within 12 months.

### 22 AMOUNTS DUE FROM/TO SUBSIDIARIES

Amount due from TLPL and TNB Janamanjung Sdn Bhd ('TNBJ') is interest free. Amounts due from TPD is subject to interest at rates ranging from 4.2% to 8.4% (2007: 6.7% to 8.4%) per annum. Amount due from SESB is subject to an interest rate of 6.0% (2007: 6.0%) per annum, is unsecured and has no fixed terms of repayment. Amount due from Kapar Energy Ventures Sdn Bhd ('KEV') and TNB Coal International Ltd are subject to interest rate of 15.0% (2007: 15.0%) and 7.0% (2007: 7.0%) per annum respectively.

Amounts due from/to all other subsidiaries are unsecured, interest free and have no fixed terms of repayment.

### 23 SHORT TERM INVESTMENTS

|                                | Group              |                    | Company            |                    |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|
|                                | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Quoted warrants, at cost       | 12.6               | 12.6               | 12.6               | 12.6               |
| Market value – quoted warrants | 15.0               | 23.7               | 15.0               | 23.7               |

### 24 MARKETABLE SECURITIES

|   | Group              |                    | Company            |                    |
|---|--------------------|--------------------|--------------------|--------------------|
|   | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Quoted in Malaysia, at cost: Shares Less: Allowance for diminution in value | 27.1<br>(18.6)     | 27.1<br>(16.5)     | 27.1<br>(18.6)     | 27.1<br>(16.5)     |
|   | 8.5                | 10.6               | 8.5                | 10.6               |
| Market value  | 8.5                | 10.6               | 8.5                | 10.6               |

### 25 DEPOSITS, BANK AND CASH BALANCES

|  | Group      |            | Company    |            |
|--|------------|------------|------------|------------|
|  | 2008       | 2007       | 2008       | 2007       |
|  | RM'million | RM'million | RM'million | RM'million |
| Cash in hand and at bank Deposits with licensed banks Deposits with licensed finance companies | 1,260.8    | 988.1      | 463.2      | 295.4      |
|  | 4,122.4    | 4,310.6    | 3,749.7    | 4,228.9    |
|  | 0.7        | 0.6        | 0          | 0          |
|  | 5,383.9    | 5,299.3    | 4,212.9    | 4,524.3    |

The interest rate per annum of deposits, bank and cash balances that were effective as at balance sheet date were as follows:

|  | Group       |             | Company     |             |
|--|-------------|-------------|-------------|-------------|
|  | 2008        | 2007        | 2008        | 2007        |
|  | %           | %           | %           | %           |
| Deposits with licensed banks and finance companies Bank balances | 3.52 - 3.75 | 3.50 - 5.25 | 3.52 - 3.75 | 3.50 - 5.25 |
|  | 0.13 - 1.50 | 0.13 - 4.75 | 0.13 - 0.50 | 0.13 - 1.00 |

Deposits with licensed banks are held in the short term money market. Deposits have maturity periods ranging from 6 to 448 days (2007: 5 to 448 days) for the Group and the Company.

Deposits of the Group and the Company at the end of the financial year have an average maturity period of 31 days (2007: 60 days).

|   | Group                                |                                   | Company                    |                            |
|---|--------------------------------------|-----------------------------------|----------------------------|----------------------------|
|   | 2008<br>RM'million                   | 2007<br>RM'million                | 2008<br>RM'million         | 2007<br>RM'million         |
| Cash and cash equivalents at end of the financial year comprise:  |                                      |                                   | 1277                       |                            |
| Cash in hand and at bank Deposits with licensed banks Deposits with finance companies Cash at bank held in trust* | 1,260.8<br>4,122.4<br>0.7<br>(205.9) | 988.1<br>4,310.6<br>0.6<br>(65.6) | 463.2<br>3,749.7<br>0<br>0 | 295.4<br>4,228.9<br>0<br>0 |
|   | 5,178.0                              | 5,233.7                           | 4,212.9                    | 4,524.3                    |

<sup>\*</sup> Deposits and cash at bank held in trust are in respect of a grant given to a subsidiary by the Government of Malaysia for a designated capital project.

### 26 PAYABLES

|                                | Group              |                    | Company            |                    |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|
|                                | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Trade payables                 | 3,999.7            | 3,233.7            | 3,059.6            | 2,607.7            |
| Accrued interest on borrowings | 506.0              | 470.8              | 202.6              | 240.9              |
| Payroll liabilities            | 258.3              | 163.7              | 241.8              | 152.8              |
| Deposits                       | 39.7               | 15.4               | 35.0               | 9.8                |
| Other payables and accruals    | 383.7              | 418.0              | 195.3              | 121.5              |
|                                | 5,187.4            | 4,301.6            | 3,734.3            | 3,132.7            |

Credit terms of trade payables of the Group and the Company vary from 30 to 60 days (2007: 30 to 60 days) depending on the terms of the contracts.

### 27 SHORT TERM BORROWINGS

|  |   | Group                         |                              | Company              |                           |
|--|---|-------------------------------|------------------------------|----------------------|---------------------------|
|  |   | 2008<br>RM'million            | 2007<br>RM′million           | 2008<br>RM'million   | 2007<br>RM'million        |
| Portion of borrowings due with<br>one financial year (Note 28) |   | 653.1<br>239.9                | 1,727.4<br>215.8             | 400.9<br>0           | 1,422.7<br>0              |
| Short term loans Bankers' acceptances                          | <ul><li>secured</li><li>unsecured</li></ul> | 893.0<br>140.0<br>5.6<br>19.7 | 1,943.2<br>0<br>40.0<br>32.3 | 400.9<br>0<br>0<br>0 | 1,422.7<br>0<br>30.0<br>0 |
|  |   | 1,058.3                       | 2,015.5                      | 400.9                | 1,452.7                   |

The short term borrowings carry interest at rates ranging from 0.75% to 8.25% (2007: 2.50% to 8.30%) per annum for the Group and from 0.75% to 6.40% (2007: 2.50% to 8.30%) for the Company. Included in short term borrowings of the Group are loan stocks held by the Company in a subsidiary company which carries a coupon of 15.00% per annum.

|                                    |      | Grou               | P                  | Compa              | any                |
|------------------------------------|------|--------------------|--------------------|--------------------|--------------------|
|                                    | Note | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Unsecured                          |      |                    |                    |                    |                    |
| - Term loans                       | (a)  | 10,142.2           | 10,198.2           | 7,767.8            | 7,557.5            |
| - Bonds                            | (b)  | 6,961.5            | 8,173.8            | 5,781.3            | 6,954.6            |
| - Income Securities                | (c)  | 1,559.2            | 1,561.4            | 1,559.2            | 1,561.4            |
| - Amount due to Cagamas Berhad     |      | 138.5              | 248.0              | 138.5              | 248.0              |
| - Redeemable Unsecured Loan Stocks |      | 365.0              | 380.2              | 0                  | 0                  |
|                                    |      | 19,166.4           | 20,561.6           | 15,246.8           | 16,321.5           |
| Secured                            |      |                    |                    |                    |                    |
| - Term loans                       | (a)  | 714.7              | 437.5              | 0                  | 0                  |
| – Bonds                            | (b)  | 2,694.0            | 2,908.0            | 0                  | 0                  |
|                                    |      | 22,575.1           | 23,907.1           | 15,246.8           | 16,321.5           |

|  | Group              |                    | Company            |                    |
|--|--------------------|--------------------|--------------------|--------------------|
| · · · · · · · · · · · · · · · · · · ·                                  | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Payable within one year included under short term borrowings (Note 27) | 893.0              | 1,943.2            | 400.9              | 1,422.7            |
| Repayable after one year:  |                    |                    |                    |                    |
| After one and up to two years  | 874.6              | 904.1              | 361.2              | 363.2              |
| After two and up to five years   | 6,103.0            | 5,957.0            | 4,549.4            | 4,308.4            |
| After five and up to ten years   | 5,356.4            | 7,851.4            | 1,689.5            | 4,212.1            |
| After ten and up to twenty years                                       | 7,722.0            | 5,740.3            | 7,058.0            | 4,907.9            |
| After twenty and up to thirty years                                    | 1,043.1            | 874.2              | 628.9              | 484.0              |
| After thirty years   | 583.0              | 636.9              | 558.9              | 623.2              |
|  | 21,682.1           | 21,963.9           | 14,845.9           | 14,898.8           |
|  | 22,575.1           | 23,907.1           | 15,246.8           | 16,321.5           |

### 28 BORROWINGS (CONT'D.)

|  | Grou               | p . //             |
|--|--------------------|--------------------|
|  | 2008<br>RM'million | 2007<br>RM'million |
| Net book values of property, plant and equipment pledged |                    |                    |
| as security for term loans: (i) Machinery and equipment  | 2,651.4            | 2,812.5            |
| (ii) Building  | 2,651.4<br>802.5   | 818.0              |
|  | 3,453.9            | 3,630.5            |

Unsecured term loans include RM14.7 million (2007: RM16.1 million) due to the Government of Malaysia and RM3,571.4 million (2007: RM3,290.4 million) guaranteed by the Government of Malaysia.

### (a) Term loans

Details of term loans with designated derivative financial instruments are as follows:

### (i) 30-YEAR JPY26.0 BILLION TERM LOAN

On 30 March 2004, TNB Capital (L) Ltd ('TNBCL') entered into a 30-year JPY26.0 billion unsecured loan, paying interests at USD fixed rates. The loan will mature on 13 April 2034. The loan is an amortising loan whose principal is payable in 20 equal annual instalments. The first repayment shall be due on 13 April 2015. The interest is paid semi-annually on 13 April and 13 October each year commencing 13 October 2005. The balance as at 31 August 2008 is RM812.5 million (2007; RM789.7 million).

### USD-JPY Option on the principal repayment

In April 2004, TNBCL entered into Currency Option Agreements with a notional amount of JPY26.0 billion as a hedge on its Term Loan. This transaction enables TNBCL to reduce its exposure to losses that may arise from adverse fluctuation on foreign currency exchange rates in relation to the above Term Loan.

### (ii) 5-YEAR JPY11.0 BILLION TERM LOAN

On 13 December 2004, the Company entered into a 5-year JPY11.0 billion unsecured loan, paying floating interest rates. The loan will mature on 4 January 2010. The loan is an amortising loan whose principal amount is payable in 10 equal semi-annual instalments. The first repayment of the loan commenced on 4 July 2005. The translated Ringgit Malaysia of the loan as at 31 August 2008 in accordance with Company's accounting policy is equivalent to RM103.1 million (2007: RM167.0 million).

### JPY-MYR cross-currency swap ('CCS')

In October 2006, TNB entered into a CCS agreement that entitles TNB to receive a floating interest rate in JPY and to pay a fixed rate of 4.23% in Ringgit Malaysia. The notional principle of the swap is JPY7.7 billion. The effect of this transaction is to fix the interest rate payable on that loan and reduce TNB's exposure to losses that may arise from adverse fluctuation on foreign currency exchange rates and interest rates in relation to the loan.

### (iii) 9-YEAR USD503.0 MILLION TERM LOAN (ECA LOAN)

On 30 August 2006, the Company novated the Loan to TNB Capital (L) Ltd. ('TNBCL'), a wholly-owned subsidiary of TNB. The loan is guaranteed by the Company and recognised as an inter-company loan between the Company and TNBCL. The loan is an amortising loan in which the principal is payable in 17 equal semi-annual instalments and will mature on 28 February 2015. The first repayment of the loan is on 28 February 2007. The balance as at 31 August 2008 is RM1,405.8 million (2007: RM1,557.4 million).

### 28 BORROWINGS (CONT'D.)

### (a) Term loans (Cont'd.)

(iii) 9-YEAR USD503.0 MILLION TERM LOAN (ECA LOAN) (CONT'D.)

### Interest Rate Swap ('IRS')

The Company entered into IRS agreements on 10 October 2008 with effective period from 15 October 2008 to 28 February 2015 that entitles it to receive interest at floating rates, and obliges it to pay interest at fixed rate of 3.76% on aggregate notional principal of USD384.6 million.

The effect of this transaction is to effectively fix the interest rate payable on the loan.

### (b) Bonds

Details of bonds with designated derivative financial instrument are as follows:

(i) 5-YEAR RM200.0 MILLION CONVERTIBLE INCOME SECURITIES ('CRIS')

On 11 May 2004, the Company issued RM200.0 million 3.05% CRIS. The CRIS will mature on 8 May 2009.

The holders of the CRIS have the right at any time during the conversion period to convert all or any part of the CRIS into fully paid up ordinary shares of the Company at the conversion price.

On 28 Fabruary 2006, the exchange price of the CRIS was adjusted from PM11.47 per share to RM9.18 per share as a result of the bonus issue.

(ii) ISLAMIC DEBT SECURITIES - BAI BITHAMIN AJIL ('BaIDS')

On 28 June 2004, Kapar Energy Ventures Sdn Bhd ('KEV'), a subsidiary of TNB obtained PM3,402.0 million BaIDS to finance the acquisition of Stesen Janaelektrik Sultan Salahuddin Abdul Aziz. The tenure of the BaIDS Facility ranges from 1 to 15 years with a profit rate of between 3.65% and 8.70% per annum.

The BaIDS are secured by the following:

- (i) Charge over KEV's leased land. The charge of the leased land was not effected as at 31 August 2008.
- (ii) Debenture over KEV's assets and properties and assignment of all rights, title interest and benefits under the project documents, the assigned insurances, and the designated accounts to secure the payment and repayment of the total secured amounts.
- (iii) The Priority and Security Sharing Agreement.

The terms of BaIDS require deposits to be placed in the debt reserve account with a licensed bank to meet the debt servicing requirements. The terms of BaIDS also require KEV to maintain certain financial covenants.

### (c) Income Securities

Fixed Income Securities ('FIS')

The FIS consists of both redeemable bonds and Redeemable Preference Shares ('RPS'), details of which are as follows:

(i) 1,500 interest bearing 10-year redeemable unsecured bonds ("Bonds") of an aggregated nominal value of RM999.0 million issued at 100% of nominal value (in denominations of RM999,000.00 each), with detachable coupons representing interest on the Bonds. The Bonds are to be redeemed at par in two tranches with redemption amounts of RM999.0 million and RM499.5 million on 16 August 2011 and 19 September 2011 respectively, and;

### 28 BORROWINGS (CONT'D.)

### (c) Income Securities (Cont'd.)

(ii) 1,000 Class A PPS of PM1.00 each, issued at a premium of RM999.00 per share, and 500 Class B RPS of PM1.00 each, issued at a premium of PM999.00 per share. Both classes of RPS are redeemable at RM1,000 each at the Company's option at any time on or after 15 August 2010 and 19 September 2010, for Class A and B RPS respectively. If the Class A and B RPS are not redeemed by 16 August 2011 and 19 September 2011 respectively, an additional sum of PM1.0 million on the first tranche and RM0.5 million on the second tranche shall become due and payable under the final Bond Coupon payment for each of the tranches.

With the adoption of the Single Tier Tax System, the Company is now making coupon payments on the FIS instead of dividend. The interest payable under the Bond Coupon is PM94.5 million per annum payable semi-annually.

The FIS are classified as debt instruments and hence are reported as liabilities.

### 29 CONSUMER DEPOSITS

Consumers (with the exception of employees and government departments/agencies) are required to deposit a sum sufficient to cover charges for two months supply of energy as allowed under the regulation of the Licensee Supply (Amendment) Regulations 2002. In default of payment of the deposit within the time specified, the supply to the consumer's installation may be disconnected, subject to certain conditions laid out in the Regulations.

TNB shall pay a sum equivalent to 5% per annum on the amount of cash deposit as a rebate, on a pro-rated basis, in January every year.

### 30 EMPLOYEE BENEFITS

The movements during the financial year in the amounts recognised in the consolidated balance sheet are as follows:-

|  | Retirement<br>benefit<br>plan<br>RM'million | Retirement<br>medical<br>plan<br>RM'million | Total<br>RM'million |
|--|---|---|---------------------|
| Group  |   |   |                     |
| At 1 Saptember 2006<br>Charged to income statement | 1,011.0                                     | 1,303.1                                     | 2,314.1             |
|  | 249.0                                       | 400.2                                       | <u> </u>            |
| Contribution and benefits paid                     | (123.8)                                     | (108.9)                                     | (232.7)             |
| At 31 August 2007                                  | 1,136.2                                     | 1,594.4                                     | 2,730.6             |
| Charged to income statement                        | 246.6                                       | 423.0                                       | 569.5               |
| Contribution and benefits paid                     | (136.3)                                     | (139.1)                                     | (275.4)             |
| At 31 August 2008                                  | 1,246.5                                     | 1,878.3                                     | 3,124.8             |

## 30 EMPLOYEE BENEFITS (CONT'D.)

The amounts recognised in the consolidated balance sheet are analysed as follows:

|                                       | Retirement<br>benefit plan<br>RM'million | Retirement<br>medical plan<br>RM'million | Total<br>RM'million |
|---------------------------------------|--|--|---------------------|
| Group                                 |  |  |                     |
| At 31 August 2007                     |  |  |                     |
| Present value of obligations          | 2,049.6                                  | 3,053.5                                  | 5,103.1             |
| Fair value of plan assets             | (648.2)                                  | 0  | (648.2)             |
| Present value of unfunded obligations | 1,401.4                                  | 3,053.5                                  | 4,454.9             |
| Unrecognised actuarial losses         | (193.8)                                  | (1,459.1)                                | (1,652.9)           |
| Unrecognised past service cost        | (77.3)                                   | 0  | (77.3)              |
| Others                                | 5.9                                      | 0  | 5.9                 |
| Liability in the balance sheet        | 1,136.2                                  | 1,594.4                                  | 2,730.6             |
| At 31 August 2008                     |  |  |                     |
| Present value of obligations          | 2,211.9                                  | 3,185.9                                  | 5,397.8             |
| Fair value of plan assets             | (615.1)                                  | 0  | (615.1)             |
| Present value of unfunded obligations | 1,596.8                                  | 3,185.9                                  | 4,782.7             |
| Unrecognised actuarial losses         | (62.0)                                   | 0  | (62.0)              |
| Unrecognised past service cost        | (294.9)                                  | (1,307.6)                                | (1,602.5)           |
| Others                                | 6.6                                      | 0  | 6.6                 |
| Liability in the balance sheet        | 1,246.5                                  | 1,878.3                                  | 3,124.8             |

The expense recognised in the consolidated income statement is analysed as follows:

|                                | Retirement<br>benefit plan<br>RM'million | Retirement<br>medical plan<br>RM'million | Total<br>RM'million |
|--------------------------------|--|--|---------------------|
| Group                          |  |  |                     |
| 2007                           |  |  |                     |
| Current service cost           | 133.2                                    | 8.4                                      | 141.6               |
| Interest cost                  | 119.2                                    | 199.4                                    | 318.6               |
| Expected return on plan assets | (28.6)                                   | 0  | (28.6)              |
| Actuarial losses recognised    | 9.7                                      | 192.4                                    | 202.1               |
| Past service cost              | 15.5                                     | 0  | 15.5                |
| Total, included in staff costs | 249.0                                    | 400.2                                    | 649.2               |
| Actual return on plan assets   | (144.0)                                  | 0  | (144.0)             |

## 30 EMPLOYEE BENEFITS (CONT'D.)

|                                | Retirement<br>benefit plan<br>RM'million | Retirement<br>medical plan<br>RM'million | Total<br>RM'million |
|--------------------------------|--|--|---------------------|
| Group                          | *  |  |                     |
| 2008                           |  |  |                     |
| Current service cost           | 133.9                                    | 22.1                                     | 156.0               |
| Interest cost                  | 130.5                                    | 207.1                                    | 337.6               |
| Expected return on plan assets | (33.5)                                   | 0  | (33.5)              |
| Actuarial losses recognised    | 0  | 193.8                                    | 193.8               |
| Past service cost              | 15.5                                     | 0  | 15.5                |
| Others                         | 0.2                                      | 0  | 0.2                 |
| Total, included in staff costs | 246.6                                    | 423.0                                    | 669.6               |
| Actual return on plan assets   | (86.1)                                   | 0  | (86.1)              |

The charge to income statement was included in the administrative expenses.

