**Tenaga Nasional Berhad** 129, Jalan Bangsar, 59200 Kuala Lumpur Tel: 603-2296 5640 Fax: 603-2283 5494 Email: cosec@tnb.com.my

## www.tnb.com.my

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## switch on the future



## VISION

TO BE AMONG THE LEADING CORPORATIONS IN ENERGY AND RELATED BUSINESSES GLOBALLY

**MISSION** 

COMMITTED TO EXCELLENCE

PRODUCTS AND SERVICES

**WE ARE** 

IN OUR



## SWITCH ON THE FUTURE

In our effort to power the nation, Tenaga Nasional Berhad (TNB) is committed to providing reliable and affordable electricity today and well into the future. TNB continues to lead in fostering economic growth & social development in the country. To ensure the sustainability of power generation, we are driven to undertake projects and developments that are clean and blend with a healthy environment. In our goal to attain excellence, we will continue to Switch On the Future of our nation.



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## ST ANNUAL GENERAL MEETING

NOTICE IS HEREBY GIVEN THAT the Twenty-First Annual General Meeting (21<sup>st</sup> AGM) of Tenaga Nasional Berhad will be held on Thursday, 15 December 2011, at 10.00 a.m. at Dewan Serbaguna, Kompleks Sukan TNB, Jalan Pantai Baru, 59200 Kuala Lumpur to transact the following businesses:

6.

#### AS ORDINARY BUSINESS:

 To receive the Audited Financial Statements for 5. the Financial Year ended 31 August 2011 together with the Reports of the Directors and Auditors thereon.

#### **Ordinary Resolution 1**

2. To approve the payment of Directors' fees of RM1,460,666.70 for the Financial Year ended 31 August 2011.

#### **Ordinary Resolution 2**

- To re-elect the following Directors who retire in accordance with Article 135 of the Company's Articles of Association:
  - (i) Dato' Zainal Abidin bin Putih Ordinary Resolution 3
  - (ii) Tan Sri Dato' Hari Narayanan a/l Govindasamy

#### **Ordinary Resolution 4**

- (iii) Dato' Mohammad Zainal bin Shaari Ordinary Resolution 5
- 4. To re-elect Datuk Nozirah binti Bahari, who retires in accordance with Article 133 of the Company's Articles of Association.

Ordinary Resolution 6

- . To re-appoint the following Directors who retire in accordance with Section 129 (6) of the Companies Act, 1965 ("Act") to hold office until the conclusion of the next Annual General Meeting ("AGM"):
  - (i) Tan Sri Leo Moggie

#### Ordinary Resolution 7

- (ii) Tan Sri Dato' Seri Siti Norma binti Yaakob Ordinary Resolution 8
- To re-appoint Messrs PricewaterhouseCoopers, having consented to act, as Auditors of the Company, to hold office until the conclusion of the next AGM and to authorise the Directors to fix their remuneration.

#### Ordinary Resolution 9

#### AS SPECIAL BUSINESS:-

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

 Specific authority for the Directors to issue shares pursuant to the Employees' Share Option Scheme II. "THAT pursuant to 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 hereby 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 10

8. Proposed renewal of authority for the purchase by the Company of its own shares.

"THAT subject to compliance with the Act, the Company's Memorandum and Articles of Association, the Main Market Listing Requirements of Bursa Malaysia Securities Berhad 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 relevant authorities, 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 share capital through Bursa Malaysia Securities Berhad ("BMSB") 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 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 at the time of purchase be allocated by the Company for the Proposed Share Buy-Back;
- (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 either unconditionally or subject to conditions;
  - (ii) 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 resell them on BMSB and/or to distribute them as share dividends".

"AND THAT the Board be and is hereby authorised 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 the Company".

#### Ordinary Resolution 11

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

**FURTHER NOTICE IS HEREBY GIVEN THAT** for the purpose of determining a member who shall be entitled to attend this 21<sup>st</sup> AGM, the Company shall be requesting Bursa Malaysia Depository Sdn. Bhd. (Bursa Depository) in accordance with Article 87 (B) (1) of the Company's Articles of Association and Section 34 (1) of the Securities Industry (Central Depositories) Act 1991 (SICDA) to issue a General Meeting Record of Depositors (ROD) as at 8 December 2011. Only a depositor whose name appears on the ROD as at 8 December 2011 shall be entitled to attend the said meeting or appoint proxy/ proxies to attend and/or vote on his/her behalf.

#### BY ORDER OF THE BOARD

NOR ZAKIAH BINTI ABD GHANI (LS 0008795) NORAZNI BINTI MOHD ISA (LS 0009635) Company Secretaries

Kuala Lumpur 17 November 2011

## Notice of the 21<sup>st</sup> Annual General Meeting

#### **EXPLANATORY NOTES ON SPECIAL BUSINESS**

(i) Ordinary Resolution 10: Power for the Directors to issue shares pursuant to the 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 11: Proposed Renewal of Share Buy-Back Authority.

The proposed Ordinary Resolution, if passed, is to empower the Directors to purchase the Company's shares of up to 10% of the issued and paid-up share 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 revoked or varied at a general meeting, will expire at the next AGM of the Company.

Detailed information on the Proposed Renewal of Share Buy-Back Authority is set out in the Statement to Shareholders in relation to the proposed renewal of authority for the purchase by the Company of its own shares dated 17 November 2011 despatched together with the Company's 2011 Annual Report.

#### Notes:

#### Registration of Members/Proxies

Registration 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 is entitled to appoint a proxy to attend and vote in his stead. A proxy may but need not be a member of the Company and the provisions of Section 149 (1) (b) of the Act shall not apply to 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 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.
- (iii) A member shall not be entitled to appoint more than two (2) proxies to attend and vote at the Meeting. Where a member appoints two (2) proxies, the appointment shall be invalid unless the proportion of the shareholdings 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 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.
- (v) Only members registered in the ROD as at 8 December 2011 shall be eligible to attend the AGM or appoint a proxy to attend and vote on his behalf.
- (vi) The instrument appointing a proxy must be deposited at Symphony Share Registrars Sdn. Bhd., Level 6, Symphony House, Pusat Dagangan Dana 1, Jalan PJU 1A/46, 47301 Petaling Jaya, Selangor Darul Ehsan not less than forty-eight (48) hours before the time set for the Meeting.

#### Additional Information on Ordinary Resolutions 3 to 8

Additional Information on the Particulars of the retiring Directors, as required under Appendix 8A of the Main Market Listing Requirements of Bursa Malaysia Securities Berhad, are detailed in the Annual Report.

pg 4

## Statement Accompanying Notice of the 21<sup>st</sup> Annual General Meeting

(Pursuant To Paragraph 8.27 (2) of the Main Market Listing Requirements of Bursa Malaysia Securities Berhad)

The Directors who are standing for re-election in accordance with Article 135 of the Company's Articles of Association:

- (i) Dato' Zainal Abidin bin Putih
- (ii) Tan Sri Dato' Hari Narayanan a/I Govindasamy
- (iii) Dato' Mohammad Zainal bin Shaari

The Director who is standing for re-election in accordance with Article 133 of the Company's Articles of Association:

(i) Datuk Nozirah binti Bahari

The Directors who are standing for re-appointment in accordance with Section 129 (6) of the Companies Act, 1965:

- (i) Tan Sri Leo Moggie
- (ii) Tan Sri Dato' Seri Siti Norma binti Yaakob

The details of the six (6) Directors who are standing for re-election and re-appointment at the 21<sup>st</sup> Annual General Meeting are stated on pages 52 to 59 in this Annual Report.

The details of interest in the securities of the Company or its subsidiaries (if any) held by the said Directors are stated on page 193 of the Audited Financial Statements in this Annual Report.

## **Investor Relations**

Investor Relations (IR) is a strategic management responsibility that integrates finance, communication and marketing to enable the most effective two-way communication between a company and its financial community. IR ultimately contributes to a company's securities achieving a fair market valuation while aarnering investor support.

IR in TNB provides a platform for regular and interactive communication between the Company and its existing and potential investors, as well as research analysts. The IR function has been placed under Group Finance Division, in the Investor Relations and Management Reporting Department. The management reporting function complements and provides credibility to the IR role by ensuring the IR team fully understands and appreciates the Company's operations, and is able to provide accurate and timely information to stakeholders.

It is vital for the IR team to create and maintain a mutually beneficial relationship between TNB's Management and representatives of the financial and investment community. The IR team regularly updates the investment community on the Company's performance and current issues. This communication is governed by an IR Policy that has established the proper practices and boundaries of disclosure to guide the extent of information which can be relayed to stakeholders. This IR Policy aims to build continuous, long-term relationships and credibility with the Company's stakeholders and potential investors based on trust, transparency and a greater understanding of the Company and its prospects.

#### SHARE PRICE MOVEMENT AND VOLUME TRADED

FY2011 Monthly Trading Volume and



#### TNB SHARE PRICE PERFORMANCE vs FBM KLCI



\* Share price prior to Jan-11 has been adjusted based on Bonus Issue

#### INVESTOR ENGAGEMENT ACTIVITIES

• Quarterly and Full-Year Financial Results Announcements

TNB conducts briefings at its headquarters to the media and equity research analysts following its quarterly and full-year financial results announcements and subsequent to the release of its disclosures to Bursa Malaysia. Conference call facilities are also made available during these briefings to accommodate those who are not able to attend.

#### Analyst Briefing Presentation

Presentation slides are prepared to help analysts and investors assimilate the Group's financial results and performance. These slides are made available promptly on the Company's website under the IR Portal following the release of financial results to Bursa Malaysia. At the same time, the presentation slides are also distributed by e-mail to all analysts and investors registered on TNB's IR distribution list.

#### One-on-One & Group Meetings at Conferences

Regular participation at local and overseas conferences allows TNB to reach out to local and foreign fund managers, and communicate the latest developments within the Group as well as emerging challenges.

#### Site Visits

During the year under review, IR organised four site visits to provide investors and analysts a better understanding of the operations of a renewable energy plant, the technical day-to-day operations of a coal-fired power plant, the handling of coal supply, and the functions of TNB's National Load Dispatch Centre in monitoring the national grid and planning for the dispatch of electricity by all power stations in Peninsula Malaysia.

#### In-house and External Meetings

The Management and IR team frequently play host to local and international fund managers and investors who request for meetings with Senior Management. During these meetings, the fund managers and investors are updated with recent developments in the Company.



### **Investor Relations**

#### Investor Relations Portal

The IR portal in the Company's website, http://www.tnb. com.my/investors-media.html, serves as an excellent platform for the IR team to ensure up-to-date information is available to stakeholders. The portal contains a few segments which include News & Highlights (Announcements to Bursa Malaysia, Changes in Shareholdings, Newsclips and Conference Materials), Financial Info (Quarterly Results, Group Financial Statistics, Headline Key Performance Indicators, Credit Ratings and Top 30 Shareholders), Share Info (Price Ticker, Share Price Volume and Stock Chart), Demand Sales and Foreign Shareholding, Annual Reports, Requests for Meetings and Requests for IR Info.

#### **IMPROVED SERVICES - ENQUIRIES AND FEEDBACK**

Besides the IR portal, the IR team can also be reached at ird@ tnb.com.my. In addition, the IR team conducts a bi-annual IR Survey to assess the quality of its IR services and to gather information and suggestions on how to better serve the financial community. The survey, which is in the form of a questionnaire, is circulated to analysts and fund managers for them to assess the IR service quality and suggest ways to strengthen relationships among the Management, IR team, stakeholders and financial community.

#### **DIVIDEND POLICY**

TNB's commitment to its shareholders is further reiterated through the Group's Dividend Policy, which aims to provide stable and sustainable dividends to shareholders while maintaining an efficient capital structure and ensuring sufficient funds for future growth. Under this policy, TNB endeavours to distribute between 40-60% of the Company's annual free cash flow to its shareholders in the form of dividends.

#### **TNB CREDIT RATINGS**

TNB continues to exhibit strong financial fundamentals and a sound balance sheet, as evidenced by the credit ratings accorded by local and international rating agencies. The credit ratings are as follows:

٠	RAM Holdings	AAA
٠	Moody's	Baal
•	Standard and Poor's	BBB+
•	MARC	AAA

For the year under review, the Company was rerated upwards by MARC to reflect the strong Government support for TNB's obligations given its role as the country's principal energy provider.



#### **DEBT MATURITY PROFILE**

## **Financial Calendar**

2010	2011		
QUARTERLY RESULTS			
<b>28 October 2010</b> Announcement of the unaudited fourth quarter results ended 31 August 2010	<b>19 January 2011</b> Announcement of the unaudited first quarter results ended 30 November 2010		
	21 April 2011 Announcement of the unaudited second quarter results ended 28 February 2011		
	21 July 2011 Announcement of the unaudited third quarter results ended 31 May 2011		
	<b>28 October 2011</b> Announcement of the audited fourth quarter results ended 31 August 2011		
DIVIDENDS			
Notice Date - 19 November 2010	Notice Date - 28 April 2011		
Entitlement Date - 16 December 2010	Entitlement Date - 16 May 2011		
Payment Date - 30 December 2010	Payment Date - 27 May 2011		
Final Gross Dividend of 20.0 sen per ordinary share less 25% income tax for the Financial Year ended 31 August 2010	Interim Dividend of 4.5 sen per ordinary share less 25% income tax for the Financial Year ending 31 August 2011		
ANNUAL GENERAL MEETING 19 November 2010 Notice of the 20 <sup>th</sup> Annual General Meeting and Issuance of 2010 Annual Report together with Circular to Shareholders in relation to the Proposed Bonus Issue, Increase In Authorised Share Capital and Amendments to the Company's Memorandum and Articles of Association and Statement to Shareholders on Proposed Renewal of Share Buy-Back Authority	<b>17 November 2011</b> Notice of the 21 <sup>st</sup> Annual General Meeting and Issuance of 2011 Annual Report and Statement to Shareholders on Proposed Renewal of Share Buy-Back Authority		
<b>15 December 2010</b> 20 <sup>th</sup> Annual General Meeting	<b>15 December 2011</b> 21 <sup>st</sup> Annual General Meeting		
BONUS ISSUE			
Announcement Date - 30 December 2010	Entitlement Date - 5 January 2011		
	Listing Date - 6 January 2011		
Bonus Issue of 1,090,133,190 new ordinary shares of RM1.00 each in TNB to be credited as fully paid-up on the basis of one (1)			

#### **REDEMPTION OF REDEEMABLE PREFERENCE SHARES**

Bonus Share for every four (4) existing Shares held at Entitlement Date

#### Redemption Date - 15 August 2011

RM1.5 Billion Tenaga Income Securities - Redemption of 1,000 units of Class A Redeemable Preference Shares at the issue price of RM1,000.00 each

Redemption Date - 15 September 2011

RM1.5 Billion Tenaga Income Securities - Redemption of 500 units of Class B Redeemable Preference Shares at the issue price of RM1,000.00 each US

About

Tenaga Nasional Berhad (TNB) is the largest electricity utility in Malaysia with almost **RM73 billion** in assets. The Company is listed on the main board of Bursa Malaysia and employs more than 31,000 people Group-wide to serve an estimated 8.08 million customers in Peninsular Malaysia, Sabah and Labuan. Set up as the Central Electricity Board of the Federation of Malaya in 1949, TNB has powered national development efforts for more than 60 years by providing reliable and efficient electricity services.

TNB's core businesses are in the generation, transmission and distribution of electricity. In Peninsular Malaysia, the Company is a major contributor to the total industry capacity through six thermal stations and three major hydroelectric schemes. It also manages and operates the National Grid which links TNB power stations and IPPs to the distribution network in the peninsula. The grid is connected to Thailand's transmission system in the north and Singapore's transmission system in the south. In East Malaysia, TNB, through 80%-owned subsidiary Sabah Electricity Sdn. Bhd. (SESB), manages the Sabah Grid and aims to provide electricity to 95% of the state's population by year 2013.

TNB's distribution network is managed through a comprehensive distribution system, customer service centres and call management centres.

Over the years, TNB has diversified from its core business into the manufacture of transformers, high voltage switchgears and cables; the provision of professional consultancy services; and architectural, civil, electrical engineering works and services, repair and maintenance. The Company also engages in research and development, property development and management services. Tapping into opportunities available overseas, TNB is making inroads into emerging markets in the region as well as in the Middle East.





In 2005, the Company embarked on a 20-Year Strategic Plan which entails greater focus on green initiatives such as the development of renewable sources of fuel, and more effective demand side management via energy efficiency. These efforts complement the Government's carbon reduction agenda while also creating a foundation for sustainable energy for the future.

TNB believes in providing service excellence and aims to attain global leadership. Towards this end, the Company invests significantly in the continuous professional development of its employees through structured programmes.

As a leading GLC, TNB also places strong emphasis on its social and environmental responsibilities. Yayasan Tenaga Nasional (YTN), established in 1993, funds much of the Company's CSR programmes. TNB also has a tradition of promoting sports and developing sporting talent in the country. The Company's own hockey team is renowned for regularly winning the Malaysian Hockey League Championship.

# SWITCH ON TO SUPERIOR SERVICES

Customer loyalty and trust can only be realised when their needs are fulfilled beyond expectations. This is why we always strive to increase efficiency through training and development of our people. It demonstrates our commitment to continuously improve, and we are confident of being able to Switch On To Superior Services.



#### **Corporate Information**

# BOARD OF DIRECTORS

Tan Sri Leo Moggie (Chairman) (Non-Independent Non-Executive Director)

Dato' Sri Che Khalib bin Mohamad Noh (President/Chief Executive Officer) (Non-Independent Executive Director)

Datuk Nozirah binti Bahari (Non-Independent Non-Executive Director) (Appointed w.e.f. 28 June 2011)

Dato' Mohammad Zainal bin Shaari (Non-Independent Non-Executive Director)

Dato' Zainal Abidin bin Putih (Senior Independent Non-Executive Director)

Tan Sri Dato' Hari Narayanan a/I Govindasamy (Independent Non-Executive Director)

Dato' Fuad bin Jaafar (Independent Non-Executive Director) Tan Sri Dato' Seri Siti Norma binti Yaakob (Independent Non-Executive Director)

Dato' Abd Manaf bin Hashim (Independent Non-Executive Director)

Dato' Ir. Azman bin Mohd (Executive Director/Chief Operating Officer) (Non-Independent Executive Director)

Chung Hon Cheong (Independent Non-Executive Director)

Suria binti Ab Rahman (Alternate Director to Dato' Mohammad Zainal bin Shaari) (Non-Independent Non-Executive Director)

Datuk Puteh Rukiah binti Abd Majid (Non-Independent Non-Executive Director) (Resigned w.e.f. 1 April 2011)

#### SENIOR INDEPENDENT NON-EXECUTIVE DIRECTOR

Dato' Zainal Abidin bin Putih Email: cosec@tnb.com.my

#### **COMPANY SECRETARIES**

Nor Zakiah binti Abd Ghani (LS 0008795)

Norazni binti Mohd Isa (LS 0009635) (Appointed w.e.f. 1 July 2011)

#### SHARE REGISTRAR

Symphony Share Registrars Sdn. Bhd. (378993-D) Level 6, Symphony House Pusat Dagangan Dana 1 Jalan PJU 1A/46 47301 Petaling Jaya Selangor Darul Ehsan Malaysia

Telephone : 603-7841 8000 Facsimile : 603-7841 8151

#### **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 AUDITORS**

Messrs PricewaterhouseCoopers (AF: 1146) Level 10, 1 Sentral Jalan Travers KL Sentral P.O. Box 10192 50706 Kuala Lumpur Malaysia

Telephone : 603-2173 1188 Facsimile : 603-2173 1288

## REGISTERED OFFICE

**Tenaga Nasional Berhad** (200866-W) No. 129, Jalan Bangsar 59200 Kuala Lumpur Malaysia

Telephone : 603-2296 5566 Facsimile : 603-2283 3686 Website : www.tnb.com.my TNB Careline: 15454 One Stop Enquiry Centre: 1-300-88-5454

Whistle Blowing Information System: wbis.tnb.com.my Toll Free: 1-800-888-862

#### **INVESTOR RELATIONS**

Investor Relations Department Level 4, TNB Headquarters No. 129, Jalan Bangsar 59200 Kuala Lumpur Malaysia

 Telephone
 : 603-2296 6077

 Facsimile
 : 603-2284 0095

 Email
 : ird@tnb.com.my

#### STOCK EXCHANGE LISTING

Main Market Bursa Malaysia Securities Berhad Malaysia (Listed since 28 May 1992)

#### RATINGS

Moody's	Baal			
Standard & Poor's	BBB+			
Rating Agency Malaysia	AAA			
Malaysian Rating Corporation Berhad				
- (Corporate Debt Ratings)	AAA			
- (Islamic Debt Ratings)	AAAID			

#### AMERICAN DEPOSITORY RECEIPTS PROGRAMME (ADR)

ADR Level 1

## **Group Corporate Structure**

SUBSIDIARY COMPANIES



## MALAYSIA TRANSFORMER MANUFACTURING SDN. BHD. (100%)

#### **ASSOCIATE COMPANIES**

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

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

FTJ BIO POWER SDN. BHD. (40%)

GB3 SDN. BHD. (20%)