The principal actuarial assumptions used in respect of the Group's defined benefit plans were as follows:

|                                   | Retirement<br>benefit plan<br>% | Retirement<br>medical plan<br>% |
|-----------------------------------|---------------------------------|---------------------------------|
| Group                             |                                 |                                 |
| At 31 August 2007                 |                                 |                                 |
| Discount rates                    | 6.5                             | 7.1                             |
| Expected return on plan assets    | 6.0                             | N/A                             |
| Expected rate of salary increases | 6.0                             | N/A                             |
| Medical cost inflation            |                                 |                                 |
| - inpatient                       | N/A                             | 7.9                             |
| - outpatient                      | N/A                             | 5.1                             |
| At 31 August 2008                 |                                 |                                 |
| Discount rates                    | 6.5                             | 7.1                             |
| Expected return on plan assets    | 6.0                             | 0                               |
| Expected rate of salary increases | 6.0                             | 0                               |
| Medical cost inflation            |                                 |                                 |
| - inpatient                       | N/A                             | 7.0                             |
| - outpatient                      | N/A                             | 5.5                             |

# 30 EMPLOYEE BENEFITS (CONT'D.)

The movements during the financial year in the amounts recognised in the Company's balance sheet are as follows:

|                                 | Retirement<br>benefit plan<br>RM'million | Retirement<br>medical plan<br>RM'million | Total<br>RM'million |
|---------------------------------|--|--|---------------------|
| Company                         |  |  |                     |
| At 1 September 2006             | 1,000.4                                  | 1,220.9                                  | 2,221.3             |
| Charged to income statement     | 246.2                                    | 391.8                                    | 638.0               |
| Contributions and benefits paid | (123.0)                                  | (108.9)                                  | (231.9)             |
| At 31 August 2007               | 1,123.6                                  | 1,503.8                                  | 2,627.4             |
| Charged to income statement     | 245.1                                    | 400.9                                    | 646.0               |
| Contributions and benefits paid | (135.3)                                  | (139.0)                                  | (274.3)             |
| At 31 August 2008               | 1,233.4                                  | 1,765.7                                  | 2,999.1             |

The amounts recognised in the Company's balance sheet are analysed as follows:

|                                       | Retirement<br>benefit plan<br>RM'million | Retirement<br>medical plan<br>RM'million | Total<br>RM'million |
|---------------------------------------|--|--|---------------------|
| At 31 August 2007                     |  |  |                     |
| Present value of obligations          | 2,042.9                                  | 2,962.9                                  | 5,005.8             |
| Fair value of plan assets             | (648.2)                                  | 0  | (648.2)             |
| Present value of unfunded obligations | 1,394.7                                  | 2,962.9                                  | 4,357.6             |
| Unrecognised actuarial losses         | (193.8)                                  | (1,459.1)                                | (1,652.9)           |
| Unrecognised past service cost        | (77.3)                                   | 0  | (77.3)              |
| Liability in the balance sheet        | 1,123.6                                  | 1,503.8                                  | 2,627.4             |
| At 31 August 2008                     |  |  |                     |
| Present value of obligations          | 2,205.2                                  | 3,073.3                                  | 5,278.5             |
| Fair value of plan assets             | (615.1)                                  | 0  | (615.1)             |
| Present value of unfunded obligations | 1,590.1                                  | 3,073.3                                  | 4,663.4             |
| Unrecognised actuarial losses         | (294.8)                                  | (1,307.6)                                | (1,602.4)           |
| Unrecognised past service cost        | (61.9)                                   | 0  | (61.9)              |
| Liability in the balance sheet        | 1,233.4                                  | 1,765.7                                  | 2,999.1             |

# 30 EMPLOYEE BENEFITS (CONT'D.)

The expense recognised in the Company's income statement is analysed as follows:

|                                | Retirement<br>benefit plan<br>RM'million | Retirement<br>medical plan<br>RM'million | Total<br>RM'million |
|--------------------------------|--|--|---------------------|
| Company                        |  |  |                     |
| 2007                           | Section 1 - Control of the               |  |                     |
| Current service cost           | 130.4                                    | 0  | 130.4               |
| Interest cost                  | 119.2                                    | 199.4                                    | 318.6               |
| Expected return on plan assets | (28.6)                                   | 0  | (28.6)              |
| Actuarial losses recognised    | 9.7                                      | 192.4                                    | 202.1               |
| Past service cost              | 15.5                                     | 0  | 15.5                |
| Total, included in staff costs | 246.2                                    | 391.8                                    | 638.0               |
| Actual return on plan assets   | (144.0)                                  | 0  | (144.0)             |

|                                | Retirement<br>benefit plan<br>RM'million | Retirement<br>medical plan<br>RM'million | Total<br>RM'million |
|--------------------------------|--|--|---------------------|
| 2008                           |  | No. 25 ATT                               |                     |
| Current service cost           | 132.6                                    | 0  | 132.6               |
| Interest cost                  | 130.5                                    | 207.1                                    | 337.6               |
| Expected return on plan assets | (33.5)                                   | 0  | (33.5)              |
| Actuarial losses recognised    | 0  | 193.8                                    | 193.8               |
| Past service cost              | 15.5                                     | 0  | 15.5                |
| Total, included in staff costs | 245.1                                    | 400.9                                    | 646.0               |
| Actual return on plan assets   | 86.1                                     | 0  | 86.1                |

The charge to income statement was included in the administrative expenses.

## 30 EMPLOYEE BENEFITS (CONT'D.)

The principal actuarial assumptions used in respect of the Company's defined benefit plans were as follows:

|                                   | Retirement<br>benefit plan<br>% |     |
|-----------------------------------|---------------------------------|-----|
| Company                           |                                 |     |
| At 31 August 2007                 |                                 |     |
| Discount rates                    | 6.5                             | 7.1 |
| Expected return on plan assets    | <b>ક.0</b>                      | N/A |
| Expected rate of salary increases | ક.0                             | N/A |
| Medical cost inflation            |                                 |     |
| – inpatient                       | N/A                             | 8.0 |
| – outpatient                      | N/A                             | 5.0 |
| At 31 August 2008                 |                                 |     |
| Discount rates                    | <u>65</u>                       | 7,1 |
| Expected return on plan assets    | <u>30</u>                       | OXA |
| Expected rate of salary increases | <b>3.0</b>                      | DYA |
| Medical cost inflation            |                                 | i   |
| – inpatient                       | DY/A                            |     |
| – outpatient                      | DY/A                            | 5.0 |

### 31 DEFERRED TAXATION

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when the deferred taxes relate to the same tax authority. The following amounts, determined after appropriate offsetting, are shown in the balance sheet:

|   | Gro                | oup                             | Com               | pany               |
|---|--------------------|---------------------------------|-------------------|--------------------|
|   | 2003<br>(RM##Illen | 2007 <sup>*</sup><br>RM'million | 2003<br>(IMFmill) | 2007<br>RM'million |
| Deferred tax liabilities: - subject to corporate income tax | (6,337.4)          | (6,274.4)                       | (E/499±1)         | (5,524.8)          |

### 31 DEFERRED TAXATION

The movements during the financial year relating to deferred tax are as follows:

|   | Group                |                      | Compa              | any                |
|---|----------------------|----------------------|--------------------|--------------------|
|   | 2008<br>RM'million   | 2007<br>RM'million   | 2008<br>RM'million | 2007<br>RM'million |
| As at the beginning of the financial year (Charged)/credited to income statement: | (6,274.4)            | (6,424.6)            | (5,524.8)          | (5,758.4)          |
| <ul><li>property, plant and equipment</li><li>provision and allowances</li></ul>  | (99.5)<br>36.5       | 149.1<br>1.1         | (13.7)<br>39.2     | 232.5<br>1.1       |
|   | (63.0)               | 150.2                | 25.5               | 233.6              |
| As at the end of the financial year   | (6,337.4)            | (6,274.4)            | (5,499.3)          | (5,524.8)          |
| Subject to income tax   |                      |                      |                    |                    |
| Deferred tax assets (before offsetting) Provision and allowances                  | 840.2                | 803.7                | 837.8              | 798.6              |
| Property, plant and equipment   | 488.1                | 558.5                | 037.0              | 778.0              |
| Offsetting  | (1,328.3)            | (1,362.2)            | (837.8)            | (798.6)            |
| Deferred tax assets (after offsetting)  | 0                    | 0                    | 0                  | 0                  |
| Deferred tax liabilities (before offsetting)                                      |                      |                      |                    |                    |
| Property, plant and equipment Offsetting  | (7,665.7)<br>1,328.3 | (7,636.6)<br>1,362.2 | (6,337.1)<br>837.8 | (6,323.4)<br>798.6 |
| Deferred tax liabilities (after offsetting)                                       | (6,337.4)            | (6,274.4)            | (5,499.3)          | (5,524.8)          |

The amount of deductible temporary differences and unused tax losses (both of which have no expiry date) for which no deferred tax assets is recognised in the balance sheet are as follows:

|  | Group              |                    | Company            |                    |
|--|--------------------|--------------------|--------------------|--------------------|
|  | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM′million |
| Deductible temporary differences<br>Tax losses | 1,338.8<br>1,184.2 | 1,688.4<br>1,222.7 | 0                  | 0                  |

As at 31 August 2008, the temporary differences associated with unremitted earnings of subsidiaries for which deferred tax liabilities have not been recognised amounted to RM1,021.8 million (2007: RM740.2 million).

### 32 DEFERRED INCOME

|   | Group              |                    | Company            |                    |
|---|--------------------|--------------------|--------------------|--------------------|
|   | 2008<br>RM'million | 2007<br>RM′million | 2008<br>RM'million | 2007<br>RM'million |
| As at the beginning of the financial year | 2,803.5            | 2,675.8            | 2,504.7            | 2,400.6            |
| Received during the financial year        | 441.0              | 454.6              | 383.7              | 395.9              |
| Released to income statement (Note 4)     | (345.1)            | (326.9)            | (307.6)            | (291.8)            |
| As at the end of the financial year       | 2,899.4            | 2,803.5            | 2,580.8            | 2,504.7            |

### 33 GOVERNMENT DEVELOPMENT GRANTS

|   | Grou               | р                  |
|---|--------------------|--------------------|
|   | 2008<br>RM'million | 2007<br>RM′million |
| As at the beginning of the financial year | 620.5              | 665.0              |
| Received during the financial year        | 0                  | 0                  |
| Released to income statement (Note 7)     | (56.9)             | (44.5)             |
| As at the end of the financial year       | 563.6              | 620.5              |

The Government development grants are in respect of capital grants received by an 80% subsidiary company Sabah Electricity Sdn Bhd for capital projects in the State of Sabah.

### 34 SHARE CAPITAL

|   | Group and     | d Company  |
|---|---------------|--|
|   | 2008<br>RM    | 2007<br>RM   |
| Authorised:   |               | The state of the s |
| Ordinary shares of RM1.00 each  | 5,000,000,000 | 5,000,000,000  |
| Special Rights Redeemable Preference Share of RM1.00 each   | 1             | 1  |
| Class A Redeemable Preference Shares of RM1.00 each As at the beginning/end of the financial year | 1,000         | 1,000  |
| Class B Redeemable Preference Shares of RM1.00 each As at the beginning/end of the financial year | 500           | 500  |

|   | Group and Company |               |
|---|-------------------|---------------|
|   | 2008<br>RM        | 2007<br>RM    |
| Issued and fully paid:  |                   |               |
| Ordinary shares of RM1.00 each  | 4,334,518,345     | 4,331,709,068 |
| Special Rights Redeemable Preference Share of RM1.00 each                     | 1                 | 1             |
| Total share capital issued and fully paid as at the end of the financial year | 4,334,518,346     | 4,331,709,069 |
|   |                   |               |
| Movements on issued ordinary shares of RM1.00 each                            |                   |               |
| As at the beginning of the financial year                                     | 4,331,709,068     | 4,135,170,337 |
| Issuance of ordinary shares of RM1.00 each under the ESOS II                  | 2,573,225         | 66,736,312    |
| Issuance of ordinary shares of RM1.00 under the                               |                   |               |
| exchange of Guaranteed Exchangeable Bonds                                     | 0                 | 114,699,925   |
| Issuance of ordinary shares of RM1.00 under the                               |                   | Thyan are at  |
| Unsecured Convertible Redeemable Income Securities                            | 236,052           | 15,102,494    |
| As at the end of the financial year   | 4,334,518,345     | 4,331,709,068 |

### Employees' Share Option Scheme ('ESOS')

The Company implemented a new Employees' Share Option Scheme II ('ESOS II') on 8 July 2003 for a period of 10 years. The ESOS II is governed by the bye-laws, which were approved by the shareholders at an Extraordinary General Meeting ('EGM') on 29 May 2003 and amended at the EGM held on 15 December 2005.

The main features of ESOS II are as follows:

- (a) The total number of ordinary shares to be issued by the Company under the ESOS II shall not exceed 10% of total issued and paid-up ordinary shares of the Company, such that not more than 50% of the shares available under the ESOS II are allocated, in aggregate, to Directors and senior management.
- (b) Not more than 10% of the shares available under the ESOS II is allocated to any individual Director or employee who, either singly or collectively through his/her associates, holds 20% or more in the issued and paid-up capital of the Company.
- (c) Any employee, including any Executive Director and those categorised as Fixed Term Senior Management, but excluding a Skim A employee (the scheme governing employees who, upon the corporatisation and privatisation of the Lembaga Letrik Negara in 1990, remain employed under the Government's terms and conditions) are eligible to participate in the ESOS II. Employees under the Fixed Term Senior Management are also entitled to the Performance Options based on them meeting prescribed performance targets.
- (d) The option price under the ESOS II is the higher of the weighted average market price of the shares as shown in the daily official list issued by the Bursa Malaysia Securities Berhad for the five trading days preceding the date of offer with a 10% discount on the nominal value of the shares, subject always that the discount shall not be applicable to any shares under the Performance Option.

### 34 SHARE CAPITAL (CONT'D.)

Employees' Share Option Scheme ('ESOS') (Cont'd.)

- (e) In the event of any alteration to the capital structure of the Company during the option period which expires on 7 July 2013, such corresponding alterations shall be made in:
  - (i) the number of new shares in relation to the ESOS II so far as unexercised;
  - (ii) the option price; and/or
  - (iii) the method of the exercise of the option.
- (f) Options granted under the ESOS II carry no dividends or voting rights. Upon exercise of the options, shares issued rank pari passu in all respects with the then existing ordinary shares of the Company.
- (g) The persons to whom the options have been granted under the ESOS II have no right to participate in any share issue of any other company within the Group.

Movements in the number of shares represented by options outstanding and their related weighted average exercise prices are as follows:

|                   | 2008                                     | 3                           | 2007                                     |                             |
|-------------------|--|-----------------------------|--|-----------------------------|
|                   | Average<br>exercise<br>price<br>RM/share | Number<br>of shares<br>'000 | Average<br>exercise<br>price<br>RM/share | Number<br>of shares<br>'000 |
| Beginning of year | 7.73                                     | 84,031                      | 6.89                                     | 133,821                     |
| Granted           | 6.56                                     | 21,351                      | 10.92                                    | 17,087                      |
| Exercised         | 6.80                                     | (2,573)                     | 6.86                                     | (66,736)                    |
| Expired           | 8.84                                     | (743)                       | 11.68                                    | (141)                       |
| At end of year    | 7.50                                     | 102,066                     | 7.73                                     | 84,031                      |

Employees' Share Option Scheme ('ESOS') (Cont'd.)

Details relating to the options exercised during the financial year are as follows:

| Exercise date                 | Fair value of<br>shares at share<br>issue date<br>RM/share | Exercise<br>price<br>RM/share | Number of<br>shares<br>issued as at<br>31.8.2008 |
|-------------------------------|--|-------------------------------|--|
| September 2007                | 9.45 - 10.30   | 6.71/6.99/7.42/7.33/11.07     | 353,125  |
| October 2007                  | 9.15 - 9.95  | 6.71/6.99/7.42/7.33           | 225,375  |
| November 2007                 | 8.80 - 9.40  | 6.71/6.99/7.42/7.33           | 154,125  |
| December 2007                 | 9.25 – 10.00   | 6.71/6.99/7.42/7.33           | 140,675  |
| January 2008                  | 8.95 - 9.95  | 6.71/7.42/7.33                | 237,875  |
| February 2008                 | 9.05 - 9.45  | 6.71/6.99/7.42/7.33           | 413,300  |
| March 2008                    | 6.80 - 8.95  | 6.71/6.99/7.33                | 56,250   |
| April 2008                    | 6.60 - 7.50  | 6.71                          | 9,000  |
| May 2008                      | 6.60 - 7.10  | 6.71                          | 8,750  |
| June 2008                     | 7.00 - 9.00  | 6.71/7.42/7.33                | 125,375  |
| July 2008                     | 7.70 - 8.40  | 6.71/6.99/7.33/6.33           | 155,025  |
| August 2008                   | 7.75 – 8.50  | 6.71/6.99/7.42/7.33/6.33      | 694,350  |
| Sub-total                     |  |                               | 2,573,225  |
| Conversion of Convertible Red | eemable Income Securities ('CRIS')                         | 9.18                          | 236,052  |
| TOTAL                         |  |                               | 2,809,277  |

Share options outstanding at the end of the year have the following expiry dates and exercise price.

| Expiry date | Exercise price<br>RM/share | Number of shares<br>2008 2007<br>'000 '000 |        |
|-------------|----------------------------|--|--------|
| 07.07.2013  | 6.71                       | 41,460                                     | 42,877 |
| 07.07.2013  | 6.99                       | 5,061                                      | 5,149  |
| 07.07.2013  | 7.75                       | 205  | 205    |
| 07.07.2013  | 7.42                       | 7,172                                      | 7,469  |
| 07.07.2013  | 8.39                       | 0  | 0      |
| 07.07.2013  | 7.80                       | 288  | 288    |
| 07.07.2013  | 7.33                       | 7,649                                      | 8,042  |
| 07.07.2013  | 7.33                       | 3,011                                      | 3,110  |
| 07.07.2013  | 9.189                      | 1,306                                      | 1,306  |
| 07.07.2013  | 11.07                      | 15,252                                     | 15,585 |
| 07.07.2013  | 11.558                     | 13   | 0      |
| 07.07.2013  | 11.237                     | 34   | 0      |
| 07.07.2013  | 9.189                      | 90   | 0      |
| 07.07.2013  | 9.189                      | 1,023                                      | 0      |
| 07.07.2013  | 10.716                     | 41   | 0      |
| 07.07.2013  | 6.33                       | 18,245                                     | 0      |
| 07.07.2013  | 7.33                       | 1,216                                      | 0      |
|             |                            | 102,066                                    | 84,031 |

Employees' Share Option Scheme ('ESOS') (Cont'd.)

The weighted average fair value of options granted during the year was determined using the Trinomial valuation model. The significant inputs into the model were as follows:

| Grant date | Share price<br>at grant date<br>RM | Exercise<br>price<br>RM | Option<br>life<br>Years | Expected<br>dividend<br>yield<br>% | Risk free<br>interest rate<br>% | 5 year average<br>share price<br>movement<br>% |
|------------|------------------------------------|-------------------------|-------------------------|------------------------------------|---------------------------------|--|
| 25.02.2005 | 8.24                               | 7.75                    | 8                       | 1.14                               | 3.64                            | 21.57  |
| 30.03.2005 | 8.00                               | 7.42                    | 8                       | 1.14                               | 3.33/3.72                       | 22.13  |
| 17.07.2005 | 8.56                               | 7.80                    | 7                       | 1.14                               | 3.40                            | 19.41  |
| 24.02.2006 | 8.70                               | 7.33                    | 7                       | 1.14                               | 3.43/3.63/3.77                  | 24.01  |
| 16.04.2006 | 8.65                               | 7.33                    | 7                       | 1.14                               | 3.55/3.96                       | 18.07  |
| 25.09.2006 | 9.91                               | 9.19                    | 6                       | 1.14                               | 3.86/3.95                       | 18.52  |
| 28.03.2007 | 11.50                              | 11.07                   | 6                       | 1.14                               | 3.48/3.50                       | 17.59  |
| 26.07.2007 | 10.95                              | 11.56                   | 6                       | 1.14                               | 3.48                            | 17.45  |
| 24.08.2007 | 10.29                              | 11.24                   | 6                       | 1.14                               | 3.60                            | 19.92  |
| 27.10.2007 | 9.28                               | 9.19                    | 6                       | 1.14                               | 3.56                            | 17.40  |
| 27.12.2007 | 9.54                               | 9.19/10.72              | 6                       | 1.14                               | 3.64/3.79                       | 17.47  |
| 25.04.2008 | 6.76                               | 6.33                    | 5                       | 1.14                               | 3.37/3.45                       | 20.32  |
| 30.07.2008 | 8.35                               | 7.33                    | 5                       | 1.14                               | 3.73/3.89                       | 22.42  |

The charges to income statement arising from share-based payments during the financial year amounted to RM27.1 million (2007: RM35.7 million) for the Group and RM25.4 million (2007: RM30.8 milion) for the Company as set out in Note 6 to these financial statements.

|   | 31.8.2008<br>RM′000 |
|---|---------------------|
| Ordinary share capital, at par<br>Share premium | 2,573<br>14,920     |
| Proceeds received on exercise of share options  | 17,493              |
| Fair value at exercise date of shares issued    | 23,359              |

### Special Rights Redeemable Preference Share ('Special Share')

(a) The Special Share would enable the Government of Malaysia through the Minister of Finance Incorporated to ensure that certain major decisions affecting the operations of the Company are consistent with the Government's policies. The Special Shareholder, which may only be the Government or any representative or person acting on its behalf, is entitled to receive notices of meetings but not to vote at such meetings of the Company. However, the Special Shareholder is entitled to attend and speak at such meetings.

The Special Shareholder has the right to appoint any person, but not more than six at any time, to be the Board of Directors of the Company.

Special Rights Redeemable Preference Share ('Special Share') (Cont'd.)

- (b) Certain matters, in particular the alteration of the Articles of Association of the Company relating to the rights of the Special Shareholder, creation and issue of additional shares which carry different voting rights, the dissolution of the Company, substantial disposal of assets, amalgamations, merger and takeover, require the prior consent of the Special Shareholder.
- (c) The Special Shareholder does not have any right to participate in the capital or profits of the Company.
- (d) The Special Shareholder has the right to require the Company to redeem the Special Share, at par, at any time.

### Class A and Class B Redeemable Preference Shares ('RPS')

The main features of the Company's Class A and Class B RPS are as follows:

- (a) The RPS do not carry any right to participate in the assets and surplus profit of the Company.
- (b) The RPS holders have no voting rights except on resolution to amend the RPS holders' rights.
- (c) These RPS are not convertible into ordinary shares.
- (d) The Company has the right to redeem all Class A and Class B RPS on or after 16 August 2010 and 19 September 2010 respectively at RM1,000 each.

As described in Note 28(c) to these financial statements, these RPS form part of the Company's Fixed Income Securities.

### 35 SHARE PREMIUM

|   | Group and Company  |                    |
|---|--------------------|--------------------|
|   | 2008<br>RM'million | 2007<br>RM'million |
| As at the beginning of the financial year<br>Arising in respect of ordinary shares issued during the financial year | 5,242.0<br>16.8    | 3,912.9<br>1,329.1 |
| As at the end of the financial year   | 5,258.8            | 5,242.0            |

# 36 REVALUATION AND OTHER RESERVES

|  | Group              |                    | Company            |                    |
|--|--------------------|--------------------|--------------------|--------------------|
|  | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| Non-distributable                      |                    |                    |                    |                    |
| Revaluation reserve                    | 935.6              | 1,000.6            | 925.5              | 990.5              |
| Foreign currency translation reserve   | (133.6)            | 5.2                | 0                  | 0                  |
| Reserve on consolidation               | (146.6)            | (146.6)            | 0                  | 0                  |
| Employees' Share Option Scheme reserve | 62.8               | 35.7               | 56.2               | 30.8               |
|  | 718.2              | 894.9              | 981.7              | 1,021.3            |

The movements in each category of reserves were as follows:

|  | Group                      |                         | Company                   |                           |
|--|----------------------------|-------------------------|---------------------------|---------------------------|
|  | 2008<br>RM'million         | 2007<br>RM'million      | 2008<br>RM'million        | 2007<br>RM'million        |
| Revaluation reserve  As at the beginning of the financial year Realisation of revaluation reserve  | 1,000.6<br>(65.0)          | 1,027.7<br>(27.1)       | 990.5<br>(65.0)           | 1,017.6<br>(27.1)         |
| As at the end of the financial year  | 935.6                      | 1,000.6                 | 925.5                     | 990.5                     |
| Foreign currency translation reserve  As at the beginning of the financial year  Arising in the financial year                                     | 5.2<br>(138.8)             | (37.5)<br>42.7          | 0                         | 0 0                       |
| As at the end of the financial year  | (133.6)                    | 5.2                     | 0                         | 0                         |
| Reserve on consolidation As at the beginning/end of the financial year   | (146.6)                    | (146.6)                 | 0                         | 0                         |
| Employees' Share Option Scheme reserve As at the beginning of the financial year Arising in the financial year                                     | 35.7<br>27.1               | 0<br>35.7               | 30.8<br>25.4              | 0<br>30.8                 |
| As at the end of the financial year  | 62.8                       | 35.7                    | 56.2                      | 30.8                      |
| Total revaluation and other reserves  As at the beginning of the financial year  Arising in the financial year  Realisation of revaluation reserve | 894.9<br>(111.7)<br>(65.0) | 843.6<br>78.4<br>(27.1) | 1,021.3<br>25.4<br>(65.0) | 1,017.6<br>30.8<br>(27.1) |
| As at the end of the financial year  | 718.2                      | 894.9                   | 981.7                     | 1,021.3                   |

### 37 RETAINED PROFITS

Subject to agreement by the Inland Revenue Board, the Company has sufficient tax credits under Section 108 of the Income Tax Act, 1967 available to frank approximately RM1,739.0 million (2007: RM1,858.3 million) of its retained profits as at 31 August 2008, if paid out as dividends. The remaining profits of RM13,431.8 million (2007: RM11,427.2 million) can be distributed as exempt dividends under the Single Tier Tax system.

In addition, the Company has tax exempt income as at 31 August 2008 arising from the Income Tax (Amendment) Act, 1999, relating to tax on income earned in 1999 being waived and exempt dividend income amounting to approximately RM247.3 million (2007: RM47.3 million) available for distribution as tax exempt dividends to shareholders. This tax exempt income is subject to agreement by the Inland Revenue Board.

### **38 COMMITMENTS**

(a) Capital and other commitments for 5 years

|   | Group              |                    | Company            |                    |
|---|--------------------|--------------------|--------------------|--------------------|
|   | 2008<br>RM'million | 2007<br>RM′million | 2008<br>RM'million | 2007<br>RM'million |
| Authorised capital expenditure not provided in the financial statements |                    |                    |                    |                    |
| Contracted  | 548.0              | 1,141.2            | 284.6              | 912.9              |
| Not contracted  | 16,352.9           | 11,580.6           | 15,964.3           | 11,283.5           |
|   | 16,900.9           | 12,721.8           | 16,248.9           | 12,196.4           |

(b) Non-cancellable operating lease commitments

|   | Group and (        | Company            |
|---|--------------------|--------------------|
|   | 2008<br>RM'million | 2007<br>RM'million |
| Future minimum lease payments                     |                    |                    |
| Not later than one year                           | 13.3               | 13.3               |
| Later than one year and not later than five years | 11.0               | 24.3               |
|   | 24.3               | 37.6               |

The above lease payments relate to the non-cancellable operating leases of the Group and the Company.

### 39 CONTINGENT LIABILITIES (UNSECURED)

|  | Group      |            | Company    |            |
|--|------------|------------|------------|------------|
| w  | 2008       | 2007       | 2008       | 2007       |
|  | RM'million | RM'million | RM'million | RM'million |
| Claims by third parties                                | 1,077.5    | 943.0      | 947.1      | 917.9      |
| Trade guarantees and performance bonds                 | 1.2        | 5.4        | 0          | 0          |
| Corporate guarantees given to financial institutions   |            |            |            |            |
| in respect of facilities granted to subsidiaries       | 307.5      | 170.8      | 3,739.4    | 3,894.4    |
| Stamp duties on transfer of assets to a subsidiary (1) | 108.0      | 108.0      | 0          | 0          |
| Other contingent liabilities                           | 5.9        | 29.7       | 0          | 0          |
|  | 1,500.1    | 1,256.9    | 4,686.5    | 4,812.3    |

Claims by third parties include claims by contractors, consultants, consumers and former employees. These claims are being resolved and the Directors are of the opinion that their outcome will not have a material adverse effect on the financial position of both the Group and the Company.

(1) In respect of stamp duties on transfer of assets from Lembaga Letrik Sabah, SESB is in the process of obtaining a vesting order to exempt itself from any potential liability.

### 40 SIGNIFICANT RELATED PARTY DISCLOSURES

The related party transaction of the Company comprises mainly transactions between the Company and its subsidiaries and associates namely the followings:

### Subsidiaries

- TNB Janamanjung Sdn Bhd
- TNB Fuel Services Sdn Bhd
- Kapar Energy Ventures Sdn Bhd
- Tenaga Switchgear Sdn Bhd
- Malaysia Transformers Manufacturing Sdn Bhd
- Sabah Electricity Sdn Bhd
- TNB Research Sdn Bhd
- TNB Capital Ltd
- TNB Repair & Maintenance Sdn Bhd
- Tenaga Cable Industries Sdn Bhd

### Associates

- Teknologi Tenaga Perlis Consortium Sdn Bhd
- GB3 Sdn Bhd
- Fibrecomm Network (M) Sdn Bhd

All related party transactions were entered into in a normal course of business and at prices available to third parties or at negotiated terms.

Khazanah Nasional Berhad (Khazanah) is a major shareholder with 37.81% equity interest and is a related party of the Company.

### 40 SIGNIFICANT RELATED PARTY DISCLOSURES (CONT'D.)

In addition to related party balances mentioned elsewhere in the financial statements, set out below are other significant related party transactions which were carried out on terms and conditions negotiated amongst the related parties:

|     |  | Grou                      | ір                 | Comp                                  | any                |
|-----|--|---------------------------|--------------------|---------------------------------------|--------------------|
|     |  | 2008<br>RM'million        | 2007<br>RM'million | 2008<br>RM'million                    | 2007<br>RM'million |
| (a) | Transaction with subsidiaries                |                           |                    |                                       |                    |
|     | Income                                       | Section of the section of |                    |                                       |                    |
|     | - Sales of electricity                       | 0                         | 0                  | 24.2                                  | 22.6               |
|     | <ul> <li>Interest income</li> </ul>          | 0                         | 0                  | 133.8                                 | 285.6              |
|     | <ul> <li>Dividend income</li> </ul>          | 0                         | 0                  | 658.5                                 | 0.4                |
|     | - Rental income                              | 0                         | 0                  | 25.1                                  | 12.9               |
|     | Expenditure                                  |                           |                    |                                       |                    |
|     | <ul> <li>Purchases of electricity</li> </ul> | 0                         | 0                  | 3,443.2                               | 3,574.4            |
|     | <ul> <li>Interest expense</li> </ul>         | 0                         | 0                  | 161.8                                 | 201.8              |
|     | Amount due from subsidiaries                 | Ó                         | 0                  | 2,299.0                               | 1,953.2            |
|     | Amount due to subsidiaries                   | 0                         | 0                  | 4,718.7                               | 5,024.5            |
| (b) | Transaction with associates                  |                           |                    |                                       |                    |
|     | Income                                       | 21.72 (Spine)             |                    | · · · · · · · · · · · · · · · · · · · |                    |
|     | <ul> <li>Sales of electricity</li> </ul>     | 0.3                       | 0.3                | 0.3                                   | 0.3                |
|     | <ul> <li>Interest income</li> </ul>          | 4.8                       | 5.9                | 4.8                                   | 5.9                |
|     | <ul> <li>Leasing income</li> </ul>           | 0                         | 0                  | 4.5                                   | 1.1                |
|     | Expenditure                                  |                           |                    |                                       |                    |
|     | <ul> <li>Purchases of electricity</li> </ul> | 1,306.5                   | 1,194.9            | 1,306.5                               | 1,194.9            |
|     | Amount due from associates                   | 37.8                      | 34.6               | 37.8                                  | 34.6               |
|     | Amount due to associates                     | 345.2                     | 224.5              | 345.2                                 | 224.5              |

Sales and purchases of electricity to and from associates are aggregated because the transactions are similar in nature and no single transaction is significant enough to warrant separate disclosure.

As stated under paragraph 5 of FRS Standard No. 124 "Related Party Disclosures", disclosure of significant related party transactions between a state-controlled enterprise with other state-controlled enterprise is not required to be disclosed in the financial statements.

Accordingly, significant related party transactions between the Company and other Government controlled entities are not presented as the principal shareholders of the Company are the Government of Malaysia and related entities owned by the Government.

### 40 SIGNIFICANT RELATED PARTY DISCLOSURES (CONT'D.)

|  | Grou               | ıp                 | Comp               | any                |
|--|--------------------|--------------------|--------------------|--------------------|
|  | 2008<br>RM'million | 2007<br>RM'million | 2008<br>RM'million | 2007<br>RM'million |
| (c) <u>Key management compensation</u> Short term employee benefits          |                    |                    |                    |                    |
| - Salaries, allowances and bonus   | 9.0                | 7.4                | 6.1                | 4.9                |
| <ul><li>Benefit in kind</li><li>Contribution to Employee Provident</li></ul> | 0.2                | 0.2                | 0.2                | 0.2                |
| Fund (EPF)   | 1.0                | 0.8                | 0.7                | 0.6                |
| - Other staff benefits   | 0.5                | 0.5                | 0.2                | 0.3                |
| Share-based payment  |                    |                    |                    |                    |
| – ESOS expense   | 2.5                | 3.3                | 2.2                | 3.0                |

Key management personnel are the persons who have authority and responsibility for planning, directing and controlling the activities of the Company or the Group either directly or indirectly but excludes the non-executive Directors of the Company.

Whenever exist, related party transactions also includes transaction with entities that are controlled, jointly controlled or significantly influenced directly or indirectly by any key management personnel or their close family members.

### 41 SEGMENTAL REPORTING

As the principal activities of the Group and the Company are the generation, transmission, distribution and sale of electricity, segmental reporting is deemed not necessary.

### 42 FINANCIAL RISK MANAGEMENT

### (a) Financial risk management objectives and policies

The main risks arising from the Group's financial assets and liabilities are foreign currency exchange, interest rate, credit, liquidity and cash flow risks.

The Group's overall risk management seeks to minimise potential adverse effects of these risks on the financial performance of the Group.

The Group has established risk management policies, guidelines and control procedures to manage its exposure to financial risks. Hedging transactions are determined in the light of commercial commitments; derivative financial instruments are used only to hedge underlying commercial exposures and are not held or sold for speculative purposes.

### Currency risk

The foreign currency exchange risk of the Group arises from borrowings denominated in foreign currencies. The main currency exposures are primarily in United States Dollar and Japanese Yen. The Group also has subsidiaries operating in foreign countries, which generate revenue and incur costs denominated in foreign currencies. The main currency exposure is primarily in United States Dollar.

### (a) Financial risk management objectives and policies (Cont'd.)

### • Interest rate risk

The Group has each and bank balances and deposits placed with creditworthy licensed banks and financial institutions. The Group manages its interest rate risks by placing such balances on varying maturities and interest rate terms.

The Group's debt includes bank overdrafts, bank borrowings, bonds and notes. The Group's interest rate risk management objective is to manage the interest expense consistent with maintaining an acceptable level of exposure to interest rate fluctuations. In order to achieve this objective, the Group targets a mix of fixed and floating debt based on assessment of its existing exposure and desired interest rate profile. To obtain this mix, the Group combines cross-currency interest rate swaps, interest rate swaps and options to convert certain long term foreign currency borrowings from variable to fixed rate and vice versa.