INTEGRAX BERHAD (22.12%)

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

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

#### **INVESTMENT COMPANIES**

LABUAN REINSURANCE (L) LTD. (10%)

FEDERAL POWER SDN. BHD. (8.91%)

Dormant

BAKUN HYDRO-ELECTRIC CORPORATION SDN. BHD. (IN LIQUIDATION) (6.67%)

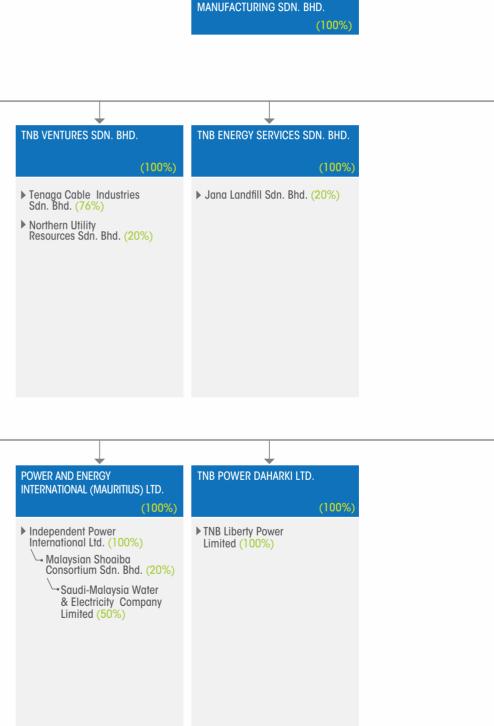
#### JOINTLY CONTROLLED ENTITY

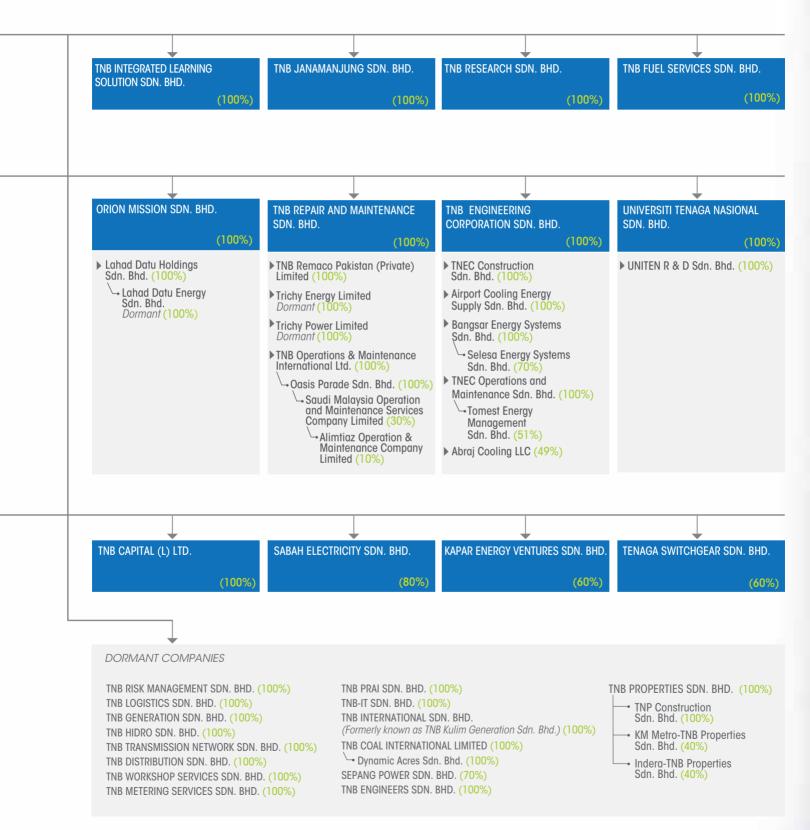
Dormant

SEATRAC SDN. BHD. (50%)

#### **TRUST FOUNDATION**

YAYASAN TENAGA NASIONAL RETIREMENT BENEFIT TRUST FUND YAYASAN CANSELOR UNIVERSITI TENAGA NASIONAL





## **Organisational Structure**

## **BOARD OF DIRECTORS**

#### **BOARD COMMITTEES**

COMPANY SECRETARY

CHIEF INTERNAL AUDITOR

## PRESIDENT/ CHIEF EXECUTIVE OFFICER

EXECUTIVE DIRECTOR/ CHIEF OPERATING OFFICER

#### NON-CORE BUSINESS

#### **Enterprise Management**

- Chief Financial Officer/ Vice President (Group Finance Division)
- Vice President (Planning Division)
- Vice President (Group Human Resource Division)
- Chief Information Officer (Information and Communication Technology Division)
- Chief Procurement Officer (Procurement Division)
- Vice President (Corporate Affairs Division)

### Corporate Services

 Senior General Manager (Corporate Services Division)

## CORE BUSINESS

- (Generation Division)
- Vice President (Transmission Division)
- Vice President
   (Distribution Division)

#### OFFICE OF PRESIDENT/ CHIEF EXECUTIVE OFFICER

- Sabah Electricity Sdn. Bhd.
- Legal Services Department
- Productivity Quality
   Management Department

## **Awards & Recognition**



## SILVER AWARD FOR BEST VIDEO FOR CONTACT CENTRE

TNB won the Silver Award for the Best Video in the Contact Centre category at the 11th Contact Centre Association of Malaysia (CCAM) Annual Award held on 8 October 2010 at Sunway Resort Hotel. TNB was also listed in the finals of the Best CRM Programme Implementation category.

#### Most Admired ASEAN Enterprise in Employment Category 2010

TNB won in the Most Admired ASEAN Enterprise in Employment Category for its human resources management practices. The ASEAN Business Award ceremony was held on 27 October 2010 at the National Convention Center in Hanoi, Vietnam, in conjunction with the ASEAN Heads of Government Meeting.





TNB once again received recognition for good Enterprise Governance by the Malaysian Business-Chartered Institute of Management Accountant (CIMA). The Company was conferred the Merit Award at the CIMA Enterprise Governance Awards 2010 held in Kuala Lumpur on 1 October 2010.





#### Gold Award - ICQCC 2010

The SMART UPJKL Team from Distribution Division in Kepong, grabbed the Gold Award at the International Convention Quality Concept Circle (ICQCC) held in Hyderabad, India, from 12–15 October 2010.

## Awards & Recognition

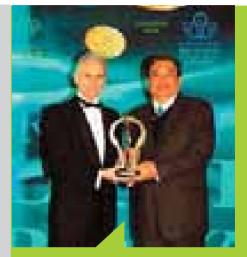
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Chicagan

A COMPANY

#### 2010 Corporate Awards - Tier 4, Category 1

TNB's Group Internal Audit Department was announced winner of the 2010 Corporate Awards – Tier 4, Category 1 by the Institute of Internal Auditors Malaysia (IIA Malaysia). The award recognises the Company's commitment to the Continuous Professional Development Programme in auditing.



#### IQC International Quality Crown Award – Gold Category

Universiti Tenaga Nasional (UNITEN) received the QC International Quality Crown Award in the Gold Category at a ceremony held in London, England, on 29 November 2010. The award was given by the Business Initiative Directions (BID) in recognition of organisations and companies worldwide which succeed in strengthening their positions and reputation in the practice and promotion of quality work management.



TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh was among the recipients of the pretigious Brand Leadership Award at the World Brand Congress 2010 held in Mumbai, India, on 23 November 2010.



#### "Anugerah Kecemerlangan Perniagaan Beretika" 2010/2011

TNB received the Highest Recognition for Large Companies at the "Anugerah Kecemerlangan Perniagaan Beretika" 2010/2011 ceremony held on 9 December 2010.



Will be there for a

#### National Level Quality Environmental Practice Award (5S) 2010

- Asset Maintenance, Distribution Division, Kluang - Service Sector Champion
- Tenaga Switchgear Sdn. Bhd.
   Small and Medium Enterprise Champion
- Tenaga Cable Industries Sdn. Bhd.Manufacturing Sector Champion
- Distribution Division TNB Taiping
   Special Award Services Sector

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#### Grand Prize - CNY Greeting Ad Award 2011

TNB won the Grand Prize for its Chinese New Year press advertisement at the CNY Greeting Ad Award 2011 Presentation on 10 March 2011 at the Sime Darby Convention Centre, Kuala Lumpur. The advertisement conveys the idea that TNB will always brighten the festival through the spirit of oneness and unity.

#### BrandLaureate 2010–2011 – Best Brand in Power Utility

TNB was conferred the BrandLaureate 2010-2011 Award for best brand in the Corporate Branding Category for Power Utilities.

## Awards & Recognition



Best Utility in Clean Energy Initiative at the 2nd Asia Power & Electricity Awards 2011

#### Asia HRD Congress 2011 Award

Dato' Muhammad Razif Abdul Rahman, Vice President of Human Resources, was conferred the Asia HRD Congress Awards 2011 – Contribution to HR Community at the 10th Asia HRD Congress held on 20 April 2011 at the Mandarin Oriental Hotel, Kuala Lumpur.

#### 550th position in Forbes Global 2000 Year 2011

TNB jumped 159 spots to be placed 550<sup>th</sup> among the world's largest companies in the Forbes Global 2000 list.

#### **Productivity Award 2010**

Tenaga Cable Industries Sdn. Bhd. (TCI) was declared winner of the Productivity Award 2010 for Category 4 for sale in excess of RM100 million by the Malaysia Productivity Corporation (MPC) on 12 May 2010 at the Grand Dorsett Subang Hotel, Selangor.



#### Certificate of Merit at NACRA 2010

TNB won a Certificate of Merit for Best Design at the National Annual Corporate Report Awards (NACRA) 2010 ceremony held on 27 January 2011 at the Sime Darby Convention Centre. NACRA, an initiative of Bursa Malaysia Berhad, the Malaysia Institute of Accountants (MIA), Malaysian Institute of Management (MIM) and Malaysia Institute of Certified Public Accountants (MICPA), promotes excellence in corporate reports.

#### World's 72<sup>nd</sup> Largest Electricity Supplier

TNB was named the World's 72nd largest company in electricity supply business and the 45<sup>th</sup> in terms business profit according to The Plimsoll Top 100 Global Analysis - Electricity Suppliers.



#### MSOSH 2010 Ceremony and OSH Award

Two TNB Business Units won Gold Merit while 26 and 11 others won the Gold Class I and Gold Class II Awards respectively while one Business Unit won the Silver Award at the Malaysian Society for Occupational Safety & Health (MSOSH) 2010 Award Ceremony on 22 July 2011.



#### Best Energy Sector – Global Leadership Awards 2011

TNB won the Best Energy Sector Award at the Global Leadership Awards 2011 ceremony organised by The Leaders International on 22 July 2011 at the Kuala Lumpur Convention Centre (KLCC).



#### ISQ 2011 Award

UNITEN received the International Standard Quality Award (ISQ) 2011 in the Quality College & University category on 6 August 2011. The evaluation of UNITEN was based on a report sent to the European Union Alliance Analysis on 24 June 2011.

#### Asia's Best Employer Brand Award 2011

TNB won the 2nd Asia's Best Employer Brand Award at a ceremony in Suntec, Singapore, jointly organised by the Employer Branding Institute, World HRD Congress and the Stars Group. TNB was among 78 companies from 19 Asian countries recognised for implementing effective human resources practices and good employer branding practice.

## **Key Past Awards**

ACCA 2009/2010 (Association Of Chartered Certified Accountants) Approved Employer – Professional Development

4<sup>th</sup> Best Company in Malaysia - Malaysia 1000

Lifetime Achievement Award – The Contact Centre Association of Malaysia: TNB Chairman, Tan Sri Leo Moggie

**Distinction** - The Malaysian Corporate Governance (MCG) Index 2009

Prime Minister's Award For Industry Excellence 2009: UNITEN

Best Power Utility Brand – The BrandLaureate Awards 2009 – 2010

Best CEO Asia – Asia Power & Electricity Awards 2010: TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh

Asia's Best Employer Brand & Human Resource Leadership Award – Asia's Best Employer Brand Awards

**Distinction** - Malaysian Corporate Governance (MCG) Index 2009

2nd Runner Up, Overall – Malaysian Business – Chartered Institute of Management Accountants (CIMA) Enterprise Governance Awards 2009



**Grand Award** – MSOSH 2009: Putrajaya Power Station

Excellence In Corporate Social Responsibility - The BrandLaureate Awards 2008

Overall Champion - ITEX 2008: UNITEN



4<sup>th</sup> Best Company in Malaysia - Malaysia 1000

575<sup>th</sup> In Forbes Global 2000 Ranking

3<sup>rd</sup> In Malaysia's Top 50 Most Valuable Brands

South East Asia Growth Strategy Leadership Award For Distribution Transformer Market: TNB Subsidiary, Transformer Manufacturing Sdn. Bhd.

Excellent Employee Award for Executives and Non-Executives – National 2009 Workers Day Gathering

2009 Invention, Innovation and Technology Exhibition (Itex 2009)

 UNITEN Won 3 Gold Medals
 Gold Award For The Best Exhibition Booth Design

#### 4<sup>TH</sup> MOST OUTSTANDING POWER UTILITY COMPANY IN ASIA – Platts Top 250 Global Energy

Platts Top 250 Global Energy Companies Rankings 2009





Business Leadership Award – Energy Sector – Malaysia Business Leadership Awards 2010: TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh



Double Win by UNITEN at PERODUA Eco-Challenge 2009

100<sup>th</sup> On Platts Top 250 Global Energy Company 2008 List

Top Three Most Admired ASEAN Companies - Employment Category - ASEAN Business Awards (ABA) 2008

#### Asiamoney Awards 2006

- Best Investor Relations, Malaysia
- Second Best for Corporate Governance
- Third Best Asian Investor Relations Company

MS ISO 9001 Certification by SIRIM QAS International Sdn. Bhd.

"2008 Corporate Awards – Tier 2, Category 1" by the Institute of Internal Auditors Malaysia (IIA Malaysia)

Malaysia's Best Chief Executive Officer 2008: TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh

Silver - Malaysia HR Award 2008-2009

#### National Level 2008 Workers Day Gathering

- Competitive Employer Award (Large Industry)
- Outstanding Male Employee
   Award, Executive Group
- Outstanding Male Employee
   Award Non Executive Group

**Best Practice Award 2007** (Public Listed Company) – NAfMA 2007

Finalist for Platts 2007 Global Energy Awards for Top Power Company of the Year, Ranked  $32^{nd}$  Among Top Energy Companies in Asia and  $42^{nd}$ Among Global Top 250

Winner of the 2007 Corporate Award – Tier 2, Category 1 – Institute of Internal Auditors Malaysia (IIA Malaysia)

Business of the Year Award 2007
– Superior Company Category

Anugerah Harapan Majikan Prihatin – National Labour Day Celebration 2006

**Best Show Awards** – 5<sup>th</sup> Malaysia ICT ASEAN Communication & Multimedia (ACM) Expo & Forum 2006 Juara Kaunter Perkhidmatan Terbaik – Kedai Tenaga Kangar, Perlis – Malam Anugerah Kualiti Menteri Tenaga, Air & Komunikasi 2006

Most Improved Company in Malaysia – Deutsche Bank Study (Reported in The Star, 10 March 2006)

Excellent Laboratory – The Institute of Interlaboratory Studies (IIS): Transformer Oil Lab, TNB Research (Three Consecutive Years)

Gold Award for the Best Emerging Contact Centre in a GLC: TNB CareLine 15454

Human Resources Minister Award in The Big Employers (Services) Category: Sabah Electricity Sdn. Bhd. (SESB)

**Best Training Provider** – Minister of Human Resources Award 2007: TNB Integrated Learning Solution Sdn. Bhd. – ILSAS



Prime Minister's Industry Excellence Award (AKIPM) 2007

## **Calendar of Events**



#### 1 SEPTEMBER 2010 61st Anniversary TNB Assembly

TNB employees assembled at the Multipurpose Hall, TNB Sports Complex, Jalan Bangsar, Kuala Lumpur, in conjunction with LLN/TNB's 61<sup>st</sup> anniversary.

#### 22-23 SEPTEMBER 2010 Hari Raya Get Together

TNB held its Hari Raya Get Together with employees at the Multipurpose Hall of the Sports Complex in Bangsar, followed by a similar gathering for the Corporate Level the next day. Dato' Sri Peter Chin Fah Kui, Minister of Energy, Green Technology and Water, was present to add to the festive mood of the Corporate Level Aidilfitri Gathering.

#### 13-17 OCTOBER 2010 International Greentech & Eco-Products Exhibition (IGEM 2010)

TNB participated in the International Greentech & Eco-Products Exhibition (IGEM 2010) organised by the Ministry of Energy, Green Technology and Water in collaboration with Green Purchasing Network Malaysia. At the exhibition, held at the Kuala Lumpur Convention Centre (KLCC), TNB highlighted its Renewable Energy and Energy Efficiency initiatives.

#### **19-21 NOVEMBER 2010** Asia Pacific Regional Conference & Exhibition on Energy Efficiency 2010

TNB participated in the Asia Pacific Regional Conference & Exhibition on Energy Efficiency 2010 at Berjaya Times Square Hotel, Kuala Lumpur. The exhibition was organised by CIRED Organisation Malaysia with the theme Energy Efficiency for Sustainable Development.

#### 28 OCTOBER 2010 Annoucement of the Group's Financial Results (FY2009/10)

The Company announced its FY2009/10 Financial Result on 28 October 2010.

#### 3 NOVEMBER 2010 Second Nuclear Energy Programme

TNB Integrated Learning Solution Sdn. Bhd. – ILSAS and TNB Nuclear Energy Unit jointly organised the Second Nuclear Energy Colloqium Programme 2010 at the Equatorial Hotel in Penang, which was attended by some 200 executives from various TNB divisions.

#### 4 NOVEMBER 2010 Central Talent Pool Briefing

Human Resources Planning and Development Department of Group Human Resources Division conducted a Briefing Session for 338 members of the TNB Central Talent Pool at the Abu Zarim Auditorium in ILSAS, Bangi. TNB President/ Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh delivered the key message and mandate.

#### 8 NOVEMBER 2010 Working visit by Minister of Energy, Green Technology and Water to UNITEN

Universiti Tenaga Nasional (UNITEN) welcomed Dato' Sri Peter Chin Fah Kui, Minister of Energy, Green Technology and Water, who visited the Putrajaya Campus to take stock of research efforts being undertaken in energy resources, particularly green technology and renewable energy.

#### 9 NOVEMBER 2010 Official visit to NLDC Building & Connaught Bridge Power Station

Government officials from the Ministry of Energy, Green Technology and Water, Economic Planning Unit, Energy Commssion and Public-Private Sector Cooperation Unit visited the NLDC Building and Cannaught Bridge Power Station in Klang, to better understand TNB's opertions. The visit also provided the officials with an opportunity to have a closer look at NLDC's operations.

#### 11–14 NOVEMBER 2010 Fifth UNITEN Robogamez

About 80 primary and secondary schools, including those from Singapore, as well as institutions of higher learning took part in the fifth UNITEN Robogamez, themed Rising of The Silent Tower: Resist or Surrender II. Robogamez 2010 was organised by UNITEN in collaboration with the Ministry of Higher Education Malaysia and Tenaga Nasional Berhad.



#### 22-24 NOVEMBER 2010 Kenyan delegation visit to TNB

A delegation of 10 members from Kenya Electricity Transmission Company (KETRACO), paid an official visit to TNB. The visit was to observe best practices implemented by TNB, particularly the Transmission Division, in grid system planning and management, engineering, asset development and maintenance as well as to explore opportunties for bilateral cooperation.

#### 1 DECEMBER 2010

#### Deepavali Get Together

The Deepavali Gathering was held at the Multipurpose Hall, TNB Sports Complex, Jalan Bangsar, attended by Dato' S. Subramaniam, Minister of Human Resources.

#### 2 DECEMBER 2010

#### Pulau Ketam Undersea Cable launched

The Pulau Ketam Undersea Cable was officially launched by Dato' Sri Peter Chin Fah Kui, Ministry of Energy, Green Technology and Water. The cable was installed to meet the growing load requirements of residents of Kampung Sungai Lima and Kampung Pulau Ketam.

#### 7 DECEMBER 2010 Maal Hijrah Gathering

40 TNB employees from the Head Office and Klang Valley took part in the Maal Hijrah Gathering at the Putrajaya International Convention Centre. The gathering was organised by the Department of Islamic Religion Malaysia (JAKIM) and officiated by His Majesty The Yang di-Pertuan Agong.

#### 8 DECEMBER 2010 TNB Malaysian Hockey League (MHL) 2010/2011

TNB, represented by President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh, signed a Letter of Understanding (LoU) with NATCO Yemen, represented by its Chief Executive Officer/Managing Director Mr Fouad Hayel Saeed.

Through this agreement, TNB and NATCO will be collaborating in system planning, design, project management and development, system operations, system maintenance, generation, distribution and energy industry-related training.

#### 8 DECEMBER 2010 TNB Customer Charter

The Company introduced the TNB Customer Charter with effect from January 2011. The Customer Charter is directed at eight focus service areas, namely Connection of New Electricy Supply, Change of Occupant, Refund of Deposit, Billing, Service Counter, Customer Relations, Disconnection and Reconnection of Electricity Supply.