### Credit risk

Financial assets that potentially subject the Group to concentrations of credit risk consist primarily of receivables, cash and cash equivalents, marketable securities and financial instruments used in hedging activities.

Due to the nature of the Group's business, customers are mainly segregated into business and residential. The Group has no other major significant concentration of credit risk other than business and residential trade receivables due to its diverse customer base. Credit risk is managed through the application of credit limits and monitoring procedures. Where appropriate, the Group obtained deposits or bank guarantees from the customers.

The Group places its cash and cash equivalents and marketable securities with a number of creditworthy financial institutions. The Group's policy limits the concentration of financial exposure to any single financial institution.

All hadging instruments are executed with creditworthy financial institutions with a view to limit the credit risk exposure of the Group. The Group, however is exposed to credit-related losses in the event of non-performance by counterparties to financial derivative instruments, but does not expect any counterparties to fail to meet their obligations.

### • Liquidity and cash flow risks

In the management of liquidity and cash flow rish, the Group monitors and maintains a level of cash and cash equivalent deemed adequate by the management to finance the Group's operations and mitigate the effects of fluctuations in cash flows. Due to the dynamic nature of the underlying business, the Group aims at maintaining flexibility in funding by keeping both committed and uncommitted credit lines available.

### (b) Interest rate risk

### Fair value interest rate risk

The Group's exposure to risk that the value of a financial instrument will fluctuate due to changes in market interest rates as mentioned in Note 28.

### Cash flow interest rate risk

The Group's income and operating cash flows are substantially independent of changes in market interest rates. Interest rate exposure arises from the Group's borrowings and deposits, and is managed through the use of fixed and floating rate debt and derivative financial instruments. Derivative financial instruments are used, where appropriate, to generate the desired interest rate profile.

# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

### 42 FINANCIAL RISK MANAGEMENT (CONT'D.)

### (b) Interest rate risk (Cont'd.)

Cash flow interest rate risk (Cont'd.)

The weighted average interest rate of the Company's fixed rate borrowings at balance sheet date was 5.44% (31.8.2007: 5.79%) per annum. After the interest rate swap, the Company's weighted average interest rate at balance sheet date was 5.49% (31.8.2007: 5.85%) per annum.

The tables below summarise the Group and the Company's exposure to interest rate risk. Included in the tables are the Group and the Company's financial assets and liabilities at carrying amounts, categorised by the earlier of repricing or contractual maturity dates. The off-balance sheet gap represents the net notional amounts of all interest rate sensitive derivative instruments. Sensitivity to interest rates arises from mismatches in the repricing dates, cash flows and other characteristics of assets and their corresponding liability funding.

|   | Effective<br>interest<br>at balance<br>sheet date<br>% per annum | Floating<br>rate<br>RM'million | <1 year<br>RM'million | 1-2 years<br>RM'million | maturing or<br>2-3 years | instruments<br>repriced in<br>3-4 years<br>RM'million | 4-5 years<br>RM'million | > 5 years<br>RM'million | Total<br>interest<br>sensitive<br>RM'million |
|---|--|--------------------------------|-----------------------|-------------------------|--------------------------|---|-------------------------|-------------------------|--|
| Group   |  | C. E.                          |                       |                         |                          |   |                         |                         |  |
| 2008  |  |                                |                       |                         |                          |   |                         |                         |  |
| <u>Financial assets</u> Trade and other receivables | 0  | 17.1                           | 281.2                 | 0                       | 0                        | 17.1  | 267.1                   | 0                       | 582.5  |
| Amount due from associates                          | 0  | 0                              | 37.8                  | 0                       | 0                        | 0   | 1.1                     | 0                       | 38.9   |
| Deposits and bank balances                          | 0  | 122.5                          | 2,952.5               | 0                       | 0                        | 0   | 0                       | 0                       | 3,075.0                                      |
| Deposits and bank balances                          |  | 122.5                          | 2,752.5               |                         |                          |   |                         |                         | 3,073.0                                      |
|   |  | 139.6                          | 3,271.5               | 0                       | 0                        | 17.1  | 268.2                   | 0                       | 3,696.4                                      |
| 2007  |  |                                |                       |                         |                          |   |                         |                         |  |
| Financial assets                                    |  |                                |                       |                         |                          |   |                         |                         |  |
| Trade and other receivables                         | 0  | 22.2                           | 202.2                 | 0                       | 0                        | 0   | 0                       | 0                       | 224.4  |
| Amount due from associates                          | 0  | 0                              | 34.6                  | 0                       | 0                        | 0   | 0                       | 0                       | 34.6   |
| Deposits and bank balances                          | 0  | 87.1                           | 4,741.7               | 0                       | 0                        | 0   | 0                       | 0                       | 4,828.8                                      |
|   |  | 109.3                          | 4,978.5               | 0                       | 0                        | 0   | 0                       | 0                       | 5,087.                                       |

# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

### 42 FINANCIAL RISK MANAGEMENT (CONT'D.)

|                                 | Total<br>interest<br>sensitive<br>RM'million  | Non<br>interest<br>sensitive<br>RM'million | Balances<br>under<br>Islamic<br>principles<br>RM'million | Total<br>RM'million |
|---------------------------------|---|--|--|---------------------|
| Group<br>2008                   |   |  |  |                     |
| Financial assets                |   |  |  |                     |
| Investments                     | 0   | 50.6                                       | 0  | 50.6                |
| Trade and other Receivables     | 582.5   | 2,513.1                                    | 350.9  | 3,446.5             |
| Amount due from Associates      | 38.9  | 7.2  | 0  | 46.1                |
| Marketable securities           | 0   | 8.5  | 0  | 8.5                 |
| Deposits and bank balances      | 3,075.0   | 802.5                                      | 1,506.4  | 5,383.9             |
| Other assets (amount receivable | Service All Property of the Control |  | 2-16-61  |                     |
| from swap counterparties)       | 0   | 0.2  | 0  | 0.2                 |
|                                 | 3,696.4   | 3,382.1                                    | 1,857.3  | 8,935.8             |
| 2007                            |   |  |  |                     |
| Financial assets                |   |  | -  |                     |
| Investments                     | 0   | 50.6                                       | 0  | 50.6                |
| Trade and other receivables     | 224.4   | 2,332.2                                    | 365.2  | 2,921.8             |
| Amount due from associates      | 34.6  | 10.7                                       | 0  | 45.3                |
| Marketable securities           | 0   | 10.6                                       | 0  | 10.6                |
| Deposits and bank balances      | 4,828.8   | 9.7  | 460.8  | 5,299.3             |
| Other assets (amount receivable | ,,==0.0   |  | ,55.0  | 0,277.0             |
| from swap counterparties)       | 0   | 0.3  | 0  | 0.3                 |
| in the second second            | 5,087.8   | 2,414.1                                    | 826.0  | 8,327.9             |

|                              | Effective<br>interest<br>at balance<br>sheet date<br>% per annum | Floating<br>rate<br>RM'million | <1 year<br>RM'million | 1-2 years<br>RM'million |   | instruments<br>repriced in<br>3-4 years<br>RM'million | 4-5 years<br>RM'million | > 5 years<br>RM'million | Total<br>interest<br>sensitive<br>RM'million |
|------------------------------|--|--------------------------------|-----------------------|-------------------------|---|---|-------------------------|-------------------------|--|
| Company                      |  |                                |                       | SER                     |   |   |                         |                         |  |
| 2008                         |  |                                |                       |                         |   |   |                         |                         |  |
| Financial assets             |  |                                |                       | M.S.                    |   |   |                         |                         |  |
| Amount due from subsidiaries | 6.03   | 560.5                          | 1,385.1               | 52.8                    | 0 | 0   | 0                       | 0                       | 1,998.4                                      |
| Amount due from associates   | 0  | 0                              | 37.8                  | 0                       | 0 | 0   | 0                       | 0                       | 37.8   |
| Deposits and bank balances   | 0  | 0                              | 2,444.0               | 0                       | 0 | 0   | 0                       | 0                       | 2,444.0                                      |
|                              |  | 560.5                          | 3,866.9               | 52.8                    | 0 | 0   | 0                       | 0                       | 4,480.2                                      |
| 2007                         |  |                                |                       |                         |   |   |                         |                         |  |
| Financial assets             |  |                                |                       |                         |   |   |                         |                         | -  |
| Amount due from subsidiaries | 8.94   | 648.5                          | 946.7                 | 54.6                    | 0 | 0   | 0                       | 0                       | 1,649.8                                      |
| Amount due from associates   | 0  | 0                              | 34.6                  | 0                       | 0 | 0   | 0                       | 0                       | 34.6   |
| Deposits and bank balances   | 0  | 0                              | 3,768.1               | 0                       | 0 | 0   | 0                       | 0                       | 3,768.1                                      |
|                              |  | 648.5                          | 4,749.4               | 54.6                    | 0 | 0   | 0                       | 0                       | 5,452.5                                      |

|                                 | Total<br>interest<br>sensitive<br>RM'million | Non<br>interest<br>sensitive<br>RM'million | Balances<br>under<br>Islamic<br>principles<br>RM'million | Total<br>RM'million |
|---------------------------------|--|--|--|---------------------|
| Company                         |  | A LONG                                     |  |                     |
| 2008                            |  |  |  |                     |
| Financial assets                |  |  |  |                     |
| Investments                     | 0  | 110.0                                      | 0  | 110.0               |
| Trade and other receivables     | 0  | 1,888.7                                    | 350.9  | 2,239.6             |
| Amount due from subsidiaries    | 1,998.4                                      | 300.6                                      | 0  | 2,299.0             |
| Amount due from associates      | 37.8   | 0  | 0  | 37.8                |
| Marketable securities           | 0  | 8.5  | 0  | 8.5                 |
| Deposits and bank balances      | 2,444.0                                      | 419.6                                      | 1,349.3  | 4,212.9             |
| Other assets (amount receivable |  |  |  |                     |
| from swap counterparties)       | 0  | 0.2  | 0  | 0.2                 |
|                                 | 4,480.2                                      | 2,727.6                                    | 1,700.2  | 8,908.0             |

# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

### 42 FINANCIAL RISK MANAGEMENT (CONT'D.)

|                                 | Total<br>interest<br>sensitive<br>RM'million | Non<br>interest<br>sensitive<br>RM'million | Balances<br>under<br>Islamic<br>principles<br>RM'million | Total<br>RM'million |
|---------------------------------|--|--|--|---------------------|
| Company                         |  |  |  | L-17:17:            |
| 2007                            |  |  |  |                     |
| Financial assets                |  |  |  |                     |
| Investments                     | 0  | 110.0                                      | 0  | 110.0               |
| Trade and other receivables     | 0  | 1,789.9                                    | 365.2  | 2,155.1             |
| Amount due from subsidiaries    | 1,649.8                                      | 303.4                                      | 0  | 1,953.2             |
| Amount due from associates      | 34.6   | 0  | 0  | 34.6                |
| Marketable securities           | 0  | 10.6                                       | 0  | 10.6                |
| Deposits and bank balances      | 3,768.1                                      | 249.4                                      | 506.8  | 4,524.3             |
| Other assets (amount receivable |  |  |  |                     |
| from swap counterparties)       | 0  | 0.3  | 0  | 0.3                 |
|                                 | 5,452.5                                      | 2,463.6                                    | 872.0  | 8,788.1             |

|   | Effective<br>interest<br>at balance<br>sheet date<br>% per annum | Floating<br>rate<br>RM'million | <1 year<br>RM'million | 1-2 years<br>RM'million |           | instruments<br>repriced in<br>3-4 years<br>RM'million | 4-5 years<br>RM'million | > 5 years<br>RM'million | Total<br>interest<br>sensitive<br>RM'million |
|---|--|--------------------------------|-----------------------|-------------------------|-----------|---|-------------------------|-------------------------|--|
| Group<br>2008   |  |                                |                       |                         |           |   |                         |                         |  |
| Financial liabilities Trade and other payables              | 0  | 0                              | 484.4                 | 0                       | 0         | 0   | 0                       | 0                       | 484.4  |
| Amount due to associates                                    | 0  | 0                              | 349.1                 | 0                       | 0         | 0   | 0                       | 601.9                   | 951.0  |
| Borrowings  | 5.45   | 1,775.7                        | 61.0                  | 205.5                   | 2,941.0   | 626.5   | 250.0                   | 12,036.8                | 17,896.5                                     |
|   |  | 1,775.7                        | 894.5                 | 205.5                   | 2,941.0   | 626.5   | 250.0                   | 12,638.7                | 19,331.9                                     |
| On-balance sheet interest sensitivity gap Off-balance sheet | 0  | (1,636.1)                      | 2,377.0               | (205.5)                 | (2,941.0) | (626.5)   | 18.3                    | (12,638.7)              | (15,652.5)                                   |
| interest sensitivity gap                                    | 0  | 103.1                          | 0                     | (102.3)                 | 0         | 0   | 0                       | 0                       | 0.8  |
| Total interest sensitivity gap                              |  | (1,533.0)                      | 2,377.0               | (307.8)                 | (2,941.0) | (626.5)   | 18.3                    | (12,638.7)              | (15,651.7)                                   |

|                                | Effective<br>interest<br>at balance<br>sheet date<br>% per annum | Floating<br>rate<br>RM'million | <1 year<br>RM'million | 1-2 years<br>RM'million |         | instruments<br>repriced in<br>3-4 years<br>RM'million | 4-5 years<br>RM'million | > 5 years<br>RM'million | Total<br>interest<br>sensitive<br>RM'million |
|--------------------------------|--|--------------------------------|-----------------------|-------------------------|---------|---|-------------------------|-------------------------|--|
| Group                          |  |                                |                       |                         |         |   |                         |                         |  |
| 2007                           |  |                                |                       |                         |         |   |                         |                         |  |
| <u>Financial liabilities</u>   |  |                                |                       |                         |         |   |                         |                         |  |
| Trade and other payables       | 0  | 0                              | 491.9                 | 0                       | 0       | 0   | 0                       | 0                       | 491.9  |
| Amount due to associates       | 0  | 0                              | 224.5                 | 0                       | 0       | 0   | 0                       | 0                       | 224.5  |
| Borrowings                     | 5.77   | 1,941.8                        | 4.7                   | 63.8                    | 307.2   | 3,008.0   | 639.1                   | 11,814.1                | 17,778.7                                     |
|                                |  | 1,941.8                        | 721.1                 | 63.8                    | 307.2   | 3,008.0   | 639.1                   | 11,814.1                | 18,495.1                                     |
| On-balance sheet               |  |                                |                       |                         |         |   |                         |                         |  |
| interest sensitivity gap       | 0  | (1,832.5)                      | 4,257.4               | (63.8)                  | (307.2) | (3,008.0)   | (639.1)                 | (11,814.1)              | (13,407.3)                                   |
| Off-balance sheet              |  |                                |                       |                         |         |   |                         |                         |  |
| interest sensitivity gap       | 0  | 167.0                          | 0                     | 0                       | (170.5) | 0   | 0                       | 0                       | (3.5)  |
| Total interest sensitivity gap |  | (1,665.5)                      | 4,257.4               | (63.8)                  | (477.7) | (3,008.0)   | (639.1)                 | (11,814.1)              | (13,410.8)                                   |

|                                      | Total<br>interest<br>sensitive<br>RM'million | Non<br>interest<br>sensitive<br>RM'million | Balances<br>under<br>Islamic<br>principles<br>RM'million | Total<br>RM'million |
|--------------------------------------|--|--|--|---------------------|
| Group<br>2008                        |  |  |  |                     |
| Financial liabilities                |  |  |  |                     |
| Trade and other payables             | 484.4  | 4,196.3                                    | 0  | 4,680.7             |
| Amount due to associate              | 951.0  | (604.2)                                    | 0  | 346.8               |
| Borrowings                           | 17,896.5                                     | 272.4                                      | 5,077.5  | 23,246.4            |
| Other liabilities (amount payable to |  |  |  |                     |
| swap counterparties)                 | 0  | 0.7  | 0  | 0.7                 |
|                                      | 19,331.9                                     | 3,865.2                                    | 5,077.5  | 28,274.6            |
| On-balance sheet                     |  |  |  |                     |
| interest sensitivity gap             | (15,635.5)                                   | (483.1)                                    | (3,220.2)  | (19,338.8)          |
| Off-balance sheet                    |  |  |  |                     |
| interest sensitivity gap             | 0.8  | 0  | 0  | 0.8                 |
| Total interest sensitivity gap       | (15,634.7)                                   | (483.1)                                    | (3,220.2)  | (19,338.0)          |

# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

### 42 FINANCIAL RISK MANAGEMENT (CONT'D.)

|                                      | Total<br>interest<br>sensitive<br>RM'million | Non<br>interest<br>sensitive<br>RM'million | Balances<br>under<br>Islamic<br>principles<br>RM'million | Total<br>RM'million |
|--------------------------------------|--|--|--|---------------------|
| Group                                |  | 1 3 1 2 2 2 2 2 2                          |  |                     |
| 2007<br>Financial liabilities        |  |  |  |                     |
| Trade and other payables             | 491.9  | 3,809.7                                    | 0  | 4,301.6             |
| Amount due to associate              | 224.5  | 1.6  | 0  | 226.1               |
| Borrowings                           | 17,778.7                                     | 221.2                                      | 6,435.2  | 24,435.1            |
| Other liabilities (amount payable to |  |  |  |                     |
| swap counterparties)                 | 0  | 1.2  | 0  | 1.2                 |
|                                      | 18,495.1                                     | 4,033.7                                    | 6,435.2  | 28,964.0            |
| On-balance sheet                     |  |  |  |                     |
| interest sensitivity gap             | (13,407.3)                                   | (1,619.6)                                  | (5,609.2)  | (20,636.1)          |
| Off-balance sheet                    |  |  |  |                     |
| interest sensitivity gap             | (3.5)  | 0  | 0  | (3.5)               |
| Total interest sensitivity gap       | (13,410.8)                                   | (1,619.6)                                  | (5,609.2)  | (20,639.6)          |

|   | Effective<br>interest<br>at balance<br>sheet date<br>% per annum | Floating<br>rate<br>RM'million | <1 year<br>RM'million | 1-2 years<br>RM'million |           | instruments<br>repriced in<br>3-4 years<br>RM'million | 4-5 years<br>RM'million | > 5 years<br>RM'million | Total<br>interest<br>sensitive<br>RM'million |
|---|--|--------------------------------|-----------------------|-------------------------|-----------|---|-------------------------|-------------------------|--|
| Company<br>2008<br>Financial liabilities                    |  |                                |                       |                         |           |   |                         |                         | +  |
| Amount due to associates                                    | 0  | 0                              | 345.2                 | 0                       | 0         | 0   | 0                       | 0                       | 345.2  |
| Amount due to subsidiaries                                  | 4.40   | 1,449.7                        | 1,072.7               | 0                       | 0         | 0   | 0                       | 2,196.3                 | 4,718.7                                      |
| Borrowings  | 5.32   | 196.5                          | 61.0                  | 205.5                   | 2,941.0   | 626.5   | 250.0                   | 8,816.3                 | 13,096.8                                     |
|   |  | 1,646.2                        | 1,478.9               | 205.5                   | 2,941.0   | 626.5   | 250.0                   | 11,012.6                | 18,160.7                                     |
| On-balance sheet interest sensitivity gap Off-balance sheet | 0  | (1,085.7)                      | 2,388.0               | (152.7)                 | (2,941.0) | (626.5)   | (250.0)                 | (11,012.6)              | (13,680.5)                                   |
| interest sensitivity gap                                    | 0  | 103.1                          | 0                     | 0                       | (102.3)   | 0   | 0                       | 0                       | 0.8  |
| Total interest sensitivity gap                              |  | (982.6)                        | 2,388.0               | (152.7)                 | (3,043.3) | (626.5)   | (250.0)                 | (11,012.6)              | (13,679.7)                                   |

|                                | Effective<br>interest<br>at balance<br>sheet date<br>% per annum | Floating<br>rate<br>RM'million | <1 year<br>RM'million | 1-2 years<br>RM'million |         | instruments<br>repriced in<br>3-4 years<br>RM'million | 4-5 years<br>RM'million | > 5 years<br>RM'million | Total<br>interest<br>sensitive<br>RM'million |
|--------------------------------|--|--------------------------------|-----------------------|-------------------------|---------|---|-------------------------|-------------------------|--|
| Company                        |  |                                |                       |                         |         |   |                         |                         |  |
| 2007<br>Financial liabilities  |  |                                |                       |                         |         |   |                         |                         |  |
| Amount due to associates       | 0  | 0                              | 224.5                 | 0                       | 0       | 0   | 0                       | 0                       | 224.5  |
| Amount due to subsidiaries     | 5.32   | 1,644.1                        | 1,184.1               | 0                       | 0       | 0   | 0                       | 2,196.3                 | 5,024.5                                      |
| Borrowings                     | 5.57   | 197.0                          | 4.7                   | 63.8                    | 307.2   | 3,008.0   | 639.1                   | 8,838.9                 | 13,058.7                                     |
|                                |  | 1,841.1                        | 1,413.3               | 63.8                    | 307.2   | 3,008.0   | 639.1                   | 11,035.2                | 18,307.7                                     |
| On-balance sheet               |  |                                |                       |                         |         |   |                         |                         |  |
| interest sensitivity gap       | 0  | (1,192.6)                      | 3,336.1               | (9.2)                   | (307.2) | (3,008.0)   | (639.1)                 | (11,035.2)              | (12,855.2)                                   |
| Off-balance sheet              |  |                                |                       |                         |         |   |                         |                         |  |
| interest sensitivity gap       | 0  | 167.0                          | 0                     | (170.5)                 | 0       | 0   | 0                       | 0                       | (3.5)  |
| Total interest sensitivity gap |  | (1,025.6)                      | 3,336.1               | (179.7)                 | (307.2) | (3,008.0)   | (639.1)                 | (11,035.2)              | (12,858.7)                                   |

|                                      | Total<br>interest<br>sensitive<br>RM'million | Non<br>interest<br>sensitive<br>RM'million | Balances<br>under<br>Islamic<br>principles<br>RM'million | Total<br>RM'million |
|--------------------------------------|--|--|--|---------------------|
| Company                              |  |  |  |                     |
| 2008                                 |  |  |  |                     |
| Financial liabilities                |  |  |  |                     |
| Trade and other payables             | 0  | 3,421.0                                    | 0  | 3,421.0             |
| Borrowings                           | 13,096.8                                     | 166.0                                      | 2,186.3  | 15,449.1            |
| Amount due to subsidiaries           | 4,718.7                                      | 0  | 0  | 4,718.7             |
| Amount due to associates             | 345.2  | 0  | 0  | 345.2               |
| Other liabilities (amount payable to |  |  |  |                     |
| swap counterparties)                 | 0  | 0.7  | 0  | 0.7                 |
|                                      | 18,160.7                                     | 3,587.7                                    | 2,186.3  | 23,934.7            |
| On-balance sheet                     |  |  |  |                     |
| interest sensitivity gap             | (13,680.5)                                   | (860.1)                                    | (486.1)  | (15,026.7)          |
| Off-balance sheet                    |  |  |  |                     |
| interest sensitivity gap             | 0.8  | 0  | 0  | 0.8                 |
| Total interest sensitivity gap       | (13,679.7)                                   | (860.1)                                    | (486.1)  | (15,025.9)          |

# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

### 42 FINANCIAL RISK MANAGEMENT (CONT'D.)

### (b) Interest rate risk (Cont'd.)

|                                      | Total<br>interest<br>sensitive<br>RM'million | Non<br>interest<br>sensitive<br>RM'million | Balances<br>under<br>Islamic<br>principles<br>RM'million | Total<br>RM'million |
|--------------------------------------|--|--|--|---------------------|
| Company                              |  |  |  |                     |
| 2007                                 |  |  |  |                     |
| Financial liabilities                |  |  |  |                     |
| Trade and other payables             | 0  | 2,804.0                                    | 0  | 2,804.0             |
| Borrowings                           | 13,058.7                                     | 170.6                                      | 3,362.7  | 16,592.0            |
| Amount due to subsidiaries           | 5,024.5                                      | 0  | 0  | 5,024.5             |
| Amount due to associates             | 224.5  | 0  | 0  | 224.5               |
| Other liabilities (amount payable to |  |  |  |                     |
| swap counterparties)                 | 0  | 1.2  | 0  | 1.2                 |
|                                      | 18,307.7                                     | 2,975.8                                    | 3,362.7  | 24,646.2            |
| On-balance sheet                     |  |  |  |                     |
| interest sensitivity gap             | (12,855.2)                                   | (512.2)                                    | (2,490.7)  | (15,858.1)          |
| Off-balance sheet                    |  |  |  |                     |
| interest sensitivity gap             | (3.5)  | 0  | 0  | (3.5)               |
| Total interest sensitivity gap       | (12,858.7)                                   | (512.2)                                    | (2,490.7)  | (15,861.6)          |

The table below summarises the effective weighted average interest rate as at 31 August 2008 and 31 August 2007 by major currencies for each class of financial asset and financial liability.

|   | USD<br>% | JPY<br>% | EURO<br>% | RM<br>% | Others<br>% |
|---|----------|----------|-----------|---------|-------------|
| Group 2008 Financial assets Deposits and bank balances  | 4.52     | 0        | 0         | 3.53    | 0           |
| Financial liabilities<br>Borrowings                     | 6.61     | 1.95     | 3.06      | 6.60    | 2.25        |
| 2007 <u>Financial assets</u> Deposits and bank balances | 4.52     | 0        | 0         | 3.53    | 0           |
| Financial liabilities Borrowings                        | 6.61     | 1.95     | 3.06      | 6.60    | 2.25        |

|                              | USD<br>% | JPY<br>% | EURO<br>% | RM<br>%      | Others<br>% |
|------------------------------|----------|----------|-----------|--------------|-------------|
| Company                      |          |          |           |              | 1 4 4 5     |
| 2008                         |          |          |           |              |             |
| Financial assets             | F 04     |          |           | F 74         |             |
| Amount due from subsidiaries | 5.21     | 0        | 0         | 5.71<br>4.00 | 0           |
| Trade and other receivables  | 5.25     | 0        | 0         | 3.58         | 0           |
| Deposits and bank balances   | 3.23     | •        |           | 3.36         |             |
| Financial liabilities        |          |          |           |              |             |
| Amount due to subsidiaries   | 4.08     | 4.05     | 0         | 0            | 0           |
| Borrowings                   | 7.45     | 1.39     | 2.50      | 6.14         | 0           |
| 2007                         |          |          |           |              |             |
| Financial assets             |          |          | -         |              |             |
| Amount due from subsidiaries | 7.04     | 0        | 0         | 7.90         | 0           |
| Trade and other receivables  | 0        | 0        | 0         | 4.00         | 0           |
| Deposits and bank balances   | 5.25     | 0        | 0         | 5.53         | 0           |
| Financial liabilities        |          |          |           |              |             |
| Amount due to subsidiaries   | 5.37     | 4.05     | 0         | 0            | 0           |
| Borrowings                   | 7.57     | 1.43     | 3.06      | 6.30         | 2.25        |

### (c) Credit risk

### (i) On balance sheet, commitment and contingencies

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss. The following tables analyse the Group's and the Company's financial assets by industry concentration as at the balance sheet date.

|  | Deposits<br>and bank<br>balances<br>(excl. cash)<br>RM'million | Investment<br>in unquoted<br>instruments#<br>RM'million | Trade<br>receivables<br>and other<br>assets<br>RM'million | Inter-<br>company<br>RM'million | Interest receivable from swap counter- parties RM'million | Total<br>on-<br>balance<br>sheet<br>RM'million | Commitment<br>and<br>contingencies<br>RM'million |
|--|--|---|---|---------------------------------|---|--|--|
| Group 2008 Government Financial Institutions | 0<br>43143   | 0<br>33:0   | 63-2<br>6-8   | Ŏ<br>O                          | 0<br>02   | 342<br>4/592                                   | 0  |
| Business<br>Individuals<br>Associates        | 0<br>0<br>0  | 0<br>0<br>0   | 1,2649<br>9233<br>0                                       | 0<br>0<br>3748                  | 0<br>0<br>0   | 1,2649<br>9283<br>8748                         | 0<br>0<br>0                                      |
| Subsidiary Companies<br>Others               | 0  | 0   | 0<br>1230   | 0                               | 0<br>0  | 0<br>193 <u>0</u>                              | 3 <b>75</b> 94<br>0                              |
|  | 4,304.0  | 3340  | 241141  | <b>37</b> 43                    | 0.2   | 6,935,4  | 37904  |
| 2007   |  |   |   |                                 |   |  |  |
| Government                                   | 0  | 0   | 114.2   | 0                               | 0   | 114.2  | 0  |
| Financial Institutions                       | 4,339.8  | 38.0  | 15.3  | 0                               | 0.3   | 4,393.4  | 0  |
| Business                                     | 0  | 0   | 1,105.2   | 0                               | 0   | 1,105.2  | 0  |
| Individuals                                  | 0  | . 0   | 1,041.8   | 0                               | 0   | 1,041.8  | 0  |
| Associates                                   | 0  | 0   | 0   | 34.6                            | 0   | 34.6   | 0  |
| Others                                       | . 0  | 0   | 190.3   | . 0                             | 0   | 190.3  | 3,566.3  |
|  | 4,339.8  | . 38.0  | 2,466.8   | 34.6                            | 0.3   | 6,879.5  | 3,565.3  |

<sup>#</sup> This amount excludes equity instruments amounting to RM21.1 million (2007: RM23.2 million), net of allowance.

- (c) Credit risk
  - (i) On balance sheet, commitment and contingencies (Cont'd.)

|                        | Deposits<br>and bank<br>balances<br>(excl. cash)<br>RM'million | Investment<br>in unquoted<br>instruments#<br>RM'million | Trade<br>receivables<br>and other<br>assets<br>RM'million | Inter-<br>company<br>RM'million | Interest<br>receivable<br>from<br>swap<br>counter-<br>parties<br>RM'million | Total<br>on-<br>balance<br>sheet<br>RM'million | Commitment<br>and<br>contingencies<br>RM'million |
|------------------------|--|---|---|---------------------------------|---|--|--|
| Company                |  |   |   |                                 |   |  |  |
| 2008                   |  |   |   |                                 |   |  |  |
| Government             | 0  | 0   | 84.2  | 0                               | 0   | 84.2   | 0  |
| Financial Institutions | 3,750.1  | 38.0  | 6.3   | 0                               | 0.2   | 3,794.6  | 0  |
| Business               | 0  | 0   | 1,049.8   | 0                               | 0   | 1,049.8  | 0  |
| Individuals            | 0  | 0   | 903.3   | 0                               | 0   | 903.3  | 0  |
| Associates             | 0  | 0   | 0   | 37.8                            | 0   | 37.8   | 0  |
| Subsidiaries           | 0  | 0   | 0   | 2,299.0                         | 0   | 2,299.0  | 3,739.4  |
| Others                 | 0  | 0   | 196.0   | 0                               | 0   | 196.0  | 0  |
|                        | 3,750.1  | 38.0  | 2,239.6   | 2,336.8                         | 0.2   | 8,364.7  | 3,739.4  |
| *                      |  | P. Miller   |   |                                 |   |  |  |
| 2007                   |  |   | -   | č                               |   |  |  |
| Government             | 0  | 0   | 76.9  | 0                               | 0   | 76.9   | 0  |
| Financial Institutions | 4,228.9  | 38.0  | 15.3  | 0                               | 0.3   | 4,282.5  | 0  |
| Business               | 0  | 0   | 967.6   | 0                               | 0   | 967.6  | 0  |
| Individuals            | 0  | 0   | 905.0   | 0                               | 0   | 905.0  | 0  |
| Associates             | 0  | 0   | 0   | 34.6                            | 0   | 34.6   | 0  |
| Subsidiaries           | 0  | 0   | 0   | 1,953.2                         | 0   | 1,953.2  | 3,894.4*   |
| Others                 | 0  | 0   | 190.3   | 0                               | 0   | 190.3  | 0  |
|                        | 4,228.9  | 38.0  | 2,155.1   | 1,987.8                         | 0.3   | 8,410.1  | 3,894.4  |

<sup>#</sup> This amount excludes equity instruments amounting to RM21.1 million (2007: RM23.2 million), net of allowance.

<sup>\*</sup> This amount represents the financial guarantees issued by the Company on the borrowing facilities given to subsidiaries.

### (c) Credit risk (Cont'd.)

### (ii) Off balance sheet

The Group and the Company are exposed to credit risk where the fair value of the contract is favourable, where the counterparty is required to pay the Group or the Company in the event of contract termination. The following table summarises the favourable fair values of the contracts, indicating the credit risk exposure.

|   | Gro  | Group   |  | oany  |  |
|---|--|---|--|---|--|
|   | Contract or<br>notional<br>principal<br>amount<br>RM'million | Favourable<br>net fair<br>value<br>RM'million | Contract or<br>notional<br>principal<br>amount<br>RM'million | Favourable<br>net fair<br>value<br>RM'million |  |
| 2008 Cross currency interest rate swap    | 103.1  | 0   | 103.1  | 0   |  |
|   | 103.1  | 0   | 103.1  | 0   |  |
| 2007<br>Cross currency interest rate swap | 167.0  | 0   | 167.0  | 0   |  |
|   | 167.0  | 0   | 167.0  | 0   |  |

### (d) Foreign exchange risk

The currency exposure of financial assets and financial liabilities of the Group and the Company that are not denominated in the functional currency of the respective companies is set out below.

|                                       | USD<br>RM'million   | JPY<br>RM'million | EURO<br>RM'million | Others<br>RM'million |
|---------------------------------------|---|-------------------|--------------------|----------------------|
| Group                                 | Carlo de la companya della companya de la companya de la companya della companya |                   |                    | 15 E 25 TO 18        |
| 2008                                  |   |                   |                    |                      |
| Financial assets                      |   |                   |                    |                      |
| Receivables, deposits and Prepayments | 21.2  | 0                 | 0.9                | 0                    |
| Deposits and bank balances            | 124.4   | 63.2              | 0                  | 57.1                 |
| Other assets                          | 0   | 0.2               | 0                  | 0                    |
|                                       | 145.6   | 63.4              | 0.9                | 57.1                 |
| Financial liabilities                 |   |                   |                    |                      |
| Payables                              |   |                   |                    |                      |
| - external                            | 75.2  | 0                 | 0.5                | 0                    |
| Borrowings                            | 6,310.7   | 4,506.1           | 1.8                | 0                    |
|                                       | 6,385.9   | 4,506.1           | 2.3                | 0                    |

### (d) Foreign exchange risk (Cont'd.)

|                                       | USD<br>RM'million | JPY<br>RM'million | EURO<br>RM'million | Others<br>RM'million |
|---------------------------------------|-------------------|-------------------|--------------------|----------------------|
| Group                                 |                   |                   |                    |                      |
| 2007                                  |                   |                   |                    |                      |
| Financial assets                      |                   |                   |                    |                      |
| Receivables, deposits and prepayments | 0.6               | 0                 | 0                  | 0                    |
| Deposits and bank balances            | 18.6              | 0                 | 0                  | 0                    |
| Other assets                          | 0                 | 0.3               | 0                  | (                    |
|                                       | 19.2              | 0.3               | 0                  | C                    |
| Financial liabilities                 |                   |                   |                    |                      |
| Payables                              |                   |                   |                    |                      |
| – external                            | 1.8               | 0                 | 0.1                | C                    |
| Borrowings                            | 6,666.3           | 4,254.9           | 6.1                | 8.1                  |
|                                       | 6,668.1           | 4,254.9           | 6.2                | 8.                   |

|   | USD<br>RM'million  | JPY<br>RM'million | EURO<br>RM'million | Others<br>RM'million |
|---|--------------------|-------------------|--------------------|----------------------|
| Company<br>2008   |                    |                   |                    |                      |
| Financial assets  Amount due from subsidiaries  Deposits and bank balances  Other assets (interest receivable from swap counterparties) | 1,380.9<br>0       | 0<br>63.2<br>0.2  | 0<br>0             | 0.3<br>0             |
|   | 1,380.9            | 63.4              | 0                  | 0.3                  |
| Financial liabilities Amount due to subsidiaries Borrowings   | 2,901.1<br>3,724.6 | 885.6<br>3,657.9  | 0<br>1.8           | 0 0                  |
|   | 6,625.7            | 4,543.5           | 1.8                | 0                    |

### (d) Foreign exchange risk (Cont'd.)

|                                   | USD<br>RM'million | JPY<br>RM'million | EURO<br>RM'million | Others<br>RM'million |
|-----------------------------------|-------------------|-------------------|--------------------|----------------------|
| Company                           |                   |                   |                    |                      |
| 2007                              |                   |                   |                    |                      |
| Financial assets                  |                   |                   |                    |                      |
| Amount due from subsidiaries      | 1,322.2           | 0                 | 0                  | 0.2                  |
| Deposits and bank balances        | 14.4              | 0                 | 0                  | 0                    |
| Other assets (interest receivable |                   |                   |                    |                      |
| from swap counterparties)         | 0                 | 0.3               | 0                  | 0                    |
|                                   | 1,336.6           | 0.3               | 0                  | 0.2                  |
| Financial liabilities             |                   |                   |                    |                      |
| Amount due to subsidiaries        | 3,108.1           | 885.6             | 0                  | 0                    |
| Borrowings                        | 3,754.6           | 3,427.2           | 6.1                | 8.1                  |
|                                   | 6,862.7           | 4,312.8           | 6.1                | 8.1                  |

### (e) Fair value

The fair value of a financial instrument is assumed to be the amount at which the instrument could be exchanged or settled between knowledgeable and willing parties in an arm's length transaction, other than in forced or liquidation sale. Quoted market prices, when available, are used as the measure of fair values. However, for a significant portion of the Group's and the Company's financial instruments, quoted market prices do not exist. For such financial instruments, fair values presented are estimates derived using the net present value or other valuation techniques. The above techniques involve uncertainties and are significantly affected by the assumptions used and judgements made regarding risk characteristics of various financial instruments, discount rates, estimates of future cash flows, future expected loss experience and other factors. Changes in assumptions could significantly affect these estimates and the resulting fair values.