The Customer Charter represents the first revision of the original TNB Charter introduced in the 1990s. It is implemented in line with the new service standard introduced by the Energy Commission.

#### 9 DECEMBER 2010

MoU between ILSAS and Tyco Electronics TNB Integrated Learning Solution Sdn. Bhd. – ILSAS signed a memorandum of Understanding (MoU) with Tyco Electronics at TNB's Head Office on the provision of training for participants from within and outside the country. This collaboration will contribute to ILSAS becoming a Centre of Excellence for Training in Asia, in line with TNB's Strategic Plan to achieve geographical expansion by 2015.

#### 15 DECEMBER 2010

#### TNB Annual General Meeting 2010

Some 4,200 shareholders and proxies attended the 20<sup>th</sup> TNB Annual General Meeting at the Multipurpose Hall, TNB Sports Complex, TNB Head Office. Also present were members of the Board of Directors and TNB Group Management Executive Committee.

#### 20 DECEMBER 2010

Official Visit by delegation from Electricity of Vietnam Southern Power Corporation TNB welcomed a delegation from EVN SPC on a working visit to the Company.

#### 4 JANUARY 2011

#### New Year Gathering of Employees

The Annual Gathering of TNB Employees for 2011 was held at the Multipurpose Hall, TNB Sports Complex, Jalan Bangsar, Kuala Lumpur. The programme included the Chairman's New Year speech, a special forum with the President/Chief Executive Officer, presentation of Excellence Awards and appreciation prizes to WIT/ICC Groups and the launch of Company initiatives.

## **Calendar of Events**



#### 25 JANUARY 2011

Official opening of Wisma TNB Seremban TNB celebrated the official opening of Wisma TNB Seremban, Negeri Sembilan, in a ceremony presided by the Yang Di-Pertuan Besar Negeri Sembilan, Tuanku Muhriz Ibni Al-Marhum Tuanku Munawir.

#### 27 JANUARY 2011

#### Seminar on Electromagnetic Fields

The Energy Commission organised a Seminar on Public Awareness of Electromagnetic Fields (EMF) at The Marriot, Putrajaya. TNB supported this initiative to explain to the public the effects of electromagnetic fields from electricity supply infrastructure.

#### 14 FEBRUARY 2011 CNY Gathering

TNB organised its 2011 Chinese New Year Gathering at the Multipurpose Hall, TNB Sports Complex.

#### **15 FEBRUARY 2011**

## National Level Maulidur Rasul Assembly & Procession

TNB participated in the National Level Maulidur Rasul Assembly and Procession themed 1 Malaysia 1 Ummah at the Tuanku Mizan Zainal Abidin Mosque in Putrajaya. The Company was represented by 100 employees and management from the Head Office and the Klang Valley.

#### 26 FEBRUARY 2011 TNB Malaysian Hockey League (MHL) 2010/2011

Presentation of TNB Championship Prize – Malaysia Hockey League 2010/2011 Liga Perdana category at MBMB Hockey Stadium in Melaka. Tengku Mahkota Pahang, Tengku Abdullah Al-Haj Ibni Sultan Haji Ahmad Shah, who is President of the Malaysia Hockey Federation, and TNB President/Chief Executive Officer, Dato' Sri Che Khalib bin Mohamad Noh, attended the function.

#### 1 MARCH 2011 Royal presence at ground breaking ceremony

The Ground Breaking Ceremony of the Ulu Jelai Hydroelectricity Project in Mukim Ulu Telom, Cameron Highlands, was officiated by His Royal Highness the Sultan of Pahang.

#### 2 MARCH 2011

#### Flood relief for employees

TNB President/Chief Executive Officer, Dato' Sri Che Khalib bin Mohamad Noh presented contributions to TNB employees affected by the floods in Johor, Melaka and Negeri Sembilan at Wisma TNB Muar.

#### 19 MARCH 2011 Recognising long service

TNB organised the TNB Loyal Service Award Ceremony 2011 at the Multipurpose Hall, TNB Sports Complex, to recognise employees who have served the Company for 20, 25, 30 and 35 years.

#### 29-30 MARCH 2011 National Symposium on OSH

The 5<sup>th</sup> TNB National Symposium on Occupational Safety and Health was held at the College of IT (COIT) Hall in UNITEN, Bangi, for occupational safety and health practitioners in TNB and its subsidiaries. Themed Energising OSH & Environment Through Effective Leadership, the symposium enhanced the participants' knowledge of Occupational Safety and Health, in compliance with acts formulated under OSHA 1994.

#### 7 APRIL 2011

#### Signing ceremony for MMP Agreement

The Signing Ceremony for the Multi-Year Maintenance Programme (MMP) Agreement for GE 9FA GT2A & GT2B Gas Turbines at the Tuanku Jaafar Power Station, Port Dickson was held at TNB's Head Office.

#### 20 APRIL 2011 MoU with KOSEP

TNB signed a Memorandum of Understanding (MOU) with Korea South-East Power Company Ltd. (KOSEP) at Wisma TNB on Jalan Timur, Petaling Jaya, Selangor. KOSEP is a subsidiary of Korea Electric Power Company (KEPCO) involved in the generation and development of electricity resources. The two companies agree to collaborate on the transfer of technology relating to electricity generation.

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#### 20-26 APRIL 2011 MSAM Week 2011

TNB participated in an Exhibition held in conjunction with the Minggu Saham Amanah Malaysia (MSAM) Week 2011, themed Investment for 1Malaysia, organised by Permodalan Nasional Berhad (PNB) at the Ipoh City Council Sports Complex in Ipoh, Perak. The function was officially opened by Prime Minister Dato' Seri Mohd Najib Tun Haji Abdul Razak.

#### 24-25 APRIL 2011 Visit to Sultan Azlan Shah Power Plant

Some 22 officers from the Ministry of Energy, Green Technology and Water and Committee Members of the Electricity Supply Industry Trust Account Committee, headed by Tuan Haji Badaruddin Mahyudin, Deputy Secretary General (Energy) of the ministry, had a working visit to the Sultan Azlan Shah Power Plant at Manjung, Perak.

#### 24 APRIL 2011

#### Charity ride attracts 382 participants

The Janamanjung Fellowship Ride (JMFR) 2011, a bicycle tour during which participants carry our welfare work, was held covering 140 km in Perak. Organised by the Sultan Azlan Shah Power Plant, Manjung, JMFR attracted 382 participants from all over the country and Singapore.

#### 26 APRIL 2011 Southern Zone Walkabout

TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh had a Southern Zone Walkabout session at the Wisma TNB Johor Bahru to enhance the level of awareness of Gemilang 2015, and the commitment of employees towards achieving its goals. It was attended by 124 Informal Leaders from Melaka, Negeri Sembilan and Johor. The Central and Northern Zone Walkabout sessions were held on 6 and 12 July 2011 respectively.

#### 28 APRIL 2011 1Malaysia Seminar

Human Resources Management Department, Group Human Resources Division with the cooperation of Special Affairs Department (JASA) of the Ministry of Information, Communication and Culture organised a Seminar on Enlightening the Concept of 1Malaysia for TNB employees at the Multipurpose Hall, TNB Sports Complex. The Seminar was attended by some 250 employees and was officiated by Dato' Muhammad Razif Abdul Rahman, Vice President (Human Resources).

#### 5 MAY 2011 Annual luncheon with Corporate Consumers

TNB held its annual luncheon with Corporate Consumers at the Shangri-La Hotel Kuala Lumpur, attended by 46 companies under its CARE Programme.

#### 7 MAY 2011 230 employees at Unity Gathering

TNB sent 130 employees to the Unity Gathering in conjunction with Workers Day 2011 at Putra Stadium, National Sports Complex, Bukit Jalil in Kuala Lumpur. Deputy Prime Minister Tan Sri Dato' Haji Muhyiddin Mohd Yassin delivered a special Workers Day mandate and presented the Workers Day 2011 Awards.

#### 25 MAY 2011 Dialogue with PUTM

TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh had a dialogue with the Association of TNB Entrepreneurs (PUTM)at ILSAS, Bangi, aimed at enhancing relationships and cooperation among TNB vendors. The session was also a follow-up on the MoU signed between TNB and PUTM on 30 November 2010.

#### 26 MAY 2011

#### Khazanah Nasional visit to Tuanku Jaafar Power Station

A delegation made up of Directors and Heads of Strategic Planning Unit from the Office of the Managing Director, Khazanah Nasional, visited the Tuanku Jaafar Power Station in Port Dickson. This first visit to Tuanku Jaafar Power Station by Khazanah Nasional was to have a closer look at the electricity generation process at TNB's most modern and environment-friendly power station.

## **Calendar of Events**



#### 26 MAY 2011 TNB adopts school in Manjung

TNB adopted the Sekolah Kebangsaan Muhammad Saman in Kampung Pasir Panjang Laut, Seri Manjung, and presented a cheque for RM16,000 to fund programmes for the pupils. The launch, themed Cahaya Ilmu Generasi Cemerlang, formed part of Generation Division's Five-Year Corporate Social Responsibility Programme.

#### 26 MAY 2011 ICT Productivity Day

ICT Productivity Day was held at the Multipurpose Hall, TNB Sports Complex, on Jalan Pantai Baru, Kuala Lumpur. Associates of ICT Division provided good tips relating to ICT as well as discounts by vendors.

#### 28 MAY 2011

#### Jom La Futsal attracts 57 teams

Corporate Communications Department of the Corporate Affairs Division organised a Jom La Futsal 2011 Competition at the Sports Complex Field at TNB's Head Office. A total of 57 teams representing various divisions and subsidiaries took part in the competition.

#### 31 MAY 2011 A Diamond in the EE crown

The Energy Commission officially opened its new, energy efficient head office, the Diamond Building in Putrajaya, in conjunction with its 10th anniversary. At the ceremony, Platinum Certificates for Green Building Index Malaysia and Green Mark Singapore were presented followed by a visit to the Diamond Building.

#### 9-10 JUNE 2011 TNB National Level Tilawah & Hafazan Al-Quran event

The TNB National Level Tilawah & Hafazan Al-Quran event for 2011M/1432H was held at the Abu Zarim Auditorium, TNB – Integrated Learning Solution Sdn. Bhd. – ILSAS. There were a total of 55 participants, comprising 42 youth and children and 13 adults.

#### 13 JUNE 2011 New edition of Book on Procurement Policies and Procedures

TNB President/Chief Executive Officer Dato' Sri Che Khalib Mohamad Noh launched the 2011 edition of the Book on Procurement Policies and Procedures at TNB's Head Office. The book, published by the Procurement Division, has been revised in line with the Red Book (Guide on Procurement Best Practices) produced by The Putrajaya Committee for GLC High Performance under the GLC Transformation Programme. It replaces the 2004 edition.

#### 14 JUNE 2011 TNB Remaco agreement with Laraib Energy

TNB Remaco signed an agreement with Laraib Energy Ltd., Pakistan at TNB's Head Office. Through this agreement, TNB Remaco was awarded the operations and maintenance contract valued at RM42.7 million for the Bong Escape Hydroelectricity Power Complex owned by Laraib Energy Ltd. in Pakistan. The agreement was the first for the 213.6 MW diesel power generator in Punjab, Pakistan.

#### 15-16 JUNE 2011

## TNB Selangor Technical Sports Champs Again

Technical Sports, organised by Sabah this year, is one way to increase the efficiency and competency of TNB employees in general and those of the Distribution Division in particular. There were 18 events and 818 participants including TNB contractors and vendors. TNB Selangor retained its crown of Overall Champion.

#### 17 JUNE 2011

#### **TNBR** Quality Convention 2011

The TNBR Quality Assurance Convention 2011 Edition 5, organised by TNBR Quality Assurance Unit and themed *Certification Towards Excellence*, was officially launched at TNB Research Sdn. Bhd. (TNBR) in Bangi. At the same function, the *Product Inspection Handbook* was launched and certificates presented to TNB Quality Assurance Inspectors.



#### 18 JUNE 2011

#### Baiti Jannati Project 2011 launched

The National TNB Baiti Jannati Project was launched by Dato' Seri Ahmad Husni bin Hanadzlah, Minister of Finance II, who was also Member of Parliament for Tambun, Perak Darul Ridzuan at the house of Haji Abdul Rani Abdullah Sani in Kampung Dato' Ahmad Said in Ipoh, Perak. Haji Abdul Rani was one of five persons from Perak to receive assistance under the Baiti Janati project in 2011.

#### 24-26 JUNE 2011 TNB supports GLC Open Day

TNB took part in the first GLC Open Day orgnanised by Khazanah Nasional Berhad at the Kuala Lumpur Convention Centre. Launched by Prime Minister Dato' Sri Mohd Najib bin Tun Abdul Razak, the open day aimed to inform society at large about the history, role and direction of Government-Linked Companies in spearheading the national economy.

#### 29 JUNE 2011 Recognising Retirees

Dato' Muhammad Razif Abdul Rahman, Vice President (Group Human Resources), presented awards to 122 employees from the Head Office, ILSAS and Kuala Lumpur who retired in 2010/11. The Retirement Award Ceremony (Jasamu Dikenang) was held at the Multipurpose Hall, TNB Sports Complex, Jalan Bangsar, Kuala Lumpur.

#### 7 JULY 2011 Certificate presentation for TNB Education Programme 2011

Certificates were presented to 858 graduates of the TNB Education Programme 2011 at the Seri Sarjana Hall of UNITEN's Putrajaya Campus. The official ceremony was presided by TNB President/Chief Executive Officer Dato' Sri Che Khalib Mohamad Noh, who was accompanied by Vice President (Human Resources) Dato' Muhammad Razif Abdul Rahman.

#### 16 JULY 2011 Family Day at Head Office

With the theme A Caring TNB Makes Happy Families, the Head Office Family Day was celebrated with great fun at the TNB Sports Complex. Close to 12,000 employees and family members were present.

#### 20-23 JULY 2011 Asean ELENEX 2011

TNB hosted the Asean ELENEX 2011 Exhibition (the 9<sup>th</sup> International Exhibition of Transmission, Distribution & Electrical Engineering for the ASEAN Region) at the Kuala Lumpur Convention Centre. Datuk Peter Chin Fah Kui, Minister of Energy, Green Technology and Water officially opened the exhibition on 21 July 2011. The programme served as a platform for TNB to strengten its business relations with regional and international energy industry players, as targeted in its 20-Year Strategic Plan.

#### 26 JULY 2011 SL1M launched

The 1Malaysia Training Scheme (SL1M) was launched at the Abu Zarim Aditorium, ILSAS, by Senator Datuk Dr Awang Adek Husain, Deputy Minister of Finance II. The SL1M programme forms part of the Government's effort to enhance the employability of graduates to reduce their unemployment rate.

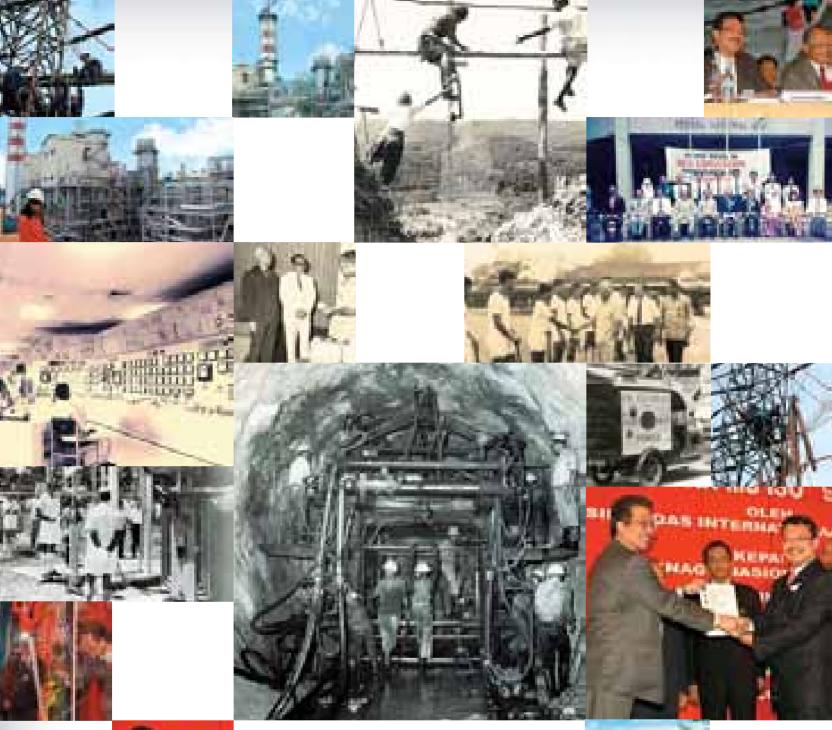
#### 26 JULY 2011 TNB Pledge of Integrity

TNB made a Pledge of Integrity in collaboration with the Malaysian Anti-Corruption Commission (MACC) at the Multipurpose Hall, TNB Sports Complex, Kuala Lumpur. The ceremony was the result of cooperation between TNB and MACC in realising the Government's mission to combat corruption.

#### 11 AUGUST 2011 Buka Puasa at Balai Islam

The TNB corporate level breaking of fast was held at Balai Islam, TNB Head Office, Kuala Lumpur. In conjunction with the event, some 50 orphans from Nurul Iman Orphanage, Setapak were given a treat by TNB. Contributions in the form money was presented by TNB Chairman, Tan Sri Leo Moggie together with TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh.

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## TNB ~ annual report 2011 Milestones over 60 Years









#### • 1 September 1949

The Central Electricity Board of the Federation of Malaya was formed, and became the controlling authority for electrical installation in the country, with W D Godsall as the first Chairman (1949-1952) and Frank P Egerton as the first General Manager (1949-1953).

#### • 1953

Frank P Egerton was succeeded by J Sharples as General Manager of the Central Electricity Board (1953-1964).

• 1957

The Central Electricity Board (CEB) took over the Huttenbachs installations in Province Wellesley (Seberang Perai), Penang. In March 1964, the Board took over all remaining Huttenbachs installations in the peninsula.

#### • 22 June 1965

CEB was renamed "Lembaga Letrik Negara (LLN)" Tanah Melayu (National Electricity Board or NEB) of the States of Malaya.

#### • 1966

NEB commissioned the first computer system in the country – an IBM 1440 mainframe with 8000KB memory – envisioned as the bedrock of the nerve centre of the Company's new HQ in Jalan Bangsar, Kuala Lumpur.

#### • 26 March 1966

The first Prime Minister, Tuanku Abdul Rahman Putra Al-Haj, officially opened the NEB Headquarters.

#### • 1968

Malaysianisation of the NEB was completed with more than 80 expatriate officers in key positions replaced by qualified Malaysians within a decade.

#### • 1959

Work commenced on the development of the Cameron Highlands hydroelectric power plant, a landmark in the history of hydroelectric technology in the country and region.

• 1960

Dato' Kurnia Jasa Haji Osman Taib became the first Malayan Chairman of the Central Electricity Board (1960-1970).

1963

A Grid Control Centre was set up in 1963 at the Connaught Bridge Power Station. Its main responsibility was to co-ordinate generation and control of the grid network of 66kV to 132kV.

#### 1964

Raja Tan Sri Zainal Raja Sulaiman succeeded J Sharples to become the first Malaysian General Manager of CEB (1964-1974).

from 1949 to 1964

#### • 1964

Maimunah Suleiman joined NEB as its first woman engineer. She was also the first woman engineer in the country. She went on to become the Company's first female General Manager.

## from 1965 to 1980

#### 1974

Tan Sri Dato' Abu Zarim Haji Omar became General Manager of NEB (1974–1984).

#### • 1976

The Board, under the leadership of Tan Sri Dato' Abu Zarim Haji Omar, set up a training institute in 1976 known as the Institut Latihan Sultan Ahmad Shah (ILSAS).

First Grid connection from the West Coast to the East Coast, supplying Kuantan and Pekan.

NEB took over the installations of the Penang City Council at a cost of some \$22 million. During the same year, the Central Government gained control of the Perak River Hydroelectric Power (PRHEP) company and its subsidiary, the Kinta Electrical Distribution Company. In 1978, the PRHEP system was integrated with that of the NEB.

#### 2 June 1979

The National Load Despatch Centre (NLDC) was officially opened by Prime Minister Tun Hussein Onn. It was established in 1978.

#### • 1980

Construction begins on the 150m-high Kenyir dam, the largest hydroelectric scheme in the peninsula then. During construction, the Company was involved in Operation Jumbo to relocate a herd of elephants trapped by rising waters on the man-made islands in the lake. The dam was completed in December 1985.

## Milestones Over 60 Years



## from 1981 to 1996

#### • 1981

First Grid connection (132kV) to Hadyai, Thailand, from Bukit Keteri, Kedah.

#### • July 1982

NEB, under the aegis of ASEAN, signed bilateral agreements with the Electricity Generating Authority of Thailand (EGAT) and the Public Utilities Board (PUB) of Singapore, paving the way for systematic and integrated connections between NEB's system and those of its two neighbours.

#### 1984

Tan Sri Mohd Jalaluddin Zainuddin succeeded Tan Sri Dato' Abu Zarim Haji Omar as Deputy Chairman and General Manager of NEB (1984-1989).

#### November 1984

Paka Power Station, one of the first combined cycle plants in the world, began receiving natural gas from Petronas.

• 1985

First undersea cable connection (230kV) to Singapore.

· 1989

Datuk Haji Ibak Abu Hussein succeeded Tan Sri Jalaluddin Zainuddin as Deputy Chairman/ General Manager (1989-1990).

#### 1 September 1990

NEB was corporatised and changed its name to Tenaga Nasional Berhad (TNB). Tan Sri Ani Arope was appointed Chairman (1990-1992).

#### 28 May 1992

TNB's shares made a successful debut on the KLSE at RM8.00, a solid premium of RM3.50 above its minimum issue price of RM4.50.

#### 1 September 1992

Tan Sri Ani Arope was appointed Executive Chairman of TNB (1992-1996).

#### 29 September 1992

Nationwide power blackout in Peninsular Malaysia. It resulted in a 'fast track' plant up programme through the installation of additional gas turbines at various existing plants.

#### 1993

TNB Research was established as a department in TNB, and evolved into a subsidiary. In 1997, TNBR was approved as an R&D status company by MIDA.

#### 19 January 1993

Minister of Energy, Telecommunications and Posts Dato' Seri Samy Vellu announced the formation of a Crisis Management Team headed by Executive Chairman Tan Sri Ani Arope to resolve the energy crisis.

#### 31 March 1993

TNB signed a 21-year Electricity Power Purchase Agreement (PPA) with Independent Power Producer (IPP), Yeoh Tiong Lay Corporation Bhd. (YTL). This was the first PPA ever signed by TNB with an IPP.

#### 6 July 1993

The Tenaga Nasional Foundation was launched at ILSAS.

#### 1994

Establishment of Institut Kejuruteraan Teknologi Tenaga Nasional (IKATAN).

#### 1995

TNB's monopoly in electricity generation ended with the establishment of five IPPs which supplied 30.99% of electricity to the National Grid. The five were YTL Power Generation Sdn. Bhd., Segari Energy Ventures Sdn. Bhd., Port Dickson Power Bhd., Powertek Bhd. and Genting Sanyen Power Sdn. Bhd.

#### 1 September 1995

Tenaga Nasional Repair and Maintenance Sdn. Bhd. (REMACO) was incorporated to provide costeffective maintenance services for TNB's power plants.

#### November 1995

The first of its kind wind turbine generator hybrid system was constructed and installed in Pulau Layang-Layang, Sabah, by TNB Research Sdn. Bhd.

#### 1996

TNB became the first non-American and the first Asian to issue the Yankee Century bonds in New York. A tranche of USD150 million bonds with an interest rate of 7.5% per year was issued and was well received by investors.

#### March 1996

Putrajaya Power Station (formerly known as Serdang Power Station) became the first power plant in Malaysia to be awarded MS ISO 9000 certification. Subsequently, all other TNB power stations were accredited with the standard.

#### • 3 August 1996

Nationwide blackout lasting between two to 20 hours. It led to the implementation of an islandisation programme and strengthening of the National Grid with a 500kV network which would function as the new backbone of the distribution arid.

#### 1 September 1996

Datuk Dr Ahmad Tajuddin Ali was appointed Executive Chairman of TNB (1996-2000).

#### 19 December 1996

Education Minister Dato' Seri Najib Tun Razak handed over a Letter of Offer to TNB's Executive Chairman for the establishment of Universiti Tenaga Nasional (UNITEN).

#### • 1 September 1997

Two wholly-owned subsidiaries were established – TNB Generation Sdn. Bhd. and TNB Engineers Sdn. Bhd.

#### • 26 August 1998

TNB, through its wholly-owned subsidiary Sabah Electricity Sdn. Bhd. (SESB), entered into a privatisation agreement with the Government of Malaysia and Sabah Electricity Board (SEB) to take over SEB's electricity business operations in the state and the Federal Territory of Labuan.

#### • 1998

Tenaga Nasional Ventures Sdn. Bhd., TNB Metering Services Sdn. Bhd., TNB Workshop Services Sdn. Bhd. and TNB Fuel Services Sdn. Bhd. were operationalised.

#### • 1 September 1999

TNB celebrated its 50th anniversary.

Two subsidiaries were spawned on 1 September 1999. Tenaga's transmission and distribution divisions were hived off as part of the group's restructuring efforts to focus on core activities and supporting services.

#### • February 2000

New Vision, Mission and Shared Values.

#### • September 2000

Datuk Dr Jamaluddin Jarjis was appointed as Chairman of TNB (2000-2002).

#### November 2000

Dato' Fuad Jaafar was appointed as President/Chief Executive Officer of TNB (2000-2001).

#### 10 September 2001

Commencement of the Liberty Power Limited (LPL) operations in Pakistan, involved in the generation and sale of electricity to the Water and Power Development Authority (WAPDA) of Pakistan. LPL operates a 235MW combined-cycle natural gas power plant.

#### November 2001

Dato' Pian Sukro was appointed as President/Chief Executive Officer of TNB (2001-2004).

#### August 2002

TNB declared that it intended to become the best corporation in Malaysia by a self-imposed deadline of August 2007. The Company aimed to do this via focusing on the T7 Strategy for transformation and the inculcation of an effective goal-oriented culture underpinned by its core values of Integrity, Customer Focus, Business Excellence and being Caring.

#### 18 October 2002

from 1997 to 2010

Prime Minister Dato' Seri Dr Mahathir Mohamad officially launched the Liberty Power Plant in Pakistan.

#### • 1 December 2002

Datuk Dr Awang Adek Hussein was appointed Chairman of TNB (1 December 2002 – 31 March 2004).

#### April 2004

The Jana Landfill Small Renewable Energy Programme (SREP) developed by TNB-ES commenced commercial operations. It is based on a Renewable Energy (RE) power purchase agreement (REPPA) signed in October 2001.

#### • 12 April 2004

Tan Sri Leo Moggie was appointed Chairman of TNB.

#### 1 July 2004

Dato' Sri Che Khalib Mohamad Noh was appointed President/CEO of TNB.

#### July 2004

The Kapar Power Station was divested to Kapar Energy Ventures Sdn. Bhd. (KEV). TNB retained a 60 per cent share in KEV.

## Milestones Over 60 Years



## from 1997 to 2010

#### • 16 April 2005

Tun Dato' Seri Utama (Dr) Haji Abdul Rahman Haji Abbas, the Yang di-Pertua Negeri Pulau Pinang, was appointed Chancelor of UNITEN.

#### • June 2005

The Saudi-Malaysian consortium (of which TNB was a member) was selected to build, own and operate the Shuaibah Independent Water and Power Project (IWPP) developed by the Shuaibah Water and Electricity Company.

#### • 13 June 2005

The new 750MW combined cycle power plant under Phase 1 of the Rehabilitation Project of the Tuanku Jaafar Power Station in Port Dickson, Negeri Sembilan, began commercial operations.

#### 26 September 2005

TNB signed an agreement with the State Government of Selangor on the Kampung Kuantan Firefly Rehabilitation Project in Kuala Selangor.

#### 1 February 2006

TNB Corporate as a whole achieved MS ISO 9000 certification.

#### • 24 May 2006

TNB announced its first tariff rebalancing exercise in nine years since 1997.

#### • 13 June 2006

TNB's CareLine 15454 service was launched by the Minister of Energy, Water and Communications Datuk Seri Lim Keng Yaik.

#### • 2006

TNB launched its 20-Year Strategic Plan, the first 5-year phase of which revolved around achieving Service Excellence.

#### 30 April 2007

Official opening of the 3x700 MW coal-fired Sultan Azlan Power Station in Manjung by the Sultan of Perak.

#### • 26 November 2007

Sabah Grid was launched by Tun Datuk Seri Panglima Haji Ahmadshah bin Abdullah, the Yang di Pertua Negeri Sabah. The East-West grid project in Sabah was completed on 28 July 2007 with the commissioning of the 275kV lines from Kolopis substation to Segaluid substation. With the commissioning of the 246km double circuit lines, the state-wide Sabah Grid was formed, linking the West Coast Grid and the East Coast Grid.

#### 2007

Malaysia Transformer Manufacturing Sdn. Bhd. (MTM) became a whollyowned subsidiary of the Tenaga Group following the successful acquisition of 27% of its equity by TNB from ABB.

#### • 27 May 2008

TNB received the coveted Prime Minister's Industry Excellence Award for 2007. It also won the Quality Management Excellence Award (Category 4).

#### 21 January 2009

TNB, together with Sarawak Energy Berhad (SEB), announced its proposal to take over the Bakun project. Under the agreement, TNB and SEB would lease the dam from Sarawak Hidro Sdn. Bhd. after its completion, while a special purpose vehicle (SPV) would be set up to develop the cables. All three parties would hold stakes in the SPV, with Sarawak Hidro taking the lead.

#### January 2009

Maybank and TNB set a milestone in electronic payments in Malaysia with the launch of an innovative Online Bill service for customers who can now view and pay their electricity bills via Maybank2u.com.

#### April 2009

TNB was ranked the 575<sup>th</sup> biggest company in the world by Forbes Global 2000.

#### June 2009

The successful completion of the second phase of the Tuanku Jaafar Power Station Rehabilitation Project (PD2) was officiated by the Minister of Energy, Green Technology and Water, Dato' Sri Peter Chin Fah Kui.

#### 1 September 2009

TNB celebrates its 60th anniversary.

#### 23 October 2009

TNB signed an agreement with the Perusahaan Listrik Negara Indonesia (PLN) on the Sumatera-Peninsular Malaysia Interconnection, which forms part of the ASEAN Power Grid. The project is expected to be completed in 2015.

#### 31 October 2009

TNB received the first official visit by Prime Minister Dato' Sri Mohd Najib bin Tun Haji Abdul Razak in conjunction with its 60th anniversary. The Prime Minister launched the 60th Anniversary of LLN/TNB Commemorative Book.

#### 12 February 2010

TNB's hockey team won the Malaysian Hockey Championship League. Team players Baljit Singh Charun was named the Best Player, S Kumar the Best Goal Keeper, and Mohd Amin Rahim the Best Scorer. The team also won the Fair Play Team Award.

#### • 19 April 2010

TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh launched the Customer First Programme as part of the Company's initiative to upgrade the quality of its service.

#### • 7 May 2010

TNB signed a Memorandum of Understanding with Provincial Electricity Authority (PEA) Thailand on a 33kV Electricity Supply System from the Principal Distribution Substation (PPU) at Pengkalan Hulu, Perak, to Betong, Thailand. This would ensure stable electricity supply to Betong and Yala Districts in Thailand.

#### • 10 June 2010

TNB Nuclear Power Colloquium 2010 was held as part of initiatives to promote green technology. The colloquium served to create awareness and to expose TNB employees to the need for nuclear power in the country.

#### 28 June 2010

TNB organised a two-day TNB-KEPCO Joint Workshop Nuclear Preliminary Feasibility Study. During the workshop, an agreement on Consultancy For Site Selection And Evaluation For Nuclear Power Plant in Peninsular Malaysia was signed between TNB Research Sdn. Bhd. and Korea Power Engineering Company Inc (KOPEC).

#### 30 June 2010

The Ministry of Energy, Green Technology and Water organised a *Nuclear Power Development* Dinner Talk for Members of Parliament in Kuala Lumpur to clarify issues and concerns raised on using nuclear power to generate electricity in Malaysia.

#### • 2 December 2010

Dato' Sri Peter Chin Fah Kui, Minister of Energy, Green Technology and Water, launched the undersea cable in Pulau Ketam.

#### • 8 December 2010

Dato' Sri Peter Chin Fah Kui, Minister of Energy, Green Technology and Water, launched TNB's Customer Charter.

# Current 2011

#### • 1 March 2011

The ground breaking ceremony of the Ulu Jelai Hydroelectric Project in Mukim Ulu Telom, Cameron Highlands was graced in the presence of His Royal Highness the Sultan of Pahang.

#### • 31 May 2011

The Energy Commission's new stateof-the-art green headquarters, the Diamond Building (Bangunan Berlian) in Putrajaya, was officially opened in conjunction with the commission's 10th anniversary.

#### 24-26 June 2011

The GLC Open Day 2011 was held for the first time at the Grand Ballroom of KLCC, officiated by Prime Minister Dato' Sri Mohd Najib bin Tun Haji Abdul Razak.

#### • 7 July 2011

The government-funded SAVE (Sustainability Achieved Via Energy Efficiency) Programme was launched in Putrajaya. The programme offers consumers a rebate of RM200 on the purchase of energy efficient electrical appliances such as refrigerators, air-conditioners and chillers.

#### • 26 July 2011

Launch of the Skim Latihan 1 (SL1M), a graduate employability and outreach programme by Y.Bhg. Datuk Awang Adek Hussin, Deputy Finance Minister II Malaysia, at the Auditorium Abu Zarim of the TNB Integrated Learning Solution Sdn. Bhd. – ILSAS in Bangi.

#### • 26 July 2011

TNB held its Integrity Pledge ceremony held with the Malaysian Anti-Corruption Commission (MACC) at the Multipurpose Hall of the Sports Complex on Jalan Pantai Baru.

# **Media Highlights** And an Array Page and page



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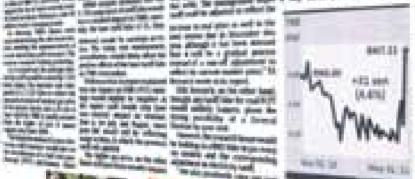
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TNB jumps to 550th spot in Forbes Global 2000 ranking

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# TENAGA NASION

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# Key Highlights

#### **Unit Demand Growth**



#### **Revenue Growth**

6.2% Moderate growth for both the Peninsular of 4.5% and SESB of 4.8%

#### **Operating Expenses Increase**

Additional fuel cost of RM2.1 billion from oil and distillate usage

# Net Profit Attributable to Owners of the Company



#### **EBITDA Margin**

16.1% in FY2010

#### ROA

4.7% in FY2010 \* based on adjusted net profit

#### CAPEX

RM5.6 billion RM4.3 billion in FY2010

Average Coal Price



<sub>pg</sub> 38

# **Key Financial Highlights**

	G	ROUP	0.0	MPANY
	2010	2011	2010	2011
	restated	2011	restated	2011
PROFITABILITY (RM Million)				
Revenue	30,317.4	32,206.9	28,362.3	30,157.1
Operating profit	4,180.0	1,156.1	3,296.1	800.4
Profit before taxation and zakat	4,019.4	546.7	3,502.0	402.1
Net profit attributable to owners of the Company	3,200.8	499.5	2,703.6	418.6
KEY BALANCE SHEET DATA (RM Million)				
Property, plant and equipment	58,913.3	60,580.9	49,507.2	50,512.6
Total assets	75,880.6	74,611.4	68,406.3	66,431.3
Total borrowings	21,263.6	19,054.1	14,454.4	12,174.2
Total liabilities	45,700.3	44,339.7	38,509.1	36,970.3
Share capital	4,352.7	5,456.6	4,352.7	5,456.6
Shareholders' equity	30,144.7	30,180.1	29,897.2	29,461.0
SHARE INFORMATION				
Per share (sen)				
- Basic earnings	58.92	9.16		
- Diluted earnings	58.71	9.14		
- Gross dividend	26.00	4.50		
- Net assets	692.60	553.10		
FINANCIAL RATIOS (%)				
Return on assets	4.7	2.1		
EBITDA margin	26.8	16.1		
Debt-equity (net of cash) ratio	0.43	0.50		
	0.40	0.00		

# Five-Year Group Financial Summary

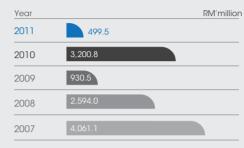
			GROUP		
YEAR ENDED 31 AUGUST	2007	2008	2009 restated	2010 restated	2011
OPERATING RESULTS (RM Million)					
Revenue	23,320.4	24,755.3	28,801.3	30,317.4	32,206.9
Operating profit	5,542.7	3,851.0	3,714.6	4,180.0	1,156.1
Profit before taxation and zakat	4,765.9	3,025.2	1,558.8	4,019.4	546.7
Net profit attributable to owners of the Company	4,061.1	2,594.0	930.5	3,200.8	499.5
KEY BALANCE SHEET DATA (RM Million)					
Property, plant and equipment	57,257.9	58,333.4	59,080.6	58,913.3	60,580.9
Total assets	67,724.6	69,841.9	73,165.2	75,880.6	74,611.4
Total borrowings	23,979.4	22,740.4	22,616.0	21,263.6	19,054.1
Total liabilities	43,627.7	44,080.0	45,752.0	45,700.3	44,339.7
Share capital	4,331.7	4,334.5	4,337.0	4,352.7	5,456.6
Shareholders' equity	23,998.6	25,657.2	27,373.0	30,144.7	30,180.1
SHARE INFORMATION					
Per share (sen)					
- Basic earnings	94.92	59.87	21.47	58.92	9.16
- Diluted earnings	93.00	59.84	21.44	58.71	9.14
- Gross dividend	36.30	20.00	17.77	26.00	4.50
- Net assets	554.00	591.90	631.20	692.60	553.10
Share price as @ 31 August (RM)	9.95	7.90	8.02	8.86	5.25
FINANCIAL RATIOS					
Return on assets (%)	6.3	4.6	3.9	4.7	2.1
Return on shareholders' equity (%)	17.6	12.5	10.5	11.4	5.2
Gearing (%)	49.9	46.9	45.2	41.3	38.6
EBITDA margin (%)	37.6	29.9	25.3	26.8	16.1
Effective weighted average cost of funds (%)	5.9	5.5	5.3	5.3	5.1
Interest coverage (%)	6.7	6.8	6.5	7.6	6.3
Currency mix (RM:Foreign)	55:45	53:47	51:49	54:46	56:44
Debt-equity (net of cash) ratio	0.78	0.68	0.60	0.43	0.50

# Five-Year Group Growth Summary

#### Revenue

Year		RM'million
2011		32,206.9
2010	30,317.4	
2009	28,801.3	
2008	24,755.3	
2007	23,320.4	

#### Net Profit Attributable to Owners of the Company



#### Shareholders' Equity

Year		RM'million
2011		30,180.1
2010	30,144.7	
2009	27,373.0	
2008	25,657.2	
2007	23,998.6	

#### Total assets

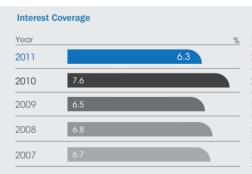
Year		RM'million
2011		74,611.4
2010	75,880.6	
2009	73,165.2	
2008	69,841.9	
2007	67,724.6	

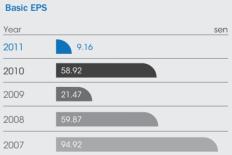
Total Borrov	wings		
Year			<u>RM'million</u>
2011		19,054.1	
2010	21,263.6		
2009	22,616.0		
2008	22,740.4		
2007	23,979.4		

#### Return on Assets

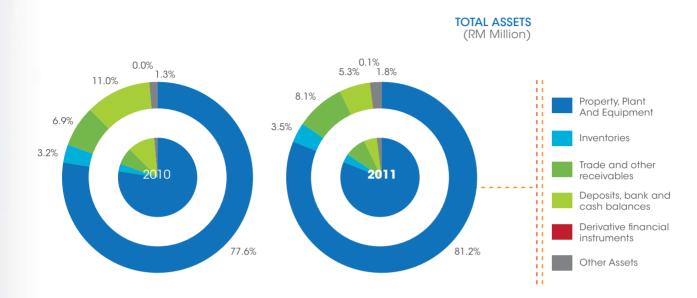
Year	%
2011	2.1
2010	4.7
2009	3.9
2008	4.6
2007	6.3

Gearing		
Year		%
2011		38.6
2010	41.3	
2009	45.2	
2008	46.9	
2007	49.9	

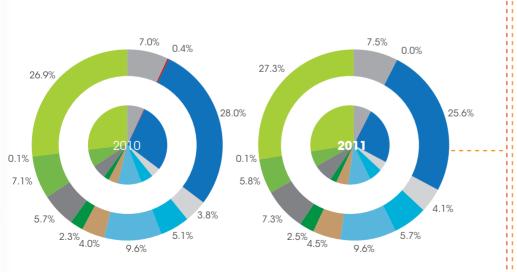




# Simplified Group Balance Sheet



LIABILITIES & SHAREHOLDERS' EQUITY (RM Million)





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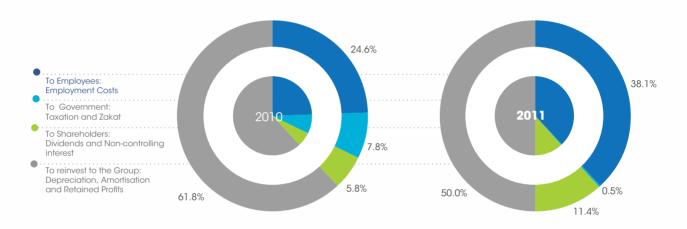
# Group Quarterly Financial Performance

	2011				
	10	2Q	3Q	4Q	2011
In RM Million					
Revenue	7,815.1	7,503.5	7,768.1	9,120.2	32,206.9
Operating profit	1,342.1	582.6	(519.8)	(248.8)	1,156.1
Profit before taxation and zakat	1,086.3	722.3	(601.4)	(660.5)	546.7
Net profit attributable to owners of the Company	763.3	630.3	(440.2)	(453.9)	499.5
Basic earnings per share (sen)	14.02	14.20	(8.08)	(8.33)	9.16
Diluted earnings per share (sen)	13.97	14.15	(8.06)	(8.31)	9.14

		2010			
	1Q	2Q	3Q	4Q	2010 restated
In RM Million					
Revenue	7,134.8	7,389.1	7,723.3	8,070.2	30,317.4
Operating profit	1,037.7	1,320.6	904.5	917.2	4,180.0
Profit before taxation and zakat	769.6	1,262.3	1,286.8	700.7	4,019.4
Net profit attributable to owners of the Company	538.4	1,000.1	1,107.1	555.2	3,200.8
Basic earnings per share (sen)	9.92	23.05	25.51	10.22	58.92
Diluted earnings per share (sen)	9.88	22.96	25.39	10.18	58.71

# **Statement of Value Added**

Value added is a measure of wealth created by the TNB Group. The statement of value added shows the total wealth created and its distribution to stakeholders, including the Government, with the balance retained in the Group for reinvestment and future expansion of the Group's business.