The face values for financial assets and liabilities with a maturity of less than one year are assumed to approximate their fair values.

### (e) Fair value (Cont'd.)

### (i) On balance sheet

The carrying amounts of financial assets and liabilities of the Group and the Company at the balance sheet date approximated their fair values except as set out below.

|                                       | Gro                              | up                          | Com                              | pany                        |
|---------------------------------------|----------------------------------|-----------------------------|----------------------------------|-----------------------------|
|                                       | Carrying<br>amount<br>RM'million | Fair<br>value<br>RM'million | Carrying<br>amount<br>RM'million | Fair<br>value<br>RM'million |
| 2008                                  |                                  |                             |                                  |                             |
| Financial assets                      |                                  |                             |                                  |                             |
| Investments                           | 0.1                              | 0                           | 0                                | 0                           |
| Long term receivables                 | 0                                | 0                           | 613.3                            | 611.3                       |
| Receivables, deposits and prepayments | 44.2                             | 15.6                        | 0                                | 0                           |
| Financial liabilities                 |                                  |                             |                                  |                             |
| Payables                              | 734.1                            | 0                           | 0                                | 0                           |
| Borrowings                            | 23,231.0                         | 23,808.7                    | 15,449.1                         | 15,514.8                    |
| Amount due to subsidiaries            |                                  |                             |                                  |                             |
| (non-current)                         | 0                                | 0                           | 3,525.8                          | 3,499.0                     |
| Other liabilities                     | 0                                | 0                           | 0                                | 0                           |
| 2007                                  |                                  |                             |                                  |                             |
| Financial assets                      |                                  |                             |                                  |                             |
| Investments                           | 0.1                              | 0                           | 0                                | 0                           |
| Long term receivables                 | 0                                | 0                           | 703.1                            | 700.9                       |
| Receivables, deposits and prepayments | 38.8                             | 17.4                        | 0                                | 0                           |
| Financial liabilities                 |                                  |                             |                                  |                             |
| Payables                              | 32.9                             | 0                           | 0                                | 0                           |
| Borrowings                            | 24,435.0                         | 25,127.1                    | 15,589.3                         | 16,156.2                    |
| Amount due to subsidiaries            |                                  |                             |                                  |                             |
| (non-current)                         | 0                                | 0                           | 3,621.1                          | 3,616.2                     |
| Other liabilities                     | 712.4                            | 0                           | 0                                | 0                           |

### Financial assets

The fair value of long term receivables is lower than carrying amount at balance sheet date as the Company gives its subsidiaries advances at below current market rate. The Directors consider the carrying amount fully recoverable as they do not intend to realise the financial assets via exchange with another counterparty.

### Financial liabilities

The fair value of quoted bonds has been estimated using the respective quoted offer price. For unquoted borrowings with fixed interest rate, the fair values have been estimated by discounting the estimated future cash flows using the prevailing market rates for similar credit risks and remaining period to maturity. For unquoted borrowings with floating interest rate, the carrying values are generally reasonable estimates of their fair values.

### (e) Fair value (Cont'd.)

### (i) On balance sheet (Cont'd.)

### Financial liabilities (Cont'd.)

The method by which fair value information was determined and any significant assumptions made in its application are as follows:

- quoted shares and marketable securities quoted market prices at balance sheet date
- loans to subsidiaries, amounts due from subsidiaries and staff loans future contractual cash flows discounted using dealer quotes of interest rates for similar loans
- bank overdrafts, cash and cash equivalents, receivables and payables with a maturity period of less than one
  year (all of which were subject to normal credit terms) carrying value at balance sheet date
- borrowings other than bank overdraft future contractual cash flows discounted at current market interest
  rates available for similar financial instruments
- vacant property provision cash flows discounted using a discount rate that reflects current market assessments of the time value of money and the risks specific to the liability
- financial guarantees given to third parties quotation from bankers in respect of the amount required to settle the contingent obligations at the balance sheet date
- forward foreign exchange contracts difference between the spot exchange rates and the contracted forward exchange rates at balance sheet date, applied to the contracted sum
- interest rate swaps present value of estimated future cash flows calculated using forward rates

### (ii) Off balance sheet

The financial derivative instruments are used to hadge foreign exchange and interest rate risks associated with certain long term foreign currency borrowings. The contract notional principal amounts of the derivative and the corresponding fair value adjustments are analyzed as below.

Fair values of financial derivative instruments are the present values of their future cash flows and are arrived at based on valuations carried out by the Company's bankers. Favourable fair value indicates amount receivable by the Company if the contracts are terminated as at 31 August 2008 or vice versa.

# [Tenaga Nasional Berhad] [Annual Report 2008]

### 42 FINANCIAL RISK MANAGEMENT (CONT'D.)

- (e) Fair value (Cont'd.)
  - (ii) Off balance sheet (Cont'd.)

|   | Contract or<br>notional<br>principal<br>amount<br>RM'million | Favourable<br>net fair value<br>RM'million | Unfavourable<br>net fair value<br>RM'million |
|---|--|--|--|
| Group   | THE WAY IN THE   |  |  |
| 2008 Cross currency interest rate swap  | 103.1  | 0  | (0.4)  |
| Currency option   | 812.5  | 0  | (0.9)  |
| Corporate guarantee given to financial institutions   | 1. 经营产基础。  |  |  |
| in respect of facilities granted to subsidiaries  | 0  | 0  | 0  |
|   | 915.6  | 0  | (1.3)  |
| 2007  |  |  | -  |
| Cross currency interest rate swap   | 167.0  | 0  | (5.1)  |
| Currency option   | 789.7  | 0  | (11.2)                                       |
| Corporate guarantee given to financial institutions in respect of facilities granted to subsidiaries  | 170.8  | 0  | 0  |
| in respect of facilities granted to subsidiaries  | 170.0  | 0  | 0  |
|   | 1,127.5  | 0  | (16.3)                                       |
| Company 2008 Corporate guarantee given to financial institutions in respect of facilities granted to subsidiaries Cross currency interest rate swap | 3,739.4<br>103.1   | 0 0  | (124.7)<br>(0.4)                             |
|   | 3,842.5  | 0  | (125.1)                                      |
| 2007 Corporate guarantee given to financial institutions  |  |  | 405  |
| in respect of facilities granted to subsidiaries  Cross currency interest rate swap   | 3,894.4<br>167.0   | 0  | (105.6)                                      |
|   | 4,061.4  | 0  | (110.7)                                      |

### 43 APPROVAL OF FINANCIAL STATEMENTS

The financial statements have been approved for issue in accordance with a resolution of the Board of Directors on 3 November 2008.

# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

## Statement by Directors

pursuant to Section 169(15) of the Companies Act, 1965

We, Tan Sri Leo Moggis and Dato' Sri Che I'halib bin Mohamad Hoh, two of the Directors of Tenaga Masional Berhad, do hereby state that, in the opinion of the Directors, the financial statements set out on pages 180 to 269 are drawn up so as to give a true and fair view of the state of affairs of the Group and of the Company as at 31 August 2008 and of the results and the cash flows of the Group and of the Company for the financial year ended on that date in accordance with the MASB Approved Accounting Standards in Malaysia for Entities Other than Private Entities and the provisions of the Companies Act, 1965.

Signed on behalf of the Board of Directors, in accordance with their resolution dated 3 November 2008.

TAN SRI LEO MOGGIE

to hogge

Chairman

DATO' SRI CHE KHALIB BIN MOHAMAD NOH

President/Chief Executive Officer

# [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

## Statutory Declaration

pursuant to Section 139(16) of the Companies Act, 1965

I, Dato' Mohd Izzaddin Idris, the person primarily responsible for the financial management of Tenaga Nasional Berhad, do solemnly and sincerely declare that the financial statements set out on pages 180 to 269 are, in my opinion, correct and I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the Statutory Declarations Act, 1960.

VACET.

DATO' MOHD IZZADDIN IDRIS

Subscribed and solamnly declared by the above named Dato' Mohd Izzaddin Idris at Kusla Lumpur, Malaysia on 3 November 2008, before me.



No: 66, Tingkat Bawah Jalan Putra 50350 KUALA LUMPUR

MOHD RADZI BIN YASIN COMMISSIONER FOR OATHS

## Independent Auditors' Report

to the Members of Tenaga Masional Berhad (Company No. 200866-W) (Incorporated in Malaysia)



PricewaterhouseCoopers (AF 1146)
Chartered Accountants
Level 10, 1 Sentral
Jalan Travers, Kuala Lumpur Sentral
P O Box 10192
50706 Kuala Lumpur, Malaysia
Telephone +60 3 2173 1188
Facsimile +60 3 2173 1298
www.pwc.com

### REPORT ON THE FINANCIAL STATEMENTS

We have audited the financial statements of Tenaga Hasional Berhad, which comprise the balance sheets as at 31 August 2008 of the Group and of the Company, and the income statements, statements of changes in equity and cash flow statements of the Group and of the Company for the year than ended, and a summary of significant accounting policies and other explanatory notes, as set out on pages 180 to 269.

### Directors' Responsibility for the Financial Statements

The directors of the Company are responsible for the preparation and fair presentation of these financial statements in accordance with MASB Approved Accounting Standards in Malaysia for Entities Other than Private Entities and the Companies Act, 1965. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with approved standards on auditing in Malaysia. Those standards require that we comply with ethical requirements and plan and perform the sudit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide affects for our audit opinion.

### Opinion

In our opinion, the financial statements have been properly drawn up in accordance with MASB Approved Accounting Standards in Malaysis for Entities Other than Private Entities and the Companies Act, 1985 so as to give a true and fair view of the financial position of the Group and of the Company as of 31 August 2008 and of their financial performance and cash flows for the year then ended.

## In accordance with the requirements of the Companies Act, 1965 in Malaysia, we also report the following:

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

- (a) In our opinion, the accounting and other records and the registers required by the Act to be kept by the Company and its
- (b) We have considered the accounts and the auditors' reports of all the subsidiaries of which we have not acted as auditors, which are indicated in note 15 to the financial statements.

subsidiaries of which we have acted as auditors have been properly kept in accordance with the provisions of the Act.

- (c) We are satisfied that the accounts of the subsidiaries that have been consolidated with the Company's financial statements are in form and content appropriate and proper for the purposes of the preparation of the financial statements of the Group and we have received satisfactory information and explanations required by us for those purposes.
- (d) The audit reports on the accounts of the subsidiaries did not contain any material qualification or any adverse comment made under Section 174(3) of the Act.

### OTHER MATTERS

This report is made solely to the members of the Company, as a body, in accordance with Section 174 of the Companies Act, 1965 in Malaysia and for no other purpose. We do not assume responsibility to any other person for the content of this report.

**PRICEWATERHOUSECOOPERS** 

(No. AF: 1146)

Chartered Accountants

Kuala Lumpur 3 November 2008 THAYAPARAN A/L S. SANGARAPILLAI

(No. 2085/09/08(J)) Chartered Accountants

## Analysis Of Shareholdings

as at 9 October 2008

### SHARE CAPITAL

Authorised Share Capital 5,000,000,000 ordinary shares of RM1.00 per share,

1 (One) Special Rights Redeemable Preference Share of RM1.00 per share,

1,000 Class A Redeemable Preference Share of RM1.00 per share, 500 Class B Redeemable Preference Share of RM1.00 per share.

Issued and Fully Paid-Up 4,334,647,295 ordinary shares of RM1.00 per share,

Share Capital 1 (One) Special Rights Redeemable Preference Share of RM1.00 per share,

1,000 Class A Redeemable Preference Share of RM1.00 per share, 500 Class B Redeemable Preference Share of RM1.00 per share.

Voting Right One voting right for one ordinary share

### ANALYSIS OF SHAREHOLDINGS

| Size of Shareholdings                    | No. of<br>Shareholders | % of<br>Shareholders | No. of<br>Ordinary Shares | % of Issued<br>Share Capital |
|--|------------------------|----------------------|---------------------------|------------------------------|
| LESS THAN 100                            | 910                    | 2.55                 | 26,304                    | 0.00                         |
| 100 – 1,000                              | 8,429                  | 23.60                | 6,521,548                 | 0.15                         |
| 1,001 -10,000                            | 23,676                 | 66.30                | 64,518,424                | 1.49                         |
| 10,001 - 100,000                         | 2,021                  | 5.66                 | 55,887,345                | 1.29                         |
| 100,001 TO LESS THAN 5% OF ISSUED SHARES | 672                    | 1.88                 | 1,659,445,774             | 38.28                        |
| 5% AND ABOVE OF ISSUED SHARES            | 3                      | 0.01                 | 2,548,247,900             | 58.79                        |
| TOTAL                                    | 35,711                 | 100.00               | 4,334,647,295             | 100.00                       |

### **DIRECTORS' SHAREHOLDINGS**

|     |  | No. of shares               |          |
|-----|--|-----------------------------|----------|
| No. | Name of Directors                            | Direct/Indirect<br>Interest | %        |
| 1   | TAN SRI LEO MOGGIE                           | _                           | _        |
| 2   | DATO' SRI CHE KHALIB BIN MOHAMAD NOH         |                             | <u> </u> |
| 3   | DATO' PUTEH RUKIAH BINTI ABD MAJID           | _                           | _        |
| 4   | DATO' MOHAMMAD ZAINAL BIN SHAARI             | <u>-</u>                    |          |
| 5   | TAN SRI DATO' LAU YIN PIN @ LAU YEN BENG     | <u> </u>                    |          |
| 6   | TAN SRI DATO' HARI NARAYANAN A/L GOVINDASAMY | _                           |          |
| 7   | DATO' ZAINAL ABIDIN BIN PUTIH                | 1,250                       | 0.00     |
| 8   | DATO' FUAD BIN JAAFAR                        | 62,500                      | 0.00     |
| 9   | TAN SRI DATO' SERI SITI NORMA BINTI YAAKOB   | 1,250                       | 0.00     |

### SUBSTANTIAL SHAREHOLDERS

| No. | Name of Substantial Shareholders  | No. of Shares | %     |
|-----|---|---------------|-------|
| 1   | KHAZANAH NASIONAL BERHAD  | 1,638,474,689 | 37.80 |
| 2   | EMPLOYEES PROVIDENT FUND BOARD  - 516,686,511 shares held in its own name  - 1,500,000 shares held in its own name  - 11,112,300 shares held through SBB Nominees (Tempatan) Sdn Bhd  - 15,180,000 shares held through Alliancegroup Nominees (Tempatan) Sdn Bhd  - 2,400,000 shares held through Alliancegroup Nominees (Tempatan) Sdn Bhd  - 7,418,700 shares held through An Nominees (Tempatan) Sdn Bhd  - 2,582,900 shares held through Cartaban Nominees (Tempatan) Sdn Bhd  - 250,000 shares held through Citigroup Nominees (Tempatan) Sdn Bhd  - 502,900 shares held through DB (Malaysia) Nominee (Tempatan) Sdn Bhd  - 708,600 shares held through Mayban Nominees (Tempatan) Sdn Bhd  - 693,700 shares held through Mayban Nominees (Tempatan) Sdn Bhd  - 4,500,000 shares held through Mayban Nominees (Tempatan) Sdn Bhd  - 280,000 shares held through Mayban Nominees (Tempatan) Sdn Bhd  - 4,390,000 shares held through RHB Nominees (Tempatan) Sdn Bhd | 592,194,361   | 13.66 |
| 3   | AMANAH RAYA NOMINEES (TEMPATAN) SDN BHD<br>SKIM AMANAH SAHAM BUMIPUTERA   | 393,086,700   | 9.07  |

### **30 LARGEST SHAREHOLDERS**

| No. | Name of Shareholders  | No. of Shares | %     |
|-----|---|---------------|-------|
| 1   | KHAZANAH NASIONAL BERHAD  | 1,638,474,689 | 37.80 |
| 2   | EMPLOYEES PROVIDENT FUND BOARD  | 516,686,511   | 11.92 |
| 3   | AMANAH RAYA NOMINEES (TEMPATAN) SDN BHD<br>SKIM AMANAH SAHAM BUMIPUTERA   | 393,086,700   | 9.07  |
| 4   | KUMPULAN WANG PERSARAAN (DIPERBADANKAN)   | 153,146,700   | 3.53  |
| 5   | LEMBAGA TABUNG HAJI   | 120,861,175   | 2.79  |
| 6   | CARTABAN NOMINEES (ASING) SDN BHD<br>SSBT FUND NB37 FOR JANUS CONTRARIAN FUND   | 84,983,900    | 1.96  |
| 7   | AMANAH RAYA NOMINEES (TEMPATAN) SDN BHD<br>AMANAH SAHAM WAWASAN 2020  | 66,617,000    | 1.54  |
| 8   | AMANAH RAYA NOMINEES (TEMPATAN) SDN BHD<br>AMANAH SAHAM MALAYSIA  | 61,354,400    | 1.42  |
| 9   | HSBC NOMINEES (ASING) SDN BHD TNTC FOR SAUDI ARABIAN MONETARY AGENCY  | 53,708,000    | 1.24  |
| 10  | CITIGROUP NOMINEES (ASING) SDN BHD<br>ROYAL BANK OF SCOTLAND AS DEPOSITORY FOR FIRST STATE ASIA PACIFIC LEADER<br>FUND (CB LDN) | 42,722,400    | 0.99  |