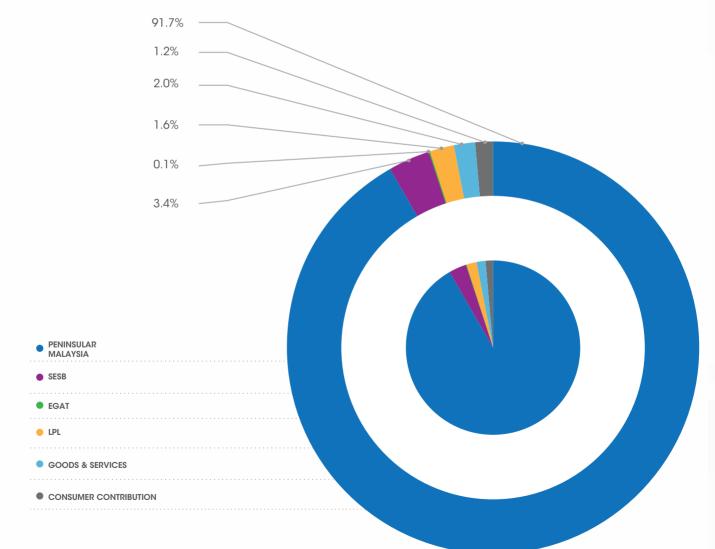


VALUE ADDED	(RM MILLION)

VALUE ADDED (NW WILLION)	2010 restated	2011
Revenue Operating expenses excluding staff costs,	30,317.4	32,206.9
depreciation and amortisation	(19,978.4)	(24,722.2)
Other operating income Finance income	382.3 209.7	532.0 319.1
Finance cost	(1,070.9)	(827.8)
Foreign exchange gain/(loss) on borrowings Share of results of associates	656.0 44.6	(194.1) 93.4
Value added available for distribution	10,560.7	7,407.3
DISTRIBUTION (RM MILLION)		
	2010 restated	2011
To employees:		
Employment costs	2,591.1	2,819.5
To the Government: Taxation and zakat	823.2	40.2
To shareholders:	02012	
Dividends	620.8	838.0
Non-controlling interest To reinvest to the Group:	(4.6)	7.0
Depreciation and amortisation	3,950.2	4,041.1
Retained profits	2,580.0	(338.5)
Total distributed	10,560.7	7,407.3

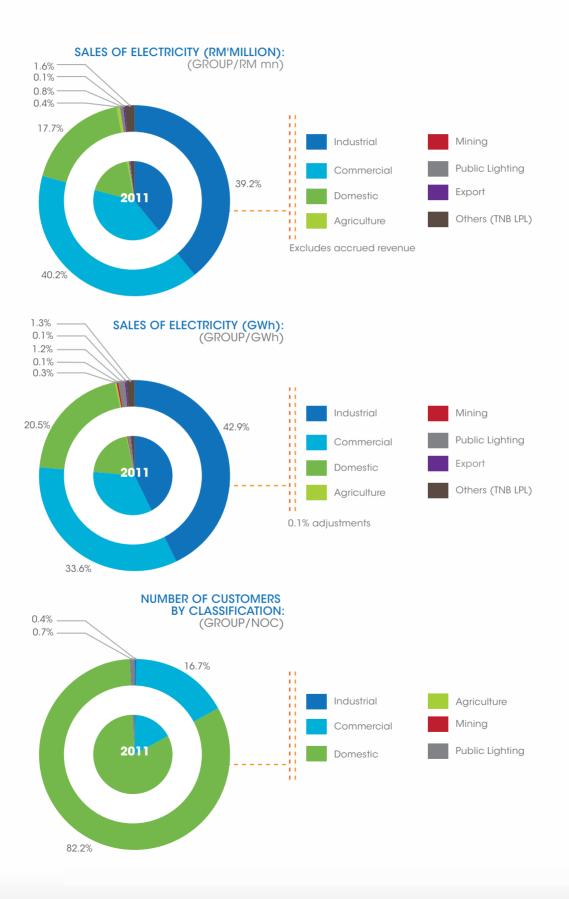
# FY2011 Core Revenue





<sub>pg</sub> 45

# **Operational Statistics**



<sub>pg</sub> 46

# **Group Financial Review**

#### REVENUE

Revenue consists of sales of electricity, goods and services and deferred income. For the financial year ended 31 August 2011, the Group's revenue continued to increase by 6.2% to RM32,206.9 million from RM30,317.4 million recorded in 2010. The increase in revenue was attributed to higher units sold for both the Peninsula business and SESB, which recorded a growth of 3.1% and 3.7% respectively. Coupled with an increase in electricity tariff effective 1 June 2011 for the Peninsula and 15 July 2011 for SESB, these translate into improved electricity sales of 4.5% and 4.8% respectively. For the period ended 31 August 2011, Group electricity demand grew by 2.8% compared to 8.4% recorded previously.

#### **OPERATING EXPENSES**

For the financial year ended 31 August 2011, the Group's operating expenses increased by 19.1% from RM26,519.7 million recorded in 2010 to RM31,582.8 million. The growth was primarily due to higher generation costs from utilisation of coal, oil and distillate resulting from severe gas curtailment during the second-half of the financial year under review.

#### **Energy and IPP Costs**

During the year, energy and IPP costs contributed 67.5% of the total expenses for the Group. If compared to the previous financial year, energy and IPP costs grew by 22.7% to RM21,318.1 million from RM17,379.0 million recorded in the same period in 2010. The increase mainly resulted from the use of expensive fuel (oil and distillates) totalling RM2,959.5 million. Average coal price for the year also increased from USD88.2/mt to USD106.9/mt. The Group, in addition, incurred higher Independent Power Producers (IPP) purchases amounted to RM14,213.0, an increase of 13.4% from RM12,528.0 million recorded in the previous year.

#### Depreciation

Depreciation charge for the financial year ended 31 August 2011 increased to RM4,041.1 million from RM3,950.2 million registered in 2010, representing a 2.3% growth. Depreciation accounts for 12.8% of total operating expenses for the Group during the financial year under review compared to 14.9% in 2010.

#### **Repair and Maintenance**

Repair and maintenance cost grew from RM1,226.4 million to RM1,519.7 million as at the end of financial year 2011, representing an increase of 23.9%. This was due to higher maintenance costs incurred by the Generation Division well as repair and maintenance work carried out for the distribution system.

#### Staff Cost

The Group's staff cost represents 8.9% of total operating expenses during the financial year under review. For the period ended 31 August 2011, staff costs registered an increase of 8.8% to RM2,819.5 million in comparison to RM2,591.1 million recorded in 2010. The higher cost is primarily attributed to higher salaries and allowances as well as the Collective Agreement (CA) review.

#### OTHER OPERATING INCOME

Other operating income recorded by the Group for the financial year ended 31 August 2011 increased to RM532.0 million, or equivalent to 39.2% increase from RM382.3 million recorded in 2010. Among major items listed under other operating income are government development grants received by Sabah Electricity Sdn Bhd for capital projects in the State of Sabah gain on disposal of non-current assets held for sale, interest on late payments and minimum charges.

#### **TRANSLATION GAIN/(LOSS)**

For the year ended 31 August 2011, the Group registered translation loss for foreign currency denominated term loans of RM227.0 million compared to the translation gain of RM632.6 million recorded in the previous year.

#### **TAXATION EXPENSE**

For the financial year ended 31 August 2011 the Group recorded a 7.4% effective tax rate compared with 20.5% recorded in 2010. The effective tax rate is calculated based on 'Total Tax Expenses' (including Deferred Tax) as a percentage of 'Profit Before Tax', which includes foreign exchange loss.

### **Group Financial Review**

#### PROFITABILITY

As a result from the increase of 19.1% in operating expenses compared to 6.2% revenue growth, the Group's profit for the period ended 31 August 2011 decreased to RM506.5 million from RM3,196.2 million recorded during the previous financial year.

#### **TOTAL ASSETS**

Total assets for the Group amounted to RM74,611.4 million as at 31 August 2011, a decline of 1.7% from RM75,880.6 million recorded in the previous financial year.

#### Property, Plant and Equipment (PPE)

The Group's PPE includes prepaid operating leases and non-current assets held for sale. The carrying amount of the Group's PPE during the financial year 2011 increased by 2.8% to RM60,580.9 million from RM58,913.3 million recorded in 2010.

#### **Trade and Other Receivables**

The Group's and the Company's credit policy provides trade receivables with a 30 days credit period. For the period ended 31 August 2011, trade and other receivables increased by 15.8% to RM6,022.1 million from RM5,200.4 million registered in the previous year. Included in receivables are staff advances/loans which consist of staff housing and car loans which are not recoverable within 12 months.

#### Deposits, Cash and Bank balances

Deposits, cash and bank balances was reduced significantly to RM3,954.2 million, representing a reduction of 52.6% compared to its level in 2010. The decline was primarily due to additional cost incurred for the use of oil and distillate, higher coal price during the year as well as payment of borrowings by the Group.

#### TOTAL LIABILITIES

As at 31 August 2011, the Group's total liabilities decreased by 3.0% to RM44,339.7 million from RM45,700.3 million registered in 2010. The improvement mainly resulted from 10.4% reduction in total borrowings from RM21,263.6 million to RM19,054.1 million in the current financial year. However, this was partially offset by the increase in trade payables by 16.0% to RM4,116.3 million. Employee benefits and consumer deposits also grew by 9.2% to RM4,220.5 million and 6.2% to RM3,084.9 million respectively.

#### Borrowings

The Group's total borrowings was further reduced by 10.4% to RM19,054.1 million from the previous financial year. The reduction in the Group's borrowings during the year resulted from repayments of foreign currency denominated term loans of RM1,703.4 million and ringgit denominated term loans of RM1,396.7 million. As at 31 August 2011, the effective average cost of borrowing for the Group stood as 5.09% compared to 5.25% in 2010.

#### SHAREHOLDERS' EQUITY

The Group's shareholders' equity increased to RM30,180.1 million or 0.1% as at 31 August 2011 from RM30,144.7 million recorded during the last financial year.

#### Earnings Per Share (EPS)

As a result from the lower profit posted by the Group during the financial year under review, basic EPS attributable to ordinary equity holders fell from 58.92 sen per share to 9.16 sen per share. Accordingly, return on shareholders' equity (ROE) also fell from 11.4% in 2010 to 5.2% in 2011.

#### Dividends

In respect of the financial year ended 31 August 2011, an interim dividend of 4.5 sen gross per ordinary share less income tax of 25% was paid on the 27<sup>th</sup> of May 2011 totalling RM184 million. The Board of Directors has not recommended any final dividend for the year.

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In order to deliver targeted financial results to our stakeholders and shareholders, we've developed operating processes that reinforce the behaviours necessary for successful execution of our particular strategies including operating as an entrepreneurial, accountable and team-oriented organisation.



# BOARD OF DIRECTORS



- 1. DATUK NOZIRAH BINTI BAHARI (Non-Independent Non-Executive Director)
- 2. **DATO' SRI CHE KHALIB BIN MOHAMAD NOH** (President/Chief Executive Officer) (Non-Independent Executive Director)
- 3. DATO' ZAINAL ABIDIN BIN PUTIH (Senior Independent Non-Executive Director)
- 4. DATO' MOHAMMAD ZAINAL BIN SHAARI (Non-Independent Non-Executive Director)
- 5. **TAN SRI LEO MOGGIE** (Chairman) (Non-Independent Non-Executive Director)
- 6. DATO' ABD MANAF BIN HASHIM (Independent Non-Executive Director)



- 7. TAN SRI DATO' SERI SITI NORMA BINTI YAAKOB (Independent Non-Executive Director)
- 8. DATO' FUAD BIN JAAFAR (Independent Non-Executive Director)
- 9. **SURIA BINTI AB RAHMAN** (Alternate Director to Dato' Mohammad Zainal bin Shaari) (Non-Independent Non-Executive Director)
- 10. CHUNG HON CHEONG

(Independent Non-Executive Director)

- 11. DATO' Ir. AZMAN BIN MOHD (Executive Director/Chief Operating Officer) (Non-Independent Executive Director)
- 12. TAN SRI DATO' HARI NARAYANAN A/L GOVINDASAMY (Independent Non-Executive Director)
- 13. NOR ZAKIAH BINTI ABD GHANI (Company Secretary)
- 14. NORAZNI BINTI MOHD ISA (Joint Company Secretary)

# **Profile of Directors**

#### TAN SRI LEO MOGGIE Chairman Non-Independent Non-Executive Director

- Aged 70, Malaysian
- Appointed to the Board on 12 April 2004
- Attended 13 out of 14 Board of Directors' meetings held in the Financial Year
- Chairman of the Board Nomination and Remuneration Committee and Board Finance and Investment Committee

Tan Sri Leo Moggie holds a Master of Arts in History from the University of Otago, New Zealand and a Master of Business Administration from Pennsylvania State University, USA.

Prior to his appointment as Chairman of Tenaga Nasional Berhad, Tan Sri Leo Moggie served the Malaysian Government for more than 38 years. He held several senior ministerial positions at both the Federal and state levels from 1976 until 2004. He was an elected Member of Council Negeri Sarawak from 1974 until 1978 as well as a Member of Parliament from 1974 until 2004.

Currently, Tan Sri Leo Moggie is a Director of several public companies including The New Straits Times Press (Malaysia) Berhad and Digi.Com Berhad. He also holds chairmanships/directorships within the TNB Group of Companies and in several private companies.

#### DATO' SRI CHE KHALIB BIN MOHAMAD NOH President/Chief Executive Officer Non-Independent Executive Director

- Aged 46, Malaysian
- Appointed to the Board on 1 July 2004
- Attended all 14 Board of Directors' meetings held in the Financial Year

Dato' Sri Che Khalib bin Mohamad Noh is a Fellow of the Association of Chartered Certified Accountants (United Kingdom) and a member of the Malaysian Institute of Accountants.

He began his career as an audit assistant with Messrs Ernst & Young in 1989 and later joined Bumiputra Merchant Bankers Berhad. Between 1992 and 1999, he served in several companies within the Renong Group including Projek Lebuhraya Utara Selatan (PLUS), HBN Management Services Sdn. Bhd., Renong Overseas Corporation Sdn. Bhd. and Marak Unggul Sdn. Bhd., the consortium responsible for the management of Keretapi Tanah Melayu Berhad. In June 1999, he joined Ranhill Utilities Berhad as its Chief Executive Officer. He then assumed the position of Managing Director and Chief Executive Officer of KUB Malaysia Berhad prior to his appointment as the President/Chief Executive Officer of Tenaga Nasional Berhad.

Dato' Sri Che Khalib was previously a member of the Board and Executive Committee of Khazanah Nasional Berhad from 2000 until 2004. He also served as a Board member within the United Engineers Malaysia Berhad Group of Companies and Bank Industri & Teknologi Malaysia Berhad. At present, he holds chairmanships/directorships within the TNB Group of Companies.

#### DATUK NOZIRAH BINTI BAHARI

Non-Independent Non-Executive Director

- Aged 56, Malaysian
- Appointed to the Board on 28 June 2011
- · Attended 3 out of 4 Board of Directors' meetings held in the Financial Year since her appointment
- Chairman of the Board Tender Committee and Member of the Board Disciplinary Committee

Datuk Nozirah binti Bahari graduated with a Bachelor of Social Science (Hons) (Urban Studies) from Universiti Sains Malaysia and later obtained a Diploma in Public Administration from the Institute of Public Administration (INTAN).

She has served over 30 years in the Malaysian Civil Service starting as an Assistant Secretary, Finance Division in the Ministry of Finance and rising to her current position as the Deputy Secretary General (Management) in the Ministry of Finance effective from 21 May 2011. Among other positions held were Deputy Under Secretary Procurement and Supplies Division, Ministry of Finance (2002–2004), Deputy Under Secretary Loan Management, Financial Market and Actuary Division, Ministry of Finance (2005-2007), Under Secretary Loan Management, Financial Market and Actuary Division, Ministry of Budget Management Division, Ministry of Finance (21 March-20 May 2011).

Datuk Nozirah currently sits on the Boards of other public companies that include Proton Holdings Berhad and Bank Simpanan Nasional Berhad. She is also a member of Perbadanan Kemajuan Negeri Selangor.





TAN SRI LEO MOGGIE

DATO' SRI CHE KHALIB BIN MOHAMAD NOH DATUK NOZIRAH BINTI BAHARI

# **Profile of Directors**

#### DATO' MOHAMMAD ZAINAL BIN SHAARI Non-Independent Non-Executive Director

- Aged 48, Malaysian
- Appointed to the Board on 31 March 2007
- Attended 11 out of 14 Board of Directors' meetings held in the Financial Year
- Member of the Board Tender Committee, Board Nomination and Remuneration Committee and Board Finance and Investment
  Committee

Dato' Mohammad Zainal bin Shaari is a Fellow of the Institute of Chartered Accountants in England and Wales, and the Association of Chartered Certified Accountants (ACCA) of the United Kingdom. He is also a member of the Malaysian Institute of Accountants (MIA) and Malaysian Institute of Certified Public Accountants (MICPA).

He has served in various capacities in the private sector including with a public accounting firm in the United Kingdom from 1984 until 1990 and subsequently with PricewaterhouseCoopers until 2002. He was with BinaFikir Sdn. Bhd. for a brief stint prior to joining Khazanah Nasional Berhad in October 2004, where he is at present the Executive Director/Chief Operating Officer.

#### DATO' ZAINAL ABIDIN BIN PUTIH

Senior Independent Non-Executive Director

- Aged 65, Malaysian
- Appointed to the Board on 1 May 2003
- Attended all 14 Board of Directors' meetings held in the Financial Year
- Chairman of the Board Audit Committee and member of the Board Finance and Investment Committee

Dato' Zainal Abidin bin Putih 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 Hanafiah Raslan & Mohamad which merged with Ernst & Young in 2002.

Dato' Zainal Abidin is the former Chairman of the Malaysian Accounting Standards Board (MASB), Mentakab Rubber Company Berhad and Pengurusan Danaharta Nasional Berhad. He is also a past President of the Malaysian Institute of Certified Public Accountants (MICPA), a former member of the Malaysian Communications and Multimedia Commission and a former Advisor to Ernst & Young Malaysia. He is currently the Executive Chairman of Dutch Lady Milk Industries Berhad and Land & General Berhad as well as Chairman of CIMB Bank Berhad and Mobile Money International Sdn. Bhd. He is also in the Board of Trustees of the National Heart Institute Foundation and Perdana Leadership Foundation.

Dato' Zainal Abidin sits on the Boards of other public companies including CIMB Group Holdings Berhad, ESSO Malaysia Berhad, CIMB Investment Bank Berhad and Southeast Asia Special Asset Management Berhad. He also holds directorships in a number of private companies.

#### TAN SRI DATO' HARI NARAYANAN A/L GOVINDASAMY

Independent Non-Executive Director

- Aged 61, Malaysian
- Appointed to the Board on 1 March 1995
- Attended all 14 Board of Directors' meetings held in the Financial Year
- · Member of the Board Nomination and Remuneration Committee and Board Audit Committee

Tan Sri Dato' Hari Narayanan graduated with a Bachelor's in Electrical and Electronics Engineering from the University of Northumbria, England. He is a Registered Professional Engineer with the Board of Engineers Malaysia.

He has vast experience in the field of electrical and electronics engineering and has held key positions in InchCape Berhad and Tamco Cutler-Hammer Sdn. Bhd. He is presently the Deputy Chairman of Emrail Sdn. Bhd.

Tan Sri Dato' Hari Narayanan currently sits on the Boards of other public companies that include S P Setia Berhad and Puncak Niaga Holdings Berhad. He also holds directorships in a number of private companies.