# O. [ Tenaga Nasional Berhad ] [ Annual Report 2008 ]

### 30 LARGEST SHAREHOLDERS (CONTINUED)

| No. | Name of Shareholders  | No. of Shares | %           |
|-----|---|---------------|-------------|
| 11  | VALUECAP SDM BHD  | 41,449,500    | 0.96        |
| 12  | PERMODALAN MASIONAL BERHAD  | 40,670,075    | 0.94        |
| 13  | MALAYSIA NOMINEES (TEMPATAN) SENDIRIAN BERHAD<br>GREAT EASTERN LIFE ASSURANCE (MALAYSIA) BERHAD (PAR 1)         | 39,400,000    | · .0.91     |
| 1.1 | AMALIAH RAYA LIOMILIEES (TEMPATALI) SOLI BHO<br>Amanah saham didik  | 25,808,950    | 0.30<br>₹.  |
| 15  | HSBC NOMINEES (TEMPATAFI) SDN BHD<br>NOMURA ASSET MGMT MALAYSIA FOR EMPLOYEES PROVIDENT FUND                    | 23,988,750    | 0.55        |
| 16  | CITIGROUP HOMINEES (ASING) SON BHD<br>BEAR STEARNS SECURITIES CORP FOR PERRY PARTHERS INTERNATIONAL, INC.       | . 23,747,336  | 0.54        |
| 17  | CITIGROUP HOMITIEES (ASITIG) SOLL BHD<br>EXEMPT ALL FOR MELLOLI BALK (MELLON)                                   | 21,879,490    | 0.50        |
| 18  | CITIGROUP HOMILIEES (TEMPATALI) SDIT BHD<br>EXEMPT ALL FOR PRUDENTIAL FULID MALIAGEMENT BERHAD                  | 20,642,075    | 0.48        |
| 19  | CARTABALL LIOMILIEES (TEMPATALI) SDLL BHD<br>PETROLIAM MASIONAL BERHAD (STRATEGIC INV)                          | 17,390,900    | 0.40        |
| 20  | CARTABALL HOMILIEES (ASING) SDLL BHD<br>SSBT FULID RUCK FOR STICHTING PELISIOELIFOLIDS ABP                      | 17,042,700    | 0.39        |
| 21  | CITIGROUP NOMINEES (ASING) SDN BHD<br>CB LDN FOR FIRST STATE ASIA PACIFIC FUND                                  | 15,335,500    | 0.35        |
| 22  | ALLIATICEGROUP FIOMITIEES (TEMPATARI) SDIT BHD<br>PHEIM ASSET MATIAGEMENT SDIT BHD FOR EMPLOYEES PROVIDENT FUND | 15,180,000    | 0.35        |
| 23  | CITIGROUP HOMITIEES (ASING) SOLI BHD<br>GSI FOR PERRY FARTHERS INTER INC  | 15,134,269    | 0.35        |
| 24  | MAVBALL HOMINEES (TEMPATALI) SOLLBHD<br>MAVBALL TRUSTEES BERHAD FOR PUBLIC ITTIMAL FULID (H14011970240)         | 14,918,200    | 0.34        |
| 25  | PERTUBUHAN KESELAMATAN SOSIAL   | 14,711,350    | - 0.34      |
| 25  | AMAHAH RAJA HOMIHEES (TEMPATAH) SDH BHD<br>SEKIM AMANAH SAHAM NASIONAL  | 13,861,900    | . 1 7 ,0.32 |
| 27  | HSBC HOMITIEES (ASITIG) SDIT BHD<br>BNY BRUSSELS FOR MAGELLAN   | 13,000,000    | 0.30        |
| 28  | LEMBAGA TABUNG ANGHATAN TENTERA   | 12,558,000    | 0.29        |
| 56  | HSBC FIOMIFIEES (ASIFIG) SDLL BHD<br>BLIV BRUSSELS FOR ING JAHUS CONTRARIAN PORTFOLIO                           | 12,512,910    | 0.28        |
| 30  | 3B8 FIOMITIEES (TEMPATALI) SDIT BHD<br>EMPLOYEES PROVIDENT FUND BOARD   | 11,112,300    | 0.23        |
|     | TOTAL   | 3,541,985,680 | 81.71       |

## Analysis Of Unsecured Convertible Redeemable Income Securities 2004-2009 ("CRIS") Holdings

as at 9 October 2008

Type of Security: 3.05% 5 year Unsecured Convertible Redeemable Income Securities 2004-2009 (CRIS) with nominal value

of RM1.00 each

Voting Right : None until upon conversion into Ordinary Shares of RM1.00 each

### ANALYSIS OF UNSECURED CONVERTIBLE REDEEMABLE INCOME SECURITIES 2004-2009 ("CRIS")

| Category                                 | No. of<br>CRIS Holders | % of<br>CRIS Holders | Nominal Value<br>of CRIS (RM) | % of<br>CRIS Issued |
|--|------------------------|----------------------|-------------------------------|---------------------|
| LESS THAN 100                            | 4                      | 4.44                 | 94                            | 0.00                |
| 100 – 1,000                              | 8                      | 8.89                 | 4,970                         | 0.01                |
| 1,001 - 10,000                           | 19                     | 21.11                | 102,688                       | 1.17                |
| 10,001 - 100,000                         | 25                     | 27.78                | 1,455,000                     | 2.46                |
| 100,001 TO LESS THAN 5% OF ISSUED SHARES | 28                     | 31.11                | 19,429,100                    | 32.82               |
| 5% AND ABOVE OF ISSUED SHARES            | 6                      | 6.67                 | 38,200,600                    | 64.54               |
| TOTAL                                    | 90                     | 100.00               | 59,191,952                    | 100.00              |

### **DIRECTORS' CRIS HOLDINGS**

|     |  | Nominal Value Of CRIS (RM)  |   |
|-----|--|-----------------------------|---|
| No. | Name of Directors                            | Direct/Indirect<br>Interest | % |
| 1   | TAN SRI LEO MOGGIE                           | _                           | _ |
| 2   | DATO' SRI CHE KHALIB BIN MOHAMAD NOH         | _                           | _ |
| 3   | DATO' PUTEH RUKIAH BINTI ABD MAJID           | _                           | _ |
| 4   | DATO' MOHAMMAD ZAINAL BIN SHAARI             | _                           | _ |
| 5   | TAN SRI DATO' LAU YIN PIN @ LAU YEN BENG     | _                           | _ |
| 6   | TAN SRI DATO' HARI NARAYANAN A/L GOVINDASAMY | _                           | _ |
| 7   | DATO' ZAINAL ABIDIN BIN PUTIH                | _                           | _ |
| 8   | DATO' FUAD BIN JAAFAR                        | _                           | _ |
| 9   | TAN SRI DATO' SERI SITI NORMA BINTI YAAKOB   | _                           |   |

### SUBSTANTIAL CRIS HOLDERS

| No. | Name of CRIS Holders  | Nominal Value<br>of CRIS (RM) | %     |
|-----|---|-------------------------------|-------|
| 1   | MAYBAN NOMINEES (TEMPATAN) SDN BHD<br>ETIQA INSURANCE BERHAD (LIFE PAR FUND)                            | 10,000,000                    | 16.89 |
| 2   | CITIGROUP NOMINEES (TEMPATAN) SDN BHD ING INSURANCE BERHAD (INV-IL PAR)                                 | 7,636,100                     | 12.90 |
| 3   | MALAYSIA NOMINEES (TEMPATAN) SENDIRIAN BERHAD<br>GREAT EASTERN LIFE ASSURANCE (MALAYSIA) BERHAD (PAR 1) | 6,800,000                     | 11.49 |
| 4   | AMANAH RAYA NOMINEES (TEMPATAN) SDN BHD<br>PUBLIC FAR-EAST BALANCED FUND                                | 5,500,000                     | 9.29  |
| 5   | AMANAH RAYA NOMINEES (TEMPATAN) SDN BHD<br>PUBLIC ENHANCED BOND FUND                                    | 5,264,500                     | 8.89  |
| 6   | AMANAH RAYA NOMINEES (TEMPATAN) SDN BHD<br>KUMPULAN WANG BERSAMA  | 3,000,000                     | 5.07  |

### **30 LARGEST CRIS HOLDERS**

| No. | Name of CRIS Holders  | Nominal Value<br>of CRIS (RM) | %     |
|-----|---|-------------------------------|-------|
| 1   | MAYBAN NOMINEES (TEMPATAN) SDN BHD<br>ETIQA INSURANCE BERHAD (LIFE PAR FUND)                            | 10,000,000                    | 16.89 |
| 2   | CITIGROUP NOMINEES (TEMPATAN) SDN BHD<br>ING INSURANCE BERHAD (INV-IL PAR)                              | 7,636,100                     | 12.90 |
| 3   | MALAYSIA NOMINEES (TEMPATAN) SENDIRIAN BERHAD<br>GREAT EASTERN LIFE ASSURANCE (MALAYSIA) BERHAD (PAR 1) | 6,800,000                     | 11.49 |
| 4   | AMANAH RAYA NOMINEES (TEMPATAN) SDN BHD<br>PUBLIC FAR-EAST BALANCED FUND                                | 5,500,000                     | 9.29  |
| 5   | AMANAH RAYA NOMINEES (TEMPATAN) SDN BHD<br>PUBLIC ENHANCED BOND FUND                                    | 5,264,500                     | 8.89  |
| 6   | AMANAH RAYA NOMINEES (TEMPATAN) SDN BHD<br>KUMPULAN WANG BERSAMA  | 3,000,000                     | 5.07  |
| 7   | AMANAH RAYA NOMINEES (TEMPATAN) SDN BHD<br>PUBLIC GLOBAL BALANCED FUND                                  | 2,500,000                     | 4.22  |
| 8   | AMANAH RAYA NOMINEES (TEMPATAN) SDN BHD<br>PUBLIC DIVIDEND SELECT FUND                                  | 2,000,000                     | 3.38  |
| 9   | HSBC NOMINEES (TEMPATAN) SDN BHD<br>HSBC (M) TRUSTEE BHD FOR OSK-UOB KIDSAVE TRUST (3621)               | 1,544,000                     | 2.61  |
| 10  | MAYBAN TRUSTEES BERHAD CIMB-PRINCIPAL STRATEGIC BOND FUND   | 1,492,000                     | 2.52  |
| 11  | HSBC NOMINEES (TEMPATAN) SDN BHD<br>HSBC (M) TRUSTEE BHD FOR OSK-UOB INCOME FUND (4314)                 | 1,207,500                     | 2.04  |
| 12  | KE-ZAN NOMINEES (ASING) SDN BHD<br>KIM ENG SECURITIES PTE. LTD. FOR CYL INVESTMENTS LIMITED             | 976,000                       | 1.65  |

### 30 LARGEST CRIS HOLDERS (CONTINUED)

| No. | Name of CRIS Holders   | Nominal Value<br>of CRIS (RM) | %     |
|-----|--|-------------------------------|-------|
| 13  | MAYBAN NOMINEES (TEMPATAN) SDN BHD MAYBAN TRUSTEES BERHAD FOR CIMB-PRINCIPAL INCOME PLUS BALANCED FUND                           | 970,000                       | 1.64  |
| 14  | DB (MALAYSIA) NOMINEE (TEMPATAN) SENDIRIAN BERHAD CIMB-PRINCIPAL ASSET MGMT BHD FOR GLOBALE RUCKVERSICHERUNGS-AKTIENGESELLSCHAFT | 963,300                       | 1.63  |
| 15  | UNIVERSAL TRUSTEE (MALAYSIA) BERHAD<br>HLG BOND FUND (L1)  | 850,000                       | 1.44  |
| 16  | CIMSEC NOMINEES (TEMPATAN) SDN BHD<br>CIMB FOR HASRAT JAGUH SDN BHD (PB)   | 800,000                       | 1.35  |
| 17  | DAYA MAHSURI SDN BHD   | 800,000                       | 1.35  |
| 18  | CITIGROUP NOMINEES (TEMPATAN) SDN BHD<br>ING INSURANCE BERHAD (INV-IL NON-PAR)   | 717,700                       | 1.21  |
| 19  | CIMSEC NOMINEES (TEMPATAN) SDN BHD CIMB FOR SIEH KOK SWEE (PB)   | 600,000                       | 1.01  |
| 20  | HLG NOMINEE (TEMPATAN) SDN BHD<br>HLG ASSET MANAGEMENT SDN BHD FOR YAYASAN USAHAWAN BUMIPUTRA                                    | 505,000                       | 0.85  |
| 21  | CIMSEC NOMINEES (TEMPATAN) SDN BHD CIMB FOR FAIRLY YAP SWEE ENG (PB)   | 500,000                       | 0.84  |
| 22  | CIMSEC NOMINEES (TEMPATAN) SDN BHD CIMB FOR CHEONG KEE LAI (PB)  | 482,000                       | 0.81  |
| 23  | MALAYSIA NOMINEES (TEMPATAN) SENDIRIAN BERHAD  OVERSEAS ASSURANCE CORPORATION (MALAYSIA) BERHAD (MGF)                            | 450,000                       | 0.76  |
| 24  | HSBC NOMINEES (TEMPATAN) SDN BHD<br>HSBC (M) TRUSTEE BHD FOR RHB BALANCED FUND (3936)  | 347,000                       | 0.59  |
| 25  | HLG NOMINEE (TEMPATAN) SDN BHD<br>HLG ASSET MANAGEMENT SDN BHD FOR PERBADANAN BEKALAN AIR PULAU PINANG<br>SDN BHD                | 338,000                       | 0.57  |
| 26  | CIMSEC NOMINEES (TEMPATAN) SDN BHD CIMB FOR ROSLINA BINTI ABDUL RAHMAN (PB-IU)   | 200,000                       | 0.34  |
| 27  | CIMSEC NOMINEES (TEMPATAN) SDN BHD CIMB FOR TAN KOK HENG (PB)  | 195,000                       | 0.33  |
| 28  | NADIAH PAUT ABDULLAH @ REBECCA PAUT  | 187,300                       | 0.32  |
| 29  | CIMSEC NOMINEES (TEMPATAN) SDN BHD<br>CIMB FOR ZAKARIA BIN ARIFFIN (PB)  | 187,000                       | 0.32  |
| 30  | CITIGROUP NOMINEES (TEMPATAN) SDN BHD ING INSURANCE BERHAD (ING-GP-EB)   | 141,000                       | 0.24  |
|     | TOTAL  | 57,153,400                    | 96.55 |

| Nature of              |                       |                       |                        | -                     | LAND                  |                        |                                  |                                  |                                   |             | BUILDING                           | S                                | DESCRIPTION     |
|------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|----------------------------------|----------------------------------|-----------------------------------|-------------|------------------------------------|----------------------------------|-----------------|
| Functional<br>Activity |                       | Leasehold             |                        |                       | Freehold              |                        |                                  |                                  |                                   |             | D 11: 11                           |                                  |                 |
| Generation             | No. of<br>Lots<br>(1) | Area<br>(sq M)<br>(2) | NBV<br>(RM'000)<br>(3) | No. of<br>Lots<br>(4) | Area<br>(sq M)<br>(5) | NBV<br>(RM'000)<br>(6) | Total<br>No. of<br>Lots<br>(1+4) | Total<br>Area<br>(sq M)<br>(2+5) | Total<br>NBV<br>(RM'000)<br>(3+6) | No.<br>(10) | Built-Up<br>Area<br>(sq M)<br>(11) | Total<br>NBV<br>(RM'000)<br>(12) | (13)            |
| Location               |                       |                       |                        |                       |                       |                        |                                  |                                  |                                   |             |                                    |                                  |                 |
| Perlis                 | _                     | · –                   | _                      | 2                     | 1,499                 | 52                     | 2                                | 1,499                            | 52                                | _           | _                                  | _                                | Power Stations, |
| Kedah                  | 2                     | 1,676                 | 27                     | ပ်                    | 22,280                | 5,047                  | 8                                | 23,956                           | 6,074                             | 21          | 2,493                              | 5,656                            | Rural Power     |
| Pulau Pinang           | 2                     | 163,325               | 26,463                 | 2                     | 67,726                | 2,136                  | 4                                | 231,051                          | 28,599                            | 8           | 10,258                             | 149,271                          | Stations,       |
| Perak                  | 8                     | 129,517               | 124,120                | 10                    | 1,604,595             | 63,916                 | 18                               | 1,814,112                        | 188,036                           | 117         | 80,378                             | 564,366                          | Mini Hydros,    |
| Salangor               | 5                     | 16,892,869            | 122,045                | 4                     | 514,707               | 25,451                 | 9                                | 17,407,576                       | 147,496                           | 40          | 11,638                             | 895,102                          | Stores, Office  |
| W. Persekutuan         | _                     | _                     | _                      | _                     | _                     | · —                    | _                                | ·                                | _                                 | 11          | 150                                | 7,184                            | Buildings,      |
| Putrajaya/             |                       |                       | ÷                      |                       |                       |                        |                                  |                                  |                                   |             |                                    |                                  | Jetties and     |
| Cyberjaya              |                       | _                     | _                      | _                     | _                     | _                      | _                                |                                  | _                                 | _           | _                                  | <u>-</u>                         | Dams            |
| N. Sambilan            | 4                     | . 170,812             | 4,074                  | 1                     | 13,550                | 1,357                  | 5                                | 184,362                          | 5,731                             | 20          | 3,257                              | 158,478                          |                 |
| Melaka                 | _                     |                       | · _                    | -                     | _                     | _                      | _                                | _                                | -                                 | -           | _                                  | _                                |                 |
| Johor                  | 3                     | 87,012                | 12,969                 | 2                     | 167,515               | 13,923                 | 5                                | 256,527                          | 26,892                            | 26          | 9,850                              | · 68,031                         |                 |
| Pahang                 | 47                    | 230,588               | 230                    | 58                    | 98,742                | 8,616                  | 105                              | 329,330                          | 8,854                             | 137         | 2,755                              | 37,933                           |                 |
| Terengganu             | 45                    | 239,386               | 16,410                 | 48                    | 20,817                | 13,938                 | 93                               | 263,203                          | 30,348                            | 92          | 12,316                             | 443,530                          |                 |
| Kelantan               | 75                    | 75,498                | 543                    | 39                    | 56,539                | 1,348                  | 114                              | 133,037                          | 1,891                             | 94          | 4,444                              | 832,538                          |                 |
| Sabah                  | 23                    | 5,462,413             | 6,463                  | 18                    | 4,017,445             | 5,769                  | 41                               | 9,479,858                        | 12,232                            | 48          | 1,100                              | 176,547                          |                 |
| Total                  | 214                   | 23,456,096            | 313,352                | 190                   | 6,673,415             | 142,853                | 404                              | 30,129,511                       | 456,205                           | 614         | 138,689                            | 3,238,600                        |                 |

### **GENERATION**

Electricity is produced through a process of converting other forms of energy into electrical energy. This conversion process is known as generation and is mainly carried out at power stations.