DATO' MOHAMMAD ZAINAL BIN SHAARI

DATO' ZAINAL ABIDIN BIN PUTIH

TAN SRI DATO' HARI NARAYANAN A/L GOVINDASAMY

# **Profile of Directors**

#### DATO' FUAD BIN JAAFAR Independent Non-Executive Director

- Aged 68, Malaysian
- Appointed to the Board on 15 March 2007
- Attended all 14 Board of Directors' meetings held in the Financial Year
- Member of the Board Tender Committee, Board Disciplinary Committee and Board Nomination and Remuneration Committee

Dato' Fuad bin Jaafar holds a Diploma in Technology from Brighton University, United Kingdom.

He has spent 35 years of his working career serving Tenaga Nasional Berhad and is a former President/Chief Executive Officer of the Company. During the course of his employment in Tenaga Nasional Berhad, Dato' Fuad held various key positions including Assistant Distribution Engineer, Senior District Manager, Construction Engineer, Assistant Senior Construction Engineer, Senior Construction Engineer, Deputy Chief Engineer/ Assistant General Manager and Deputy General Manager. Dato' Fuad was appointed as General Manager of the Transmission Division in January 1994 and later made Senior General Manager of Energy Supply. He was appointed as TNB's Chief Operating Officer and Executive Director on 4 September 1997 prior to his appointment as the President/Chief Executive Officer on 16 October 2000.

At present, Dato' Fuad is a Director within the TNB Group of Companies as well as in Sarawak Hidro Sdn. Bhd.

#### TAN SRI DATO' SERI SITI NORMA BINTI YAAKOB

Independent Non-Executive Director

- Aged 71, Malaysian
- Appointed to the Board on 12 September 2008
- Attended all 14 Board of Directors' meetings held in the Financial Year
- Chairman of the Board Disciplinary Committee and member of Board Finance and Investment Committee and Board Nomination and Remuneration Committee

Tan Sri Dato' Seri Siti Norma binti Yaakob graduated as a Barrister-at-law from Gray's Inn, London and 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 positions such as Senior Assistant Registrar, President of the Sessions Court, Senior Federal Counsel of the Attorney General's Chambers, Deputy Public Trustee, Malaysia and Chief Registrar of the Federal Court, Malaysia. Tan Sri Dato' Seri Siti Norma was appointed as a Judge of the High Court of Malaya from 1983 until 1994 and subsequently appointed as a Judge of the Court of Appeal, Malaysia from 1994 until 2000. On 1 January 2001, she was made a Judge of the Federal Court of Malaysia and eventually was elevated to Chief Judge of Malaya, a position she held from 8 February 2005 until her retirement on 5 January 2007.

Currently, Tan Sri Dato' Seri Siti Norma sits on the Boards of public companies that include KAF Investment Bank Berhad, RAM Holdings Berhad and RAM Rating Services Berhad. She is also Chairman of the Malaysian Competition Commission and a Director of RAM Rating (Lanka) Limited.

#### DATO' ABD MANAF BIN HASHIM

Independent Non-Executive Director

- Aged 55, Malaysian
- Appointed to the Board on 1 February 2010
- Attended all 14 Board of Directors' meetings held in the Financial Year
- Member of the Board Audit Committee, Board Disciplinary Committee and Board Tender Committee

Dato' Abd Manaf bin Hashim holds a Higher National Diploma in Engineering from the Cambridgeshire College of Arts and Technology O.N.D. of Thames Valley University (Slough Campus).

He has been a member of the Suruhanjaya Perkhidmatan Awam Negeri Perak since 2009 and serves as Chairman in several private companies involved in the construction, telecommunications and solar hybrid sectors since 1993. Prior to that, he held various positions in Shapadu Decloedt Dredging Sdn. Bhd. (1990–1992), Industrial Boilers and Allied Equipment (IBAE) (1984–1986), Hakasa Sdn. Bhd. (1983–1984) and Asie Sdn. Bhd. (1982–1983).

Dato' Abd Manaf is a Director of Integrax Berhad and several other private companies.



DATO' FUAD BIN JAAFAR

TAN SRI DATO' SERI SITI NORMA BINTI YAAKOB DATO' ABD MANAF BIN HASHIM

# **Profile of Directors**

DATO' Ir. AZMAN BIN MOHD Executive Director/Chief Operating Officer Non-Independent Executive Director

- Aged 54, Malaysian
- Appointed to the Board on 15 April 2010
- Attended 11 out of 14 Board of Directors' meetings held in the Financial Year.

Dato' Ir. Azman bin Mohd graduated with a Bachelor's Degree in Engineering (Electrical Engineering) from the University of Liverpool, United Kingdom and holds a Master of Business Administration (MBA) from the University of Malaya.

He is the Executive Director/Chief Operating Officer of Tenaga Nasional Berhad and holds directorships within the TNB Group of Companies. Dato' Ir. Azman has served the Company in various positions since 1979 such as Assistant District Engineer, District Manager, Area Manager, Assistant General Manager as well as General Manager. He was appointed as Senior General Manager of Operations (Region 2) of the Distribution Division and later made Vice President, Distribution of Tenaga Nasional Berhad prior to his current position.

#### CHUNG HON CHEONG

Independent Non-Executive Director

- Aged 50, Malaysian
- Appointed to the Board on 1 October 2010
- Attended 11 out of 13 Board of Directors' meetings held in the Financial Year since his appointment
- Member of the Board Finance and Investment Committee and Board Audit Committee

Chung Hon Cheong holds a qualification in Advanced Computer Programming, CDS Computer Data Services.

He began his career in information technology (IT) in the early 1980s. In 2001, he was appointed Managing Director of E-Resource.com Sdn. Bhd., a company that conducts research and development in RFID applications. Thereafter, he joined Rexit Solution Sdn. Bhd. in 2003 and later became a Managing Director of Rexit Venture Sdn. Bhd. He is currently the Chief Executive Officer/Executive Director of Rexit Berhad.

He sits on the Boards of public companies including Rexit Berhad and Rexit (Labuan) Berhad. He also holds directorships in several other private limited companies.

#### SURIA BINTI AB RAHMAN (Alternate Director to Dato' Mohammad Zainal bin Shaari) Non-Independent Non-Executive Director

Aged 38, Malaysian

Appointed to the Board on 30 November 2009

Suria binti Ab Rahman holds a Bachelor of Science in Economics (Accounting and Finance) from the London School of Economics and a Master of Business Administration (MBA) from Judge Business School, University of Cambridge. She is an Associate of the Institute of Chartered Accountants in England and Wales (ICAEW) and the Institute of Internal Auditors United Kingdom and Ireland as well as a member of the Malaysian Institute of Accountants.

Suria has been a Director in the Managing Director's Office of Khazanah Nasional Berhad since June 2009. Prior to her current position, she held various key roles in Khazanah Nasional Berhad that included Head of Risk Management Unit from February 2006 until May 2009 and Vice President, Risk Management Unit from April 2005 until January 2006. She served KPMG in its London offices for nine and the half years from mid-1996 until 2005, before joining Khazanah Nasional Berhad.



DATO' Ir. AZMAN BIN MOHD

CHUNG HON CHEONG

SURIA BINTI AB RAHMAN

Other than as disclosed, none of the Directors has any:-

- Family relationship with any Director and/or major shareholders of Tenaga Nasional Berhad; Conflict of interest with Tenaga Nasional Berhad; or Conviction for any offence within the past 10 years. 1.
- 2. 3.

# Group Executive Council Committee – GECC

#### from left to right:

HUSSIN BIN OTHMAN Vice President, Distribution

DATO' Ir. MOHD NAZRI BIN SHAHRUDDIN Vice President, Generation

MOHAMED RAFIQUE MERICAN BIN MOHD WAHIDUDDIN MERICAN Chief Financial Officer/Vice President, Group Finance

DATO' Ir. AZMAN BIN MOHD Executive Director/Chief Operating Officer

DATUK ROZIMI BIN REMELI Vice President, Transmission

DATO' SRI CHE KHALIB BIN MOHAMAD NOH President/Chief Executive Officer The Group Executive Council Committee is entrusted with the responsibility to ensure that the Group's operations are aligned with its vision and mission as well as ensuring that it is implemented in accordance with the Group's policies and strategies.

The Committee is also responsible for monitoring the overall performance of the Group and the other Management Committees, the appointment of members of the Management Committees and the promotion of the executives within the Group.

The Committee held seven (7) meetings during the Financial Year under review.



# Energy Supply Committee – ESC

The Energy Supply Committee is the highest management forum with the authority to endorse and approve all power system development plans and proposals for TNB in Peninsula Malaysia prior to submission to TNB's Board of Directors. The Committee also makes decisions on major operational issues affecting the Company's core business as well as matters related to the expedition of the on-going generation, transmission and primary distribution development projects in Peninsula Malaysia.

The Committee held five (5) meetings during the Financial Year under review.

from left to right:-

DATUK ROZIMI BIN REMELI Vice President, Transmission

HUSSIN BIN OTHMAN Vice President, Distribution

DATO' Ir. MOHD NAZRI BIN SHAHRUDDIN Vice President, Generation

**DATIN ROSLINA BINTI ZAINAL** Vice President, Planning

DATO' SRI CHE KHALIB BIN MOHAMAD NOH President/Chief Executive Officer

DATO' Ir. AZMAN BIN MOHD Executive Director/Chief Operating Officer



# Group Executive Management Committee – GEMC

#### **DATIN ROSLINA BINTI ZAINAL** Vice President, Planning

#### DATO' SRI CHE KHALIB BIN MOHAMAD NOH

President/Chief Executive Officer

**DATUK ROZIMI BIN REMELI** Vice President, Transmission

**DATO' RAZALI BIN AWANG** Chief Information Officer

Responsibility for the Company's daily financial and operational management, strategic planning, resource management and risk assessment is undertaken by the Group Executive Management Committee, headed by the President/Chief Executive Officer. The Committee oversees and manages issues to ensure that the Company's obligations are fulfilled and the expectations of shareholders and other stakeholders are met.

The Committee also deliberates on the achievements of the Divisions' Key Performance Indicators (KPIs) and the challenges faced in achieving the KPIs. The KPIs are then reviewed and realigned with the targets set for the year.

The Committee generally meets on a monthly basis and as and when the need arises. During the Financial Year under review, the Committee held 11 meetings.



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#### from left to right:-~

DATO' Ir. AZMAN BIN MOHD Executive Director/Chief Operating Officer

MOHAMED RAFIQUE MERICAN **BIN MOHD WAHIDUDDIN MERICAN** Chief Financial Officer/Vice President, Group Finance

DATO' MUHAMMAD RAZIF BIN ABDUL RAHMAN Vice President, Group Human Resource

DATO' Ir. MOHD NAZRI BIN SHAHRUDDIN Vice President, Generation

**HUSSIN BIN OTHMAN** Vice President, Distribution

**MD. JAILANI BIN ABAS** Senior General Manager, Corporate Services

Ir. NOR AZMI BIN RAMLI Chief Procurement Officer

**ADELINA BINTI ISKANDAR** Vice President, Corporate Affairs



#### SWITCH ON TO ON TO

We have a responsibility towards the environment. We are tirelessly thinking and looking into ways of producing cleaner energy resources to ensure the environment is protected for future generations. The Switch To Green Energy is a responsibility shared by everyone at our organisation, one that we are proud to share with the world.



# Chairman's Letter to Shareholders

DEAR SHAREHOLDERS,

# TNB HAS ITS ROOTS AS A GOVERNMENT BODY AND ITS COMMITMENT TO NATIONAL DEVELOPMENT HAS NEVER WAVERED.

As Chairman of Tenaga Nasional Berhad (TNB), the nation's main power company, there is a checklist of items that I would like TNB to be able to tick as an indicator of its performance. These include: operational excellence and supply reliability, excellent customer service, green energy, a highly competent and productive workforce, global presence, cost efficiency, shareholder value and business sustainability. It is quite an extensive list, yet I am glad to say that, for

#### the year under review, we have fared well on most of the entries.

It is unfortunate that beginning from December 2010, Petronas was not able to supply the expected volume of gas to the power sector. This placed the Company under severe financial strain as we endeavoured to fulfil our obligation of providing an uninterrupted supply of electricity to the nation. The fact that we did whatever it took to safeguard this power supply - even if it meant incurring an additional cost of RM300-RM400 million a month - proves we are motivated by more than just making profits.

TNB has its roots as a government body and its commitment to national development has never wavered. What keeps us empowered is a deep sense of responsibility towards Malaysia. We are driven by our pledge to power the economy, to light up our streets, homes and local communities. We persevere in fulfilling the daunting task of supplying electricity to our 8.08 million customers because we realise that with power we can all Switch On to a better and briahter future.

#### TAN SRI LEO MOGGIE Chairman



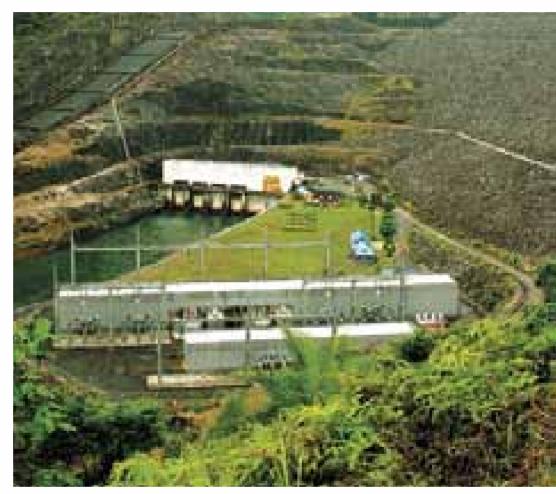




# **Chairman's Letter to Shareholders**

#### FINANCIAL PERFORMANCE

The financial year was marked by a generally bearish global economy, exacerbated by the political upheaval in the Middle East and natural disasters across the world. For the power sector, the most devastating was the earthquake and tsunami that struck Japan. Although our stock market mirrored these calamities, the Malavsian economy on the whole remained quite robust, benefitting from the Economic Transformation Programme (ETP) that the Government rolled out in October 2010. Boosted by Government initiatives and fresh investments by the private sector, various industries continued to flourish, resulting in growth of electricity demand of about 3.1 per cent.



This contributed to a 6.2% growth in revenue of the TNB Group from RM30.32 billion in FY2009/10 to RM32.21 billion in FY2010/11. However, because we were compelled to compensate for the gas shortfall with additional imports of coal, oil and distillate – at prices (for oil and distillate) that were five times higher per kW than what we would have paid for the gas – our operational expenditure surged and the Group's net profit dropped 84.4% from RM3,200.8 million in FY2009/10 to RM499.5 million in FY2010/11. As a result of the unavoidable high cost of fuel, which severely curtailed our cash flow, I regret to announce that the Board has decided we are unable to pay a final year dividend for FY2010/11. For the year under review, therefore, our shareholders have received a total gross dividend of 4.5 sen per ordinary share less income tax of 25% in respect of the Financial Year ending 31 August 2011, as was declared during our first half results announcement.



#### OPERATIONAL EXCELLENCE & SUPPLY RELIABILITY

We have achieved impressive results operationally which contributed to a world-class performance in many aspects of our operations, i.e. in electricity generation, transmission and supply. In particular, I am pleased to be able to report that 80% of our power stations exceeded an equivalent availability factor (EAF) of 90%, and that 70% of the stations achieved an equivalent unplanned outage factor (EUOF) of less than 2.4%, with three of them recording EUOFs of less than 0.7%. We have also upheld our superior performance in system minutes and further reduced transmission and distribution losses, while maintaining zero incident of major disturbance.

Our System Availability Interruption Disruption Index (SAIDI), as well as the time taken to restore supply, as measured by the Customer Average Interruption Duration Index (CAIDI), have also improved. It is especially heartening to see the drastic improvement in SAIDI in Sabah, thanks to the concerted efforts of our subsidiary, Sabah Electricity Sdn. Bhd., which continues to enhance its service delivery to the people.

Operational efficiency is one of the focus points of our 20-Year Strategic Plan, which we embarked on in 2005. The first phase of this plan - Service Excellence 10/10 (SE10/10) - began the process of strengthening our operational backbone with the upgrade of existing systems and implementation of new technologies. Although SE10/10 ends in calendar year 2010, we will maintain the momentum and constantly improve the way we do things under the second phase of the Plan - Gemilang 2015. In this financial year, we introduced the Asset Utilisation Plan which will further contribute towards fully optimising our assets.

The year also witnessed the launch of TNB's Corporate Integrity Pledge – an initiative with the Malaysian Anti-Corruption Commission – which serves as a benchmark for other GLCs and underscores our continuous efforts to promote and foster integrity, discipline, productivity and excellence in the work ethics of our staff.

#### **EXCELLENT CUSTOMER SERVICE**

The culture of serving the customer has been with TNB from the very beginning. Over the years, as we grow and as our customers increase in numbers, it becomes more challenging to provide the best service. Rather than be daunted, however, we embrace this challenge and are constantly looking for ways to improve the experience of our customers in their dealings with TNB. On 8 December 2010, we launched a Customer Charter and People 1st Programme, reinforcing our commitment to our most valued stakeholders.

To further delight our customers, this year we have expanded our online functions to allow for e-applications for electricity. The convenience this service affords is reflected in its popularity; no less than 40.8% of all new applications are now done electronically.

We also improved our call centre service. which receives very heavy call traffic an average of 250,000 calls a month to the Call Management Centre and 60,000 calls to the One Stop Enquiry Centre. To better manage these calls, we have made available more channels through which customers can connect with TNB. For example, they can SMS to report power outages and malfunctioning streetlights; use web chat to communicate with a TNB customer service assistant; and email to enquire about bills and matters related to accounts. Also, customers who are unable to get through on the hotline can leave their telephone number or a message so that a customer service assistant is able to call them back, at no extra charge. As a result of these initiatives, we were able to tend to an average of 95% of calls to the CareLine, as opposed to an average of 60% previously.

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# **Chairman's Letter to Shareholders**



At our Customer Service Centres, meanwhile, we now have customer service officers (CSOs) who approach all walk-in customers to identify their needs and help them accomplish their service request or transaction as quickly as possible.

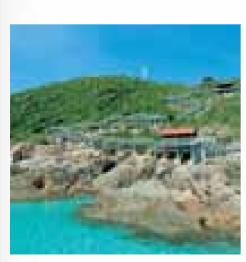
#### **GREEN ENERGY**

In light of the urgency to counter climate change, TNB has trained our focus on greening our operations and, in the process, becoming a primary driver of green energy in Malaysia. This year, we outlined a Green Energy Policy and a GREENER TNB framework to increase our environmental management capabilities. We have launched into various green energy projects, including a pilot solar project in Putrajaya and a 10MW biomass plant in Jengka, Pahang, using empty oil palm fruit bunches from neighbouring Felda palm oil mills.

The greening of TNB requires a significant shift in the way our employees work, behave and think, as well as in the way the Company conducts our day-to-day business. To imbue our employees with an environment-conscious mindset, we are running various awareness programmes and disseminating information through circulars, intranet communication and training. At the same time, we are in the midst of conducting a carbon audit of our entire operations and will be setting targets to reduce our CO2 emissions Group-wide. This will be achieved by upgrading our systems, processes and facilities to become more energy efficient.

At the national level, we are supporting the development of renewable energy (RE) by signing Renewable Energy Power Purchase Agreements (REPPAs) with RE developers, while educating the public about energy efficiency (EE) and encouraging the use of energy-efficient equipment via promotions and other incentives. We are partnering FOMCA in a SWITCH campaign to encourage the public to use EE compact fluorescent lamp (CFL) bulbs; and we support the Government's SAVE programme, which offers rebates to customers who purchase EE air-conditioners, refrigerators and chillers.

In addition to our RE and EE initiatives, we are also actively promoting demand side management, especially among our industrial customers for whom this could make a significant cost difference. Energy-intensive industries can offset a sizeable portion of their electricity costs by taking advantage of off-peak tariffs and the thermal energy storage tariff. We have made it our mission to educate our industrial customers on the benefits of demand side management, as it not only cuts down on their electricity bills but also helps us to better manage peak demand.



# A HIGHLY COMPETENT AND PRODUCTIVE WORKFORCE

It goes without saying that while we power the nation, TNB itself is powered by our people. Our policy is to provide our employees with sufficient training and professional development opportunities so that they realise their true potential and the Company benefits from higher levels of productivity and professionalism.

During the year, we continued to enhance the technical competency of our staff, focusing on closing the gaps as identified by immediate managers/supervisors. In planning our training programmes, we are guided by regulatory as well as current business requirements. I am pleased to note that the training provided last year contributed to a higher competency index of 80%, as compared to 78% in FY2009/10.

TNB employs a talent management framework to identify and develop potential leaders to fill Key Leadership Positions (KLPs) at the corporate level and critical positions at the divisional level. We have further enhanced our Leadership Development Programme (LDP) for our Corporate and Divisional Talent Pool members, with the objective of developing managers with the relevant skills and competencies to help TNB achieve our business goals. One component of the LDP is the Prestigious Leadership Programme under which identified highperformers are sent on courses at top business schools such as European Institute of Business Administration (INSEAD), The ICLIF Leadership & Governance Centre (ICLIF), Cambridge, IMD and Harvard.

#### **GLOBAL PRESENCE**

Our vision for year 2025 is to be among the global leaders in the energy sector. We already have a presence overseas, via our wholly-owned TNB Liberty Power Limited in Pakistan; and with our investment in Shuaibah IWPP, Saudi Arabia's largest greenfield independent power and water project, which was completed on schedule on 18 August 2010. This IWPP is providing a sustainable, efficient and environmentally-friendly supply of electricity and water to the Kingdom.