In addition, a number of mini hydro stations and numerous diesel generating sets are operated by TNB.

| Nature of              |                       | LAND                  |                        |                       |                       |                        |                                  |                                  |                                   |             |                                    | BUILDINGS                        |             |  |
|------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|----------------------------------|----------------------------------|-----------------------------------|-------------|------------------------------------|----------------------------------|-------------|--|
| Functional<br>Activity |                       | Leasehold             |                        |                       | Freehold              |                        | Tabl                             | Tatal                            | Total                             |             | D. da Ha                           | T                                |             |  |
| Transmission           | No. of<br>Lots<br>(1) | Area<br>(sq M)<br>(2) | NBV<br>(RM'000)<br>(3) | No. of<br>Lots<br>(4) | Area<br>(sq M)<br>(5) | NBV<br>(RM'000)<br>(6) | Total<br>No. of<br>Lots<br>(1+4) | Total<br>Area<br>(sq M)<br>(2+5) | Total<br>NBV<br>(RM'000)<br>(3+6) | No.<br>(10) | Built-Up<br>Area<br>(sq M)<br>(11) | Total<br>NBV<br>(RM'000)<br>(12) | (13)        |  |
| Location               |                       |                       |                        |                       |                       |                        |                                  |                                  |                                   |             |                                    |                                  |             |  |
| Perlis                 | 4                     | 110,024               | 1,030                  | 2                     | 15,860                | 474                    | 6                                | 125,884                          | 1,504                             | 16          | 3,145                              | 63,803                           |             |  |
| Kedah                  | 11                    | 440,017               | 3,409                  | 180                   | 71,451                | 2,441                  | 191                              | 511,468                          | 5,850                             | 70          | 7,694                              | 180,927                          |             |  |
| Pulau Pinang           | 15                    | 1,311,447             | 8,126                  | 36                    | 114,908               | 4,739                  | 51                               | 1,426,355                        | 12,865                            | 44          | 3,653                              | 167,373                          |             |  |
| Perak                  | 10                    | 157,193               | 1,498                  | 69                    | 26,438                | 12,463                 | 79                               | 183,631                          | 13,961                            | 53          | 8,146                              | 245,310                          |             |  |
| Selangor               | 20                    | 257,523               | 24,493                 | 46                    | 92,713                | 113,923                | 66                               | 350,236                          | 138,416                           | 124         | 13,673                             | 715,345                          |             |  |
| W. Persekutuan         | 10                    | 176,794               | 10,991                 | 204                   | 79,800                | 14,209                 | 214                              | 256,594                          | 25,200                            | 46          | 7,740                              | 336,436                          |             |  |
| Putrajaya/             |                       |                       |                        |                       |                       |                        |                                  |                                  |                                   |             |                                    |                                  | Main Intake |  |
| Cyberjaya              | _                     | _                     | _                      | _                     | _                     | _                      | _                                | _                                | _                                 | _           | _                                  | _                                | Substations |  |
| N. Sembilan            | 13                    | 688,904               | 6,703                  | 15                    | 87,029                | 5,090                  | 28                               | 775,933                          | 11,793                            | 59          | 3,836                              | 159,031                          |             |  |
| Melaka                 | 6                     | 59,717                | 4,881                  | 21                    | 20,627                | 7,188                  | 27                               | 80,344                           | 12,069                            | 51          | 7,167                              | 89,231                           |             |  |
| Johor                  | 30                    | 554,552               | 22,153                 | 44                    | 64,522                | 15,132                 | 74                               | 619,074                          | 37,285                            | 133         | 9,027                              | 697,994                          |             |  |
| Pahang                 | 8                     | 86,487                | 1,235                  | 19                    | 155,835               | 4,722                  | 27                               | 242,322                          | 5,957                             | 76          | 2,934                              | 177,820                          |             |  |
| Terengganu             | 5                     | 170,622               | 3,363                  | 11                    | _                     | 210                    | 16                               | 170,622                          | 3,573                             | 41          | 3,544                              | 69,751                           |             |  |
| Kelantan               | 3                     | 95,628                | 1,838                  | 170                   | 176,029               | 6,130                  | 173                              | 271,657                          | 7,968                             | 35          | 5,551                              | 67,201                           |             |  |
| Sabah                  | 3                     | 30,904                | 1,454                  | 1                     | 14,165                | 134                    | 4                                | 45,069                           | 1,588                             | 19          | 5,040                              | 82,402                           |             |  |
| Total                  | 138                   | 4,139,812             | 91,174                 | 818                   | 919,377               | 186,855                | 956                              | 5,059,189                        | 278,029                           | 767         | 81,150                             | 3,052,624                        |             |  |

### TRANSMISSION

Transmission activity relates to the process of transmitting electricity generated at power stations to the load centres where it is required, eg. townships, industrial growth centres and major customers.

A network of transmission lines, forming the National Grid is required for this purpose. At appropriate sites, transmission substation are constructed to channel electricity from the National Grid to the numerous load centres. The transmission system operates at voltage levels of 500 kV, 275 kV, 132 kV and 66 kV.

| Nature of              |                       | LAND                  |                        |                       |                       |                        |                         |                         |                          |             |                                    | BUILDINGS               |              |  |
|------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|-------------------------|-------------------------|--------------------------|-------------|------------------------------------|-------------------------|--------------|--|
| Functional<br>Activity |                       | Leasehold             |                        | Freehold              |                       |                        | - Total                 | Total                   | Total                    |             | Puile He                           | Total                   |              |  |
| Distribution           | No. of<br>Lots<br>(1) | Area<br>(sq M)<br>(2) | NBV<br>(RM'000)<br>(3) | No. of<br>Lots<br>(4) | Area<br>(sq M)<br>(5) | NBV<br>(RM'000)<br>(6) | No. of<br>Lots<br>(1+4) | Area<br>(sq M)<br>(2+5) | NBV<br>(RM'000)<br>(3+6) | No.<br>(10) | Built-Up<br>Area<br>(sq M)<br>(11) | NBV<br>(RM'000)<br>(12) | (13)         |  |
| Location               |                       |                       |                        |                       |                       |                        |                         |                         |                          |             |                                    |                         |              |  |
| Perlis                 | 37                    | 16,378                | 779                    | 42                    | 71,964                | 880                    | 79                      | 88,342                  | 1,659                    | 52          | 1,200                              | 4,756                   | Distribution |  |
| Kedah                  | 159                   | 363,808               | 9,744                  | 309                   | 428,369               | 25,844                 | 468                     | 792,177                 | 35,588                   | 214         | 46,250                             | 39,206                  | Substations  |  |
| Pulau Pinang           | 106                   | 155,457               | 5,760                  | 366                   | 47,423                | 22,915                 | 472                     | 202,880                 | 28,675                   | 175         | 12,880                             | 24,225                  |              |  |
| Perak                  | 538                   | 562,810               | 9,953                  | 250                   | 528,843               | 7,615                  | 788                     | 1,091,653               | 17,568                   | 366         | 11,088                             | 49,481                  |              |  |
| Selangor               | 398                   | 316,145               | 45,757                 | 546                   | 366,783               | 67,808                 | 944                     | 682,928                 | 113,565                  | 793         | 121,096                            | 147,843                 |              |  |
| W. Persekutuan         | 176                   | 122,882               | 44,107                 | 172                   | 122,976               | 11,546                 | 348                     | 245,858                 | 55,653                   | 295         | 15,971                             | 322,709                 |              |  |
| Putrajaya/             |                       |                       |                        |                       |                       |                        |                         |                         |                          |             |                                    |                         |              |  |
| Cyberjaya              | 1                     | -                     | 70                     | 3                     | _                     | 676                    | 3                       |                         | 746                      | 16          |                                    | 27,601                  |              |  |
| N. Sembilan            | 246                   | 108,319               | 2,849                  | 145                   | 40,689                | 2,383                  | 391                     | 149,008                 | 5,232                    | 123         | 6,872                              | 6,156                   |              |  |
| Melaka                 | 197                   | 61,468                | 4,000                  | 211                   | 67,646                | 24,279                 | 408                     | 129,114                 | 28,279                   | 155         | 4,007                              | 6,006                   |              |  |
| Johor                  | 588                   | 464,151               | 18,763                 | 632                   | 388,894               | 44,276                 | 1,220                   | 853,045                 | 63,039                   | 465         | 19,774                             | 40,391                  |              |  |
| Pahang                 | 204                   | 157,459               | 7,429                  | 177                   | 94,830                | 219                    | 381                     | 252,289                 | 7,648                    | 153         | 9,801                              | 28,626                  |              |  |
| Terengganu             | 188                   | 639,980               | 2,709                  | 58                    | 40,214                | 1,084                  | 246                     | 680,194                 | 3,793                    | 119         | 4,508                              | 17,943                  |              |  |
| Kelantan               | 175                   | 516,903               | 3,617                  | 179                   | 212,985               | 6,103                  | 354                     | 729,888                 | 9,720                    | 139         | 67,062                             | 10,033                  |              |  |
| Sabah                  | 52                    | 645,935               | 3,595                  | 37                    | 173,243               | 1,881                  | 89                      | 819,178                 | 5,476                    | 322         | 84,500                             | 31,544                  |              |  |
| Total                  | 3,064                 | 4,131,695             | 159,132                | 3,127                 | 2,584,859             | 217,509                | 6,191                   | 6,716,554               | 376,641                  | 3,387       | 405,009                            | 756,520                 |              |  |

### DISTRIBUTION

The distribution process begins at the termination of the transmission line where distribution substations step down voltage to enable electricity to be distributed to TNB's customers.

The distribution system consists of distribution substations, overhead lines and underground cables operating at voltage levels of 33 kV and below.

| Nature of Functional      |                       | LAND                  |                        |                       |                       |                        |                                  |                                  |                                   |             |                                    | BUILDINGS                        |              |  |
|---------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|----------------------------------|----------------------------------|-----------------------------------|-------------|------------------------------------|----------------------------------|--------------|--|
| Activity                  |                       | Leasehold             |                        |                       | Freehold              |                        |                                  |                                  |                                   |             | B 35.11                            |                                  |              |  |
| Residential<br>and others | No. of<br>Lots<br>(1) | Area<br>(sq M)<br>(2) | NBV<br>(RM'000)<br>(3) | No. of<br>Lots<br>(4) | Area<br>(sq M)<br>(5) | NBV<br>(RM'000)<br>(6) | Total<br>No. of<br>Lots<br>(1+4) | Total<br>Area<br>(sq M)<br>(2+5) | Total<br>NBV<br>(RM'000)<br>(3+6) | No.<br>(10) | Built-Up<br>Area<br>(sq M)<br>(11) | Total<br>NBV<br>(RM'000)<br>(12) | (13)         |  |
| Location                  | 16,00                 |                       |                        |                       |                       |                        |                                  |                                  | minutes of                        |             |                                    |                                  |              |  |
| Perlis                    | 1                     | 1,037                 | 322                    | 6                     | 50,816                | 1,987                  | 7                                | 51,853                           | 2,309                             | 13          | 6,151                              | 6,080                            | Residential  |  |
| Kedah                     | 5                     | 43,983                | 2,491                  | 29                    | 259,202               | 22,711                 | 34                               | 303,185                          | 25,202                            | 42          | 39,168                             | 24,446                           | Houses,      |  |
| Pulau Pinang              | 8                     | 26,829                | 5,294                  | 23                    | 256,968               | 28,168                 | 31                               | 283,797                          | 33,462                            | 54          | 13,628                             | 134,389                          | Apartments,  |  |
| Perak                     | 37                    | 78,110                | 3,060                  | 53                    | 1,074,710             | 28,544                 | 90                               | 1,152,820                        | 31,604                            | 116         | 134,749                            | 63,214                           | Holiday      |  |
| Selangor                  | 36                    | 33,009,908            | 158,641                | 49                    | 1,764,430             | 137,897                | 85                               | 34,774,338                       | 296,538                           | 331         | 90,263                             | 1,035,389                        | Bungolows,   |  |
| W. Persekutuan            | 3                     | 18,757                | 7,112                  | 11                    | 79,918                | 74,101                 | 14                               | 98,675                           | 81,213                            | 125         | 136,326                            | 148,447                          | Office       |  |
| Putrajaya/                |                       |                       |                        |                       |                       |                        |                                  |                                  |                                   |             |                                    |                                  | Buildings,   |  |
| Cyberjaya                 | _                     | _                     | _                      | _                     | _                     | _                      | _                                | _                                | _                                 | _           | _                                  | _                                | Main Store,  |  |
| N. Sembilan               | 10                    | 113,329               | 2,013                  | 28                    | 359,906               | 29,597                 | 38                               | 473,235                          | 31,610                            | 71          | 132,894                            | 58,870                           | Warehouse    |  |
| Melaka                    | 6                     | 535,762               | 10,019                 | 20                    | 142,288               | 9,582                  | 26                               | 678,050                          | 19,601                            | 31          | 28,635                             | 14,718                           | and Workshop |  |
| Johor                     | 23                    | 384,439               | 36,104                 | 49                    | 773,793               | 22,953                 | 72                               | 1,158,232                        | 59,057                            | 119         | 76,373                             | 65,400                           |              |  |
| Pahang                    | 23                    | 760,444               | 15,611                 | 24                    | 67,598                | 7,332                  | 47                               | 828,042                          | 22,943                            | 183         | 76,822                             | 163,509                          |              |  |
| Terengganu                | 25                    | 3,306,420             | 29,410                 | 4                     | 1,922                 | 2,362                  | 29                               | 3,308,342                        | 31,772                            | 53          | 47,434                             | 89,410                           |              |  |
| Kelantan                  | 11                    | 229,863               | 7,310                  | 22                    | 87,845                | 5,822                  | 33                               | 317,708                          | 13,132                            | 54          | 322,636                            | 58,184                           |              |  |
| Sabah                     | 5                     | 122,369               | 3,079                  | 5                     | 140,207               | 20,681                 | 10                               | 262,576                          | 23,760                            | 12          | 33,500                             | 18,858                           |              |  |
| Pakistan                  | -                     | _                     | _                      | 1                     | 856,207               | 2,436                  | 1                                | 856,207                          | 2,436                             | 3           | 12,713                             | 1,300                            |              |  |
| Total                     | 193                   | 38,631,250            | 280,466                | 324                   | 5,915,810             | 394,173                | 517                              | 44,547,060                       | 674,639                           | 1,207       | 1,151,292                          | 1,882,214                        |              |  |

### RESIDENTIAL AND OTHERS

'Residential Property' includes staff quarters, holiday bungalows and apartments. "Others" include office buildings, main store and warehouse.

## Proxy Form

| Number of Ordinary Share(s) held |  |
|----------------------------------|--|
| CDS Account No.:                 |  |



| I/We,            | (FINAL NAME IN CARITAL (FITTER) | NRIC No./Passport No./Co. No |                      |                     |  |  |  |
|------------------|---------------------------------|------------------------------|----------------------|---------------------|--|--|--|
|                  | (FULL NAME IN CAPITAL LETTERS)  |                              |                      |                     |  |  |  |
| of               |                                 | being a Me                   | mber/Members of Tena | ga Nasional Berhad, |  |  |  |
|                  | (ADDRESS)                       |                              |                      |                     |  |  |  |
| hereby appoint:- |                                 |                              |                      |                     |  |  |  |
|                  | Name/NRIC No.                   | No. of shares                | Percentage (%)       |                     |  |  |  |
| Proxy 1          |                                 | _                            |                      | or failing him/her  |  |  |  |
| Proxy 2          |                                 | _                            |                      | or failing him/her  |  |  |  |
|                  |                                 | TOTAL                        |                      |                     |  |  |  |

the Chairman of the Meeting, as my/our proxy, to vote for me/us, and on my/our behalf at THE EIGHTEENTH ANNUAL GENERAL MEETING of TENAGA NASIONAL BERHAD to be held at Dewan Serbaguna, Kompleks Sukan TNB, Jalan Pantai Baru, 59200 Kuala Lumpur on **Thursday**, **11 December 2008**, at **10.00 am** and/or at any adjournment thereof.

My/Our proxy is to vote as indicate below:

|     |                  |   | FOR | AGAINST |
|-----|------------------|---|-----|---------|
| 1.  | RESOLUTION 1     | To receive the Audited Financial Statements for the Financial Year ended 31 August 2008 |     |         |
| 2.  | RESOLUTION 2     | Declaration of Dividend   |     |         |
| 3.  | RESOLUTION 3     | Payment of Directors' Fees  |     |         |
| 4.  | RESOLUTION 4     | Re-election of Tan Sri Leo Moggie pursuant to Article 135                               |     |         |
| 5.  | RESOLUTION 5     | Re-election of Tan Sri Dato' Hari Narayanan a/l Govindasamy pursuant to<br>Article 135  |     |         |
| 6.  | RESOLUTION 6     | Re-election of Dato' Zainal Abidin bin Putih pursuant to Article 135                    |     |         |
| 7.  | RESOLUTION 7     | Re-election of Tan Sri Dato' Seri Siti Norma binti Yaakob pursuant to Article 133       |     |         |
| 8.  | RESOLUTION 8     | Re-appointment of Messrs PricewaterhouseCoopers as the Company's Auditors               |     |         |
|     | SPECIAL BUSINESS |   |     |         |
| 9.  | RESOLUTION 9     | Issuance of Shares Pursuant to Employees' Share Option Scheme II (ESOS II)              |     |         |
| 10. | RESOLUTION 10    | Issuance of New Shares Pursuant to Section 132D, Companies Act, 1965                    |     |         |
| 11. | RESOLUTION 11    | Proposed Share Buy-Back   |     |         |

(Please indicate "X" in the appropriate box against each Resolution as to how you wish your proxy/proxies to vote. If no voting instruction is given, this form will be taken to authorise the proxy/proxies to vote at his/her discretion).

| Dated: | December 2008. |  |
|--------|----------------|--|
|        |                | Signature of Shareholder(s) or Common Seal |

### NOTES:

- 1. Any member entitled to attend and vote at this Meeting of the Company is entitled to appoint a proxy to attend and vote in his stead. A proxy need not be a member of the Company.
- 2. The instrument appointing a proxy shall be in writing under the hand of the appointer or of his attorney duly appointed under a power of attorney. Where the instrument appointing a proxy/proxies is executed by a corporation, it shall be executed either under its common seal or under the hand of any officer or attorney duly appointed under a power of attorney.
- 3. Where a member appoints two (2) proxies, the appointment shall be invalid unless the percentage of the holding to be represented by each proxy is specified.
- 4. A corporation which is a member, may by resolution of its Directors or other governing body authorise such person as it thinks fit to act as its representative at the Meeting, in accordance with Article 107(6) of the Company's Articles of Association.
- 5. The instrument appointing a proxy/proxies must be deposited at Symphony Share Registrars Sdn. Bhd., Level 26, Menara Multi-Purpose, Capital Square, No. 8, Jalan Munshi Abdullah, 50100 Kuala Lumpur not less than forty-eight (48) hours before the time set for the Meeting.

## UNIVERSITY TENAGA NASIONAL LIBRARY

Stamp

H0685

Symphony Share Registrars Sdn. Bhd.

Level 26, Menara Multi-Purpose Capital Square No. 8, Jalan Munshi Abdullah 50100 Kuala Lumpur



cooperative societies





of UNITEN Library.
taken against any user who
ords, makes notes in the
ignres of damages books in
way.

# www.tnb.com.my



No. 129, Jalan Bangsar, 59200 Kuala Lumpur

Tel: 603 2296 5640 Fax: 603 2283 5494