However, we aim to do more. Global expansion is one of the strategic thrusts of Gemilang 2015, and the Business Development Department is exploring the potential of forging partnerships with our counterparts overseas. Although the Middle East has been badly shaken by the recent uprisings, we believe that once the new governments restore peace in their countries and start to rebuild their economy, there will be scope for TNB to take our knowledge and technical abilities to the region. Other than the Middle East, we are also looking at countries closer to home, such as Indonesia, Vietnam and Bangladesh. The regional power market represents a mine of opportunities in the current climate of liberalisation and we hope to be able to tap into this.

#### **BUSINESS SUSTAINABILITY**

Business sustainability is a necessarily complex issue for an electricity company in the current environment of depleting resources, increasing demand, escalating and volatile fuel prices and environmental concerns. Both resource availability and resource cost pose a constant challenge to us, as this year's events have made only too evident. Yet the sustainability of our business is critical – not just for TNB, but for the continued progress of the nation.

In order to ensure our sustainability, we are making concerted efforts to further diversify our generation mix, especially with renewable energy which has the

added benefit of being 'green'. At the same time, we are upgrading our plants to maximise their efficiency and productivity. We are investing in sophisticated clean technologies for new plants - such as the coal-powered plant in Manjung - and are looking at ways to improve on the systems that are currently in place in the existing plants. To further guarantee supply reliability, we are also exploring alternative supply options such as the import of liquefied natural gas (LNG), the import of hydroelectricity from Sarawak and crossborder transactions with neighbouring countries.

The other side of the sustainability coin is cost, which has been difficult for TNB to manage given the constraints of price structures. Thus, the introduction of the new electricity tariff is a move in the right direction. I especially look forward to the re-introduction of the fuel cost pass through (FCPT) mechanism in the future. It is also heartening to note that the price of gas to the energy sector will be reviewed every six months, as the gap between this price and the international market rate causes a huge strain on the Government/Petronas, costing them roughly RM25.64 billion on annual subsidies for gas supplied to the power and non-power sectors.

I believe the sustainability of the electricity supply industry would be more assured when the FCPT mechanism is in place to cover the price of all fuels included in the generation mix. Prices of fossil fuels are volatile at best, and tend to increase with time, along with their depletion and geopolitical events that impact supply. Although TNB has been able to absorb these costs in the year under review, we have used almost all our cash reserves to do so. We would be unable to continue to pay for exorbitant fuels on a regular or long-term basis.

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# **Chairman's Letter to Shareholders**

#### SERVING THE COMMUNITY

Corporate responsibility is integral to TNB. It influences every aspect of our operations including our supply chain management. Our entire business – of supplying electricity – serves to fulfil the Government's aspiration to advance the nation socially and economically. Over and above contributing to this powerful development agenda, we are conscious of playing our part in creating greater equity among Malaysians by providing for the underprivileged in various different ways.

Through our Foundation, Yayasan Tenaga Nasional (YTN), we have been supporting the educational needs of deserving Malaysian students since 1993. We have also adopted 27 schools under the Khazanah Nasional-inspired PINTAR programme, and provide educational aid to the children of our employees. We cater for children with hearing and visual impairments, and those with learning difficulties, through YTN sponsorship of a Special Education Centre in Putrajaya.

At the same time, we provide aid to the hard-core poor through programmes such as Baiti Jannati, under which we repair dilapidated homes, and install basic amenities such as electricity, water and proper sanitation as well as furniture. We also work with the Ministry of Rural and Regional Development and Ministry of Energy, Green Technology and Water to supply rural areas with electricity. And in 2010, we embarked on a programme in collaboration with the Ministry of Education to supply 42 rural schools with 24-hour electricity, either by connecting them to the national grid or using solar hybrid or gen-sets.

In this Annual Report, we have included a more detailed write-up of our Corporate Social Responsibility initiatives to inform our stakeholders of the extensive level of the Company's engagement in the community and in preserving the environment.

#### PROSPECTS

The shortage of gas supply that severely affected our financial performance in FY2010/11 is likely to be at least partially redressed once Petronas' new LNG terminal in Melaka is commissioned in 2012. Financially, we will also reap the benefits of a full-year's contribution of the revised tariff. We are, further, confident of sustained growth of the local economy, with the Government's commitment to fuel the ETP.

TNB itself is actively involved in a number of Entry Point Projects under the ETP and we are very pleased to be able to support the Government in this exciting and ambitious endeavour to attain highincome status by 2020. Generally speaking, we have been tasked with making the infrastructure changes that are necessary to promote greater adoption of EE and RE initiatives in the country. We are also actively monitoring the economics and technological developments in the field of RE; and laying the groundwork for the potential deployment of nuclear energy in the country, should the country decide to use nuclear power in the future. Finally, we will assess the potential of bringing in hydro electricity from Sarawak, and rebalancing the generation mix with greater contribution from hydro electricity.

Taking the above factors into consideration, we believe that the prospects for the local economy look favourable. Yet, because TNB depends on external sources for our supply of fuel, it is difficult to predict with any measure of certainty how the Company will fare in the year to come. What I do know, and can assert with confidence, is that TNB has been making great progress towards achieving technical excellence and, for as long as we are able to manage the cost and supply of fuel, we will continue to delight our customers and the nation with quality and reliable service.

#### ACKNOWLEDGEMENTS

It gives me immense pleasure to announce that our President/Chief Executive Officer. Dato' Sri Che Khalib bin Mohamad Noh, is in the running for the CEO of the Year in the Platts 2011 Global Energy Awards, the results of which will be announced in December. Whether or not he wins, it is a great honour not just for TNB, but for the country, for Dato' Sri Che Khalib to have attained such high level recognition by a prestigious international award. I speak on behalf of the Board of Directors and the Company when I say that we feel privileged to have a leader of such calibre at the helm of TNB. Indeed, the entire Board of Directors and management team of TNB deserve full credit for their commitment and unrelenting efforts to enable TNB to fulfil its responsibility of powering the nation, especially in the year that we have just experienced. I would also like to acknowledge the steadfast dedication of TNB's 31,000 employees and their contributions to our many successes in the face of unavoidable adversities.

The Government, as always, has been a pillar of support to TNB and we would like to express our gratitude to the nation's leaders for their foresight in introducing policies that serve to safeguard the sustainability of power supply in the country. Finally, I would like to thank all our stakeholders – and especially our shareholders – for their belief in TNB and for staying with us even as we made our way through a particularly challenging year.

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TAN SRI LEO MOGGIE Chairman

## **President/CEO's Review**

#### DEAR SHAREHOLDERS,

## THE YEAR ENDING AUGUST 2011 HAS BEEN WITHOUT DOUBT CHALLENGING FOR ALL SECTORS GLOBALLY, FOR A VARIETY OF ECONOMIC, POLITICAL AND ENVIRONMENTAL REASONS.

Just as it seemed as if the world was on a recovery path following the financial crunch in 2008, the US economy took another dive due to sovereign debts, its ripple effects compounded by unmanageable borrowings in the Eurozone. From end 2010 onwards, bubbles of unrest in the Middle East fomented to become what has now been called the region's Spring of Discontent that has seen almost all Gulf dictators overthrown by the people.

The power industry in particular was affected by a series of natural disasters, the most damaging of which was the earthquake and tsunami that lashed across northern Japan, forcing the closure of its nuclear plants. This has meant further demand for fossil fuels, not only in Japan but in other nations that have reacted to the meltdown of the Fukushima plant by adopting a more cautionary stance towards nuclear energy. Various smaller scale natural disasters added to the generally unstable geo-economic climate affecting the supply of traditional fuels.

#### DATO' SRI CHE KHALIB BIN MOHAMAD NOH President/Chief Executive Officer

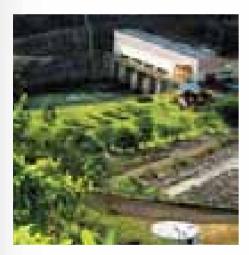






## President/CEO's Review

Economically, Malaysia is fortunate in that it has been cushioned from the brunt of the alobal shake-ups. What's more, the local economy was positively boosted when the Government launched its Economic Transformation Programme (ETP) on October 2010. Although we have had to contend with inflation resulting in rising costs of commodities, there is a generally positive consumer sentiment brought about to a fair degree by concerted efforts to reinvigorate the economy, with the Government offering attractive incentives for the private sector to invest in designated national key economic areas.



Having said this, there can be no denying that the energy sector in Malaysia has been hard hit by factors beyond our control. Most critical has been the curtailment of gas from Petronas, first, due to a fire at the Bekok C gas field in December 2010, and then due to the shutdown of its facilities for maintenance and upgrades from March onwards. Although the power industry is allocated 1,250 million standard cubic feet of gas per day (mmscfd), in the year under review our gas supply dropped by about 30% to an annual average of about 930 mmscfd. Even after dispatching all the available nongas capacity, we faced an average shortfall of 2,100MW, leading to greater reliance on alternative, more expensive fuels - notably distillate, medium fuel oil (MFO) and coal. We were also compelled to purchase electricity from Thailand and Singapore, at a high price. This placed a huge technical and financial burden on the Company in order literally 'to keep the lights on at all costs'. The gas shortfall led to RM2.1 billion in additional fuel cost (for oil and distillate) in FY2010/11, which has affected our financial performance for the year.

#### FINANCIAL PERFORMANCE

The increase in demand for electricity in the Peninsula dropped from 8.8% during the high of the economic rebound in FY2009/10 to a more stable 3.1% last year. Our determination to meet this demand, notwithstanding the low-gas environment, meant that we managed to continue to increase our revenue by 6.2%, from RM30.32 billion in FY2009/10 to RM32.21 billion in FY2010/11. Greater operational and capital efficiencies together contributed to a very positive profit after tax of RM700 million in Quarter 1, when we were still receiving 1,150 mmscfd of gas. It was only in Quarter 2 that we began to experience the gas shortfall, which intensified in Quarter 3, following which our financial performance began to buckle under the stress, and we recorded an operating loss. The situation continued into Quarter 4, but was partially alleviated when we obtained the Government's approval to increase the electricity tariff by 7.12% effective from 1 June 2011 - 2% reflecting a general increase in the cost of electricity supply, taking into consideration the price of materials such as copper, steel and aluminium used in transmission infrastructure; and 5.12% to accommodate the increase in price of gas (from RM10.70 per mmBTU to RM13.70 per mmBTU).

The new tariff shored up our revenue by RM50 million a month in July and August, however it was not sufficient to counter the additional cost of coal, oil and distillate. These alternative fuels carried much higher price tags per kWh than the gas we were paying for, with oil and distillate being as much as five times more expensive. The new tariff also did not compensate for the high cost of electricity purchased from neighbouring countries. Hence we recorded a net loss of RM453.9 million for Quarter 4.

Needless to say, our financial KPIs have also been affected. Year-on year, our cost per unit sold (CPU) increased to 32.7 sen/MWh while our return on assets (ROA) dropped to 2.1% and our EBITDA margin decreased to 16.1%.



Our profit for the year, however, remained positive – at RM499.5 million – which I believe speaks volumes for the crisis management abilities of the team at TNB and our sheer tenacity in maintaining the healthiest possible bottom line. TNB is in the midst of a 20-Year Strategic Plan aimed at taking us to global heights. I have no doubt that the greater operational efficiencies brought about by initiatives under this plan have served to keep the organisation from sliding into the financial red during this challenging period.

#### A WATERSHED YEAR

The year that has been was nothing less than a watershed for us at TNB. It has brought to the fore several underlying issues which have been plaguing the industry for some time, creating a sense of urgency - not just for TNB but also the country - to grab these by the horn, so to speak, and manage them. In many ways, the theme of this annual report is very apt - for the financial year 2010/11 has driven home the fact that the status auo cannot continue; and that a new way of thinking is required to ensure the sustainability of the energy sector. What's more, we at TNB are committed to leading the way as we switch on a new future.

To my mind, there are three main issues that need to be addressed, which are interrelated. They are: 1) the availability of fuel; 2) the rising cost of fuel; and 3) the need for greater investments into renewable energy and energy efficiency.

AVAILABILITY OF FUEL. Fossil fuels, as we know, are finite resources. They take billions of years to be formed, yet can be depleted in just a blink in the history of the cosmos. It wouldn't be too much of an exaggeration to say that oil and gas extracted from the bowels of the earth have fuelled global development over the last century. In fact, existing reserves have been depleted to such an extent that what is left is becoming increasingly harder to access. Yet more than 90% of the industry's generation fuel mix comprises fossil fuels. In FY2009/10, the nation's generation mix comprised 54.2% gas, 40.2% coal, 0.2% distillate, 0.3% oil and 5.1% hydro, ie 94.7% was based on fossil fuels. In FY2010/11, the generation mix shifted to 45.1% gas, 44.0% coal, 2.5% distillate, 2.6% oil and 5.8% hydro but fossil fuels still make up 94.2% of the total.

The issue of availability at present applies most pressingly with regard to gas, which constitutes the bulk of the country's generation mix. That gas supply cannot be taken for granted was made evident by the events that unfolded in the last financial year. Notwithstanding the fire and plant shutdowns for maintenance, production at Petronas' main gas fields has been on the decline. From 2006, production has dropped at between 6% and 29%. The situation is the same in other gas producing countries.

Although we have not faced a similar urgency in supply with coal, the fact remains that TNB currently consumes a significant 20 million tonnes a year of coal, all of which is imported. And any event that causes a disruption in this supply would impact our performance.

**RISING COST OF FUEL**. In the early days, TNB was reliant on oil because it was abundant and affordable. After the oil crises of the 1970s, however, it became evident that there was a need to diversify our fuel generation mix, hence gas, coal and hydro was brought into the picture. Gas soon became the favoured fuel as it was locally available, cheaper than oil and cleaner.

To ensure affordable electricity to the rakyat, the Government fixed the price of gas sold to the energy sector. While its reason was noble, the fixed rate had grave ramifications as the international market price increased. Firstly, it served as a disincentive for the oil majors to invest in gas infrastructure in the country - which meant a reduction in production, as well as inefficient production (given that old machinery is not as productive as new machinery). Secondly, it meant that selling to the energy sector no longer made economic sense as the oil companies would fetch better prices elsewhere.

## President/CEO's Review



Along with the revision of the electricity tariff, the Government increased the price of gas to the energy sector by 28%, from RM10.70 per mmBTU to RM13.70 per mmBTU. However, this still falls short of the international market price, which is around RM40 per mmBTU. In order to guarantee a more stable supply of gas, the price to the sector has to match that of the international market rate. The proposed reintroduction of the fuel cost pass through (FCPT) mechanism is a step in the right direction, and the Government's periodical review of the gas price is very promising. TNB has formed an internal multi-divisional FCPT taskforce which is dedicated to providing our input to the Government on what we consider a critical matter.

The price of coal, meanwhile, has increased more than 3 times since FY2003/04 - from USD34 to USD107 in the last financial year. Coal prices are dependent on the forces of supply and demand, shooting up when natural disasters strike and increase demand. In the year under review, this was seen following the earthquake and tsunami in Japan, as well as the floods in Australia and Indonesia. Given that coal makes up a sizeable portion of our energy mix, it would ultimately be in the interest of all concerned to include the price of coal - indeed the price of all fuels - in the FCPT mechanism, as is the case in most regional and developed countries.

#### RENEWABLE ENERGY AND ENERGY EFFICIENCY

There was a time when energy companies felt conscientious about investing in renewable energy (RE). Well those days are gone. RE is no longer a feel-good diversion but has become an imperative to ensure the sustainability of energy supply and of energy suppliers.

The Government in 2011 passed the Renewable Energy Act, effectively launching a roadmap to increase the contribution of RE to the electricity generation mix from less than 1% currently to 5.5% by 2015. The Act has been well thought out to encourage greater investment in RE by individuals and companies. For example, a range of rates are now being offered for RE - from 23 sen/kWh to 123 sen/kWh, depending on the type of RE power generated which is higher than the previous fixed rate of 21 sen/kWh. Under the Act, further, a Feed-in Tariff (FiT) will be implemented as of December 2011, to be paid for by the allocation of 1% of electricity bills into an RE fund. TNB fully supports these initiatives, and we believe the country holds great potential for the development of RE from sources such as biomass, solar and mini hydro. As with the Government, we positively encourage greater involvement by the private sector in promoting an RE ecosystem in Malaysia. Under the Small Renewable Energy Programme (SREP), we have signed Renewable Energy Power Purchase Agreements with RE developers for a total RE capacity of 87.65MW as of August 2011.



As a leading energy producer, TNB ourselves are fully committed to developing low carbon and renewable generation technologies. Our green initiatives are coordinated under the Green Renewable Energy and Energy Efficiency Roundtable (GREENER TNB) and encompass several RE projects, such as a pilot 5MW solar photovoltaic (PV) plant in Putrajaya, a 10MW biomass JV plant in Jengka Pahang, and mini-hydros, solar hybrids and bio-gas ventures.

However, we believe that RE initiatives on their own are not sufficient. Malaysians need to use electricity more efficiently, and not waste precious resources. There are those who believe an energy producer must want to increase demand so as to increase its profit margins. The fact is, it is very costly to build new energy infrastructure and much more efficient to sweat the assets that we already have. Within TNB itself we are making a conscientious effort to reduce waste. Under GREENER TNB, we have formulated demand side management (DSM) initiatives as well as energy efficiency (EE) initiatives. While the former concentrates on spreading the demand of electricity more evenly on a 24-hour basis so as to manage peak demands, the latter focuses on creating greater efficiency of systems and processes in our power plants, substations, buildings and offices.

The responsibility of conserving energy, however, does not lie solely with TNB. It is something everyone can, and should, contribute towards. If every household (domestic customer) saved 1kW a day, this would mean a total average saving of 7.6 million kW a day. What's more, it is not difficult to be energy efficient; all it requires is making a conscious decision to do the right thing, such as increase the temperature of air-conditioned rooms, use more energy saving bulbs, and have the discipline of switching off lights in rooms that are not being used. These are simple steps with significant outcomes.

## President/CEO's Review

In the year under review, we launched our own Green Energy Policy, which states: "TNB is committed to supporting the national green agenda and minimising the environmental impact of our business by applying sustainable and efficient operations, and delivering green energy through the application of appropriate technologies and investments."

#### **SERVICE EXCELLENCE 10/10**

Operationally, TNB has embarked on a series of 'simple steps' to achieve significant outcomes. In 2005, we launched a 20-Year Strategic Plan to help us realise our 2025 vision of global leadership. This plan has been broken into four five-year journeys, the first of which - Service Excellence 10/10 (SE10/10) - was completed in the year under review. The goal of SE10/10 was to improve our operational and cost efficiencies so as to place us among the best performing companies in Malaysia by 2007 and in the region by 2010. The fact that we received the Prime Minister's Industry Excellence Award (AKIPM) in 2007 - mid-way through SE10/10 - was proof of having achieved organisational excellence at the national level.

More impressively, we are currently shortlisted for the Platts 2011 Global Energy (Power Company Of The Year) Award – the energy sector's most prestigious award. Such recognition, coming as it does in a year that has been one of the most challenging for TNB – proves that despite the financial stresses we have had to face, we have 'got it right' at a fundamental level. I am extremely proud of this achievement and share the entire team's excitement in awaiting the final results, which will be announced in December.

#### **KEY ACHIEVEMENTS IN THE YEAR**

The emphasis over the last five years has been to improve the performance of our core divisions via cost optimisation and business process re-engineering. An Asset Utilisation Plan was drawn up which led to the upgrade of existing systems and the implementation of new, superior technologies. As a result, in FY2010/11, we made notable improvements in key areas. TNB managed to reduce our Transmission and Distribution Losses to 8.97% against a target of 9.0-9.5%; our Distribution System Average Interruption Duration Index (SAIDI) went down to 78.9 minutes/ customer/year against our target of 85-93 minutes/customer/year; and we maintained our Transmission System Minutes at 1 minute against the target of 1-2.5 minutes.

There has also been emphasis on expanding our services abroad, and I am very pleased with the successes achieved by our non-regulated business in this regard. Several of our subsidiaries managed to export their expertise in the year under review - including our operations and maintenance arm, TNB Repair and Maintenance Sdn. Bhd. (TNB REMACO); our district cooling business run by TNB Engineering Corporation Sdn. Bhd. (TNEC); and the group of subsidiaries that offer manufacturing products and services, namely Malaysia Transformer Manufacturing Sdn. Bhd. (MTM), Tenaga Switchgear Sdn. Bhd. (TSG) and Tenaga Cable Industries Sdn. Bhd. (TCI), Shuaibah IWPP and Shuaibah IWPP Expansion. Our training arm, TNB Integrated Learning Solution Sdn. Bhd. (ILSAS), and university, Universiti Tenaga Nasional Sdn. Bhd. (UNITEN), also successfully marketed their training and development programmes overseas. As a result of all these efforts, TNB's nonregulated business achieved its total targeted revenue of about RM1.8 billion.



Underlining these achievements is greater employee commitment, as measured by their level of engagement in the Company. Based on a survey conducted by an independent consulting firm in July 2011, TNB's employee engagement level stands at 84%, a steady improvement from 81% in 2007 and comparable to Malaysian Best Employers' average employee engagement level of 85% in 2011.

Another key achievement has been enhanced customer service. In the year, we introduced new channels through which our customers can communicate with us, including the One Stop Enquiry Centre. This will help to divert some of the traffic from our Call Management Centre, which receives 250,000 calls on average a month. We have also introduced an e-Application Total Enhancement Programme, and set up a Performance Standard of Electricity Supply Services with the purpose of improving our Minimum Service Level (MSL) and Guaranteed Service Level (GSL).



The year's operations review would not be complete without mentioning the significant improvements in our subsidiary, Sabah Electricity Sdn. Bhd. (SESB). In the year under review, SESB managed to almost halve its SAIDI from 687 mins/ customer/year to 366 mins/customer/ year (a decrease of more than 10 fold from 4,030 mins/customer/year in 2006). Another milestone was the revision of the electricity tariff in the state – the first in 25 years. As of July 2011, the tariff has been increased 3.1 sen/kWh from 25.5 sen/ kWh to 28.6 sen/kWh, which will boost SESB's revenue by about RM150 million by Financial Year 2012. This will contribute towards the development of new power plants required to meet SESB's vision of providing electricity to 95% of the population in Sabah by 2013.

#### **GEMILANG 2015**

In the second phase of our 20-Year Strategic Plan, called Gemilang 2015, we aim to achieve geographical expansion and to create new revenue streams based on our knowledge and capabilities. Gemilang 2015 comprises four main action plans:

- Financially, we aim to build a sustainable business by optimising costs and capitalising on business opportunities.
- In the marketplace, we will strive to delight our customers with enhanced service and improved communication channels. We will also establish TNB as a primary driver of green energy in Malaysia.
- Internally, we will further enhance our operational excellence in order to sustain world-class power supply reliability and security via the deployment of the latest proven technology, including nuclear.
- 4. In terms of our capabilities, we will enhance our human capital development and productivity and leverage on the existing knowledge and experience of TNB staff.

We have set ourselves specific targets for year 2015 under Gemilang 2015, which include a return on assets (ROA) of 6-7%, Transmission and Distribution Losses of 6-7%, non-regulated revenue for the FY2011-15 period of RM5 billion, UOR of less than 4%, SAIDI of less than 50mins, System Minutes of less than 1min and first ranking of an Asian electricity utility in the Platts Award.

#### **MAJOR PROJECTS IN PROGRESS**

Even as we faced financial constraints, TNB has forged ahead with numerous projects that promise not only to boost our generation capacity but are also environmentally-friendly, and will contribute to a greener energy landscape in the country.

We have been given the green light to go ahead with two new hydroelectric plants in the country - a 250MW Hulu Terengganu Hydroelectric Project in Terengganu and a 372MW Ulu Jelai Hydroelectric Project in Pahang. We are also developing a new coal-fired plant in Manjung that will employ the latest supercritical boiler technology boasting an efficiency level of 39.8%. And we are proceeding with a proposed 300MW power plant in POIC Lahad Datu Phase 3, after obtaining approval to power it by a gas-fired combined cycle as opposed to coal, as was the initial intention. All of these are slated to be completed by 2015, except for the Ulu Jelai Hydroelectric Project which will be ready in 2016.

I am pleased to report, also, that our plan to implement a smart grid is progressing well. Three sites have been designated for the implementation of pilot smart grids – the Bukit Bintang commercial area, Bayan Lepas industrial area and Medini in Wilayah Iskandar, Johor. During the year, a team visited South Korea to observe the smart grid in the country and take notes on its successful implementation.

## **President/CEO's Review**



#### OUTLOOK

We enter the financial year 2011/12 in a climate of continued global uncertainties. In our industry, we are also very sensitive to natural disasters which have the power to curtail essential fuels on which we depend. As floods, earthquakes and volcanic eruptions are beyond human control, one has to always tread cautiously in looking at the future of the energy industry.

As the global economic prospects are expected to be more challenging in 2012, the Malaysian 2012 Budget saw the Government putting in measures to stimulate domestic economic activities through the implementation of the Economic Transformation Plan (ETP) and Second Rolling Plan projects under the Tenth Malaysia Plan (10MP). To further support economic growth, the Government will also implement a Special Stimulus Package through Private Financing Facility amounting to RM6.0 billion. Through these initiatives, the Government expects the Malaysian economy to achieve growth of 5.0% -6.0% in 2012.

However, with the uncertainty in gas supply and rising fuel prices, generation cost is expected to increase from the use of oil and distillate as well as higher generation from coal fired power plants. TNB has continuously been engaging with the Government in an effort to resolve the gas volume issue as well as the burden of sharing the higher fuel costs. The outcome of the discussions and its impact to TNB will be significant.

Given the foregoing scenario, we expect the Group's performance for the financial year ending 31 August 2012 to be very challenging.

#### ACKNOWLEDGEMENTS

As always, I would like to thank the Government, and especially the Ministry of Energy, Green Technology and Water, the Economic Planning Unit, the Public Private Partnership Unit (UKAS), the Ministry of Finance, Energy Commission, Performance Management and Delivery Unit (PEMANDU) and the Putrajaya Committee on GLC, for always being open to discussion and dialogue, and for their continuing support. I would also like to acknowledge the Board of Directors, so ably led by Tan Sri Leo Moggie, for leading us through this difficult year and providing us with invaluable input as we navigated our way through the trials and tribulations that we faced. My gratitude extends to our Management, who have persevered and kept the morale up even as they burnt the proverbial candle to iron out issues that were presented to them. To all our business partners and vendors, thank you for your diligence, trust and integrity. I would also like to remind our shareholders that you remain topmost in our mind and we hope to be able to make up for any shortcomings with improved performance in the coming year. As for our customers, rest assured that we exist to serve you, and on behalf of the Company, I would like to say that you always come first.

We have been through an intensely challenging year, and emerged in some ways stronger than before. For this, I truly have to thank our more than 31,000 employees across the nation – for their dedication, commitment and sheer tenacity. These are the people who will Switch On our future, and to them I express my heartfelt gratitude.



DATO' SRI CHE KHALIB BIN MOHAMAD NOH President/Chief Executive Officer

TNB ~ annual report 2011



DATO' Ir. AZMAN BIN MOHD Executive Director/Chief Operating Officer



## Operations Review ~ GENERATION

DATO' Ir. MOHD NAZRI BIN SHAHRUDDIN Vice President

#### **DIVISIONAL GOALS**

TNB's Generation Division operates and maintains six thermal power stations and three major hydroelectric power generating schemes in Peninsular Malaysia, while also developing and building new power stations for the Group. The six thermal power stations comprise conventional gas and oil-fired plants as well as open and combined cycle gas turbine plants. The division further supports the operations and maintenance of three IPPs, namely the wholly TNB-owned Sultan Azlan Shah Power Station and TNB Liberty Power Limited of Pakistan, and the majority-owned Sultan Salahuddin Abdul Aziz Shah Power Station.

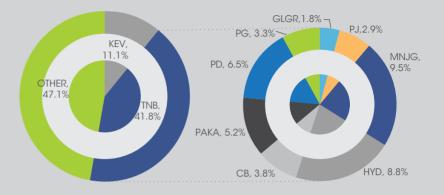




TNB Repair and Maintenance Sdn. Bhd. (TNB REMACO), a business unit under Generation Division, provides repair, maintenance and testing services as well as the refurbishment of components. More recently, it has diversified into project development and operations and maintenance, both locally and overseas.

With over 60 years of experience, the Generation Division takes the lead in providing the technical expertise in TNB's overseas ventures.

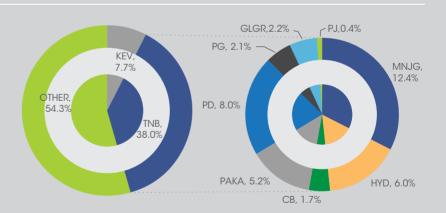
#### Chart 1: GENERATION INSTALLED CAPACITY IN PENINSULAR MALAYSIA FOR FY2010/11



#### **OPERATIONAL SUMMARY**

Peak demand for electricity in Peninsular Malaysia increased 2.7% from 15,072MW in May 2010 to 15,476MW in May 2011. Generation Division has a total installed capacity of 9,110MW, comprising 7,199MW in thermal plants and 1,911MW in hydro plants<sup>1</sup>. The organisation commands a 41.8% market share of installed capacity in Peninsular Malaysia, as depicted in Chart 1.

1 Based on Generation Security Standard (June 2011) by Energy Procurement Department, TNB

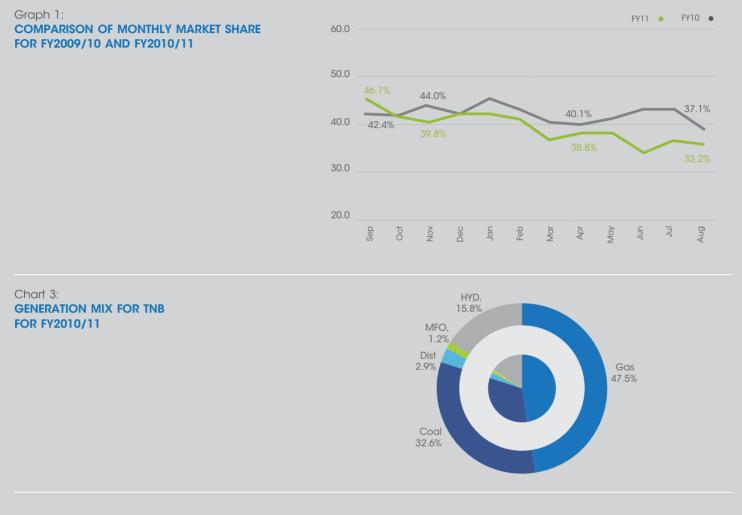


Due to unplanned outages at the Sultan Azlan Shah Power Station, Manjung and Tuanku Ja'afar Power Station, Port Dickson in the FY2010/11, TNB's generation market share dropped 3.9 percentage points year-onyear to 38.0%. The Sultan Azlan Shah Power Station, Manjung and Tuanku Ja'afar Power Station, Port Dickson continue to dominate TNB's energy generation, contributing to 32.6% and 21.1% of the total respectively.

Chart 2 shows the overall generation market share in FY2010/11 while Graph 1 compares TNB's monthly market share for the FY2009/10 and 2010/11.

#### Chart 2: OVERALL GENERATION MARKET SHARE BY SALES FOR FY2010/11

## **Operations Review – Generation**



Generation from gas contributed to 47.5% of the total energy generated by TNB in FY2010/11, followed by coal at 32.6%, hydro at 15.8%, distillate at 2.9% and medium fuel oil (MFO) at 1.2%. TNB's generation fuel mix for the period under review has changed from the previous financial year due to prolonged gas curtailment by Petronas. Chart 3 shows the generation fuel mix for FY2010/11.

#### **TECHNICAL PERFORMANCE REVIEW**

#### Plant Equivalent Availability Factor (EAF)

TNB Generation's plant equivalent availability factor stood at 86.8% in FY2010/11, 2.6 percentage points lower than in FY2009/10, as a result of major planned and unplanned outages throughout the year. Among the major planned

outages were those at Units 1 and 2 at the Sultan Azlan Shah Power Station, GT1B at the Connaught Bridge Power Station, Unit 3 at the Sultan Mahmud Power Station and Unit 2 at the Kenering Power Station – all due to major overhauls. The Sultan Azlan Shah Power Station, Manjung and Tuanku Ja'afar Power Station, Port Dickson experienced high unplanned outages due to mechanical failure of the boiler and failure of the Generator Transformer ST1C respectively.

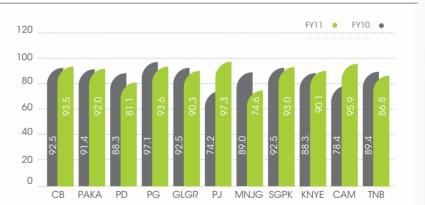
The overall station performance in FY2010/11 was good, with 80% of the power stations exceeding an EAF of 90%. Among the different plant types, open-cycle gas turbines achieved an EAF of 97.5%, hydro plants 92.8%, conventional oil/gas thermal plants 89.4%, combined-cycle plants 86.6% and conventional coal thermal plants 74.6%

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#### Graph 2: EQUIVALENT AVAILABILITY FACTOR FOR FY2010/11 (%)



As shown in Graph 2, the lowest EAF – of 76.3% – was recorded in June 2011. This was due to the unavailability of GT1B at Connaught Bridge Power Station, CCP at Gelugor Power Station and CCP Block 2 at Sultan Ismail Power Station due to planned outages. Unit 3 at Sultan Azlan Shah Power Station, CCP Block 1 at Tuanku Ja'afar Power Station and GT1A at Connaught Bridge Power Station were also unavailable due to the unplanned outages during the month. The EAF in FY2010/11 was the lowest in the last five years, largely as a result of the high unplanned outage of 7.1%. Graph 3 shows the EAF for TNB's power stations in FY2009/10 and FY2010/11. Graph 4 shows the EAF trend since FY2006/07.





#### Graph 3: EQUIVALENT AVAILABILITY FACTOR BY STATION (%)

Graph 4: TRENDING OF EQUIVALENT AVAILABILITY FACTOR (%)

## **Operations Review – Generation**

#### Graph 5: TREND OF EQUIVALENT UNPLANNED OUTAGE FACTOR (%)



#### Plant Equivalent Unplanned Outage Factor (EUOF)

With the exception of the Sultan Azlan Shah Power Station, Manjung and Tuanku Ja'afar Power Station, Port Dickson, overall station reliability in FY2010/11 was good. High unplanned outages at these two stations contributed to TNB Generation's EUOF of 7.1% in FY2010/11, an increase of 4.4 percentage points from FY2009/10. Graph 5 shows the EUOF trend from FY2006/07 to FY2010/11.

#### Graph 6: EQUIVALENT UNPLANNED OUTAGE FACTOR BY STATION (%)

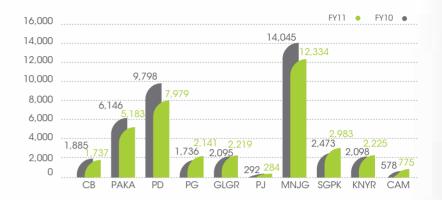


The EUOF of most of the power stations was on par with international benchmarks, with 70% of the stations achieving an EUOF of less than 2.4%. Three of the power stations – the Putrajaya Power Station, Sungai Perak Power Station and Sultan Mahmud Power Station – recorded EUOFs of less than 0.7%. The Sultan Azlan Shah Power Station, Manjung and Tuanku Ja'afar Power Station, Port Dickson recorded the highest EUOFs of 17.1% and 12.5% respectively. Graph 6 shows the EUOF of all the power stations in FY2010/11.



The major contributors of unplanned outages by major components are as indicated in Chart 4.

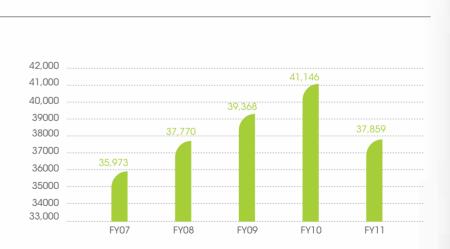
#### Graph 7: NET UNIT GENERATED BY STATION (GWH)



#### Net Unit Generated (NUG)

The total Net Unit Generated in FY2010/11 was 37,859GWh, a decrease of 8% from the previous financial year. The Sultan Azlan Shah Power Station, Manjung contributed to the highest unit generation of 12,334GWh, followed by the Tuanku Ja'afar Power Station, Port Dickson (7,979GWh) and Sultan Ismail Power Station, Paka (5,183GWh).

Graph 7 shows a comparison of energy generated by power stations in FY2009/10 and FY2010/11. The annual trend of energy generated from FY2006/07 to FY2010/11 is depicted in Graph 8. The decrease in generation in the year under review was due to prolonged gas curtailment by Petronas and the unplanned outages at the Sultan Azlan Shah Power Station, Manjung and Tuanku Ja'afar Power Station, Port Dickson.



#### Graph 8: TRENDING OF TNB GENERATION NET UNIT GENERATED (GWH)

## **Operations Review – Generation**

#### Graph 9: THERMAL EFFICIENCY BY STATION (%)



#### Net Thermal Efficiency (NEFF)

Generation Division's overall net thermal efficiency in FY2010/11 was 38.9%. Graph 9 shows a comparison of the thermal efficiency by station for FY2009/10 and FY2010/11. The overall decrease can be largely attributed to the cycling of CCP as a result of the prolonged gas curtailment and the use of distillate and MFO.





Overall, thermal efficiency improved by 1.3 percentage points from FY2006/07 to FY2010/11, as depicted in Graph 10.



#### TOTAL EMISSIONS OF CO<sub>2</sub> BY ALL POWER STATIONS (METRIC TONS OF CO<sub>2</sub>/MWH)

#### **Carbon Emission**

Graph 11:

In FY2010/11, a total of 0.54 metric tons of CO<sub>2</sub>/MWh was generated, marking a decrease of 3.6% from the previous financial year, partly as a result of higher utilisation of hydro energy. Graph 11 shows the total emissions of CO<sub>2</sub> by all power stations in FY2010/11.

Coal and MFO fuel contributed to the highest emission of 0.87 metric tons of CO<sub>2</sub>/MWh, followed by distillate fuel at 0.72 metric tons of CO<sub>2</sub>/MWh and natural gas at 0.48 metric tons of CO<sub>2</sub>/MWh. Initiatives to mitigate CO<sub>2</sub> emissions are ongoing. These include improving the performance tracking parameters for gas turbines and standardising the compressor water washing for CCP.



#### MAJOR PROJECTS

#### **Current Ongoing Projects**

#### Hulu Terengganu Hydroelectric Project (250MW)

Construction of the Hulu Terengganu Hydroelectric Project consists of four work packages - the Preliminary Civil Works, the Main Civil and Associated Works, the Electrical and Mechanical Plant and the High Voltage Switchyard. Preliminary Civil Works was awarded to AZRB and commenced in January 2010. Upon completion in May 2011, the project site was handed over to the Main Civil Works contractor, Loh & Loh Sinohydro JV, which was awarded the contract in September 2010 with a construction period of 56 months. The contract for the Electrical & Mechanical Works was awarded in October 2010 to the consortium of Alstom Hydro Malaysia & Alstom Power India Ltd, with a construction period of 55 months. The High Voltage Switchyard works will be undertaken by Transmission Division.

HTJV, a consortium of SNC Lavalin Inc, SNC Lavalin Power (Malaysia) Sdn. Bhd., KTA Tenaga and G&P Associates, is the engineering consultant for this project.

The target Commercial Operation Date for the first unit is September 2015, followed by the second unit in December 2015.

#### Ulu Jelai Hydroelectric Project (372MW)

Preliminary Civil Works for the Ulu Jelai Hydroelectric Project was awarded to the TM-Salini consortium in August 2010, with a construction period of 12 months, and work commenced in October 2010. The contract for the Main Civil and Electrical & Mechanical Works was awarded to the same consortium in December 2010, and work commenced in March 2011. SMEC International Pty Ltd entered into a joint venture agreement with SMEC (Malaysia) Sdn. Bhd. is the engineering consultant for this project. The target Commercial Operation Date for the first unit is December 2015, followed by the second unit in March 2016.

## Manjung Coal-Fired Power Plant Project (1000MW)

On 23 August 2010, the Government awarded TNB a contract to build a 1,000MW coal-fired power plant. TNB subsequently awarded the EPC contract to the ALSTOM-CMC consortium on 31 March 2011 which also signifies the commencement date of the contract. The project is located adjacent to the existing Sultan Azlan Shah Power Station in Manjung, Perak.

The new power plant will use the latest supercritical boiler technology which is more efficient than conventional coal-fired boilers. It is expected that the new plant will operate at an efficiency of 39.8%, which is higher than the 35% efficiency level of the existing power plant in Manjung. This means the boiler will burn less coal, hence emit less NO<sub>y</sub>, SO<sub>y</sub>, CO<sub>2</sub> and particulates.

The Detailed Environmental Impact Assessment was approved by the Department of Environment (DOE) on 23 March 2011, and site work commenced on 29 June 2011. Commercial operations are scheduled to begin on 31 March 2015.

#### Lahad Datu Joint Venture coal-fired IPP Project (300MW)

Subsequent to a joint presentation by the Ministry of Energy, Green Technology and Water, TNB and Petronas, the National Economic Council on 25 April 2011 agreed that the proposed 300MW power plant in POIC Lahad Datu Phase 3 should be powered by gas-fired combined cycle as opposed to coal, as had been initially planned.

The Federal Government, through the Public Private Partnership Unit (UKAS), awarded the combined cycle project to a consortium of TNB (50%), Petronas (30%) and the Sabah State Government (20%) on 25 July 2011. The power plant will be fueled by natural gas from the proposed Petronas LNG plant in the same area. The first unit is expected to be completed by end 2015.

## Jengka Joint Venture Biomass Project (10MW)

FTJ Biopower Sdn. Bhd., a joint venture company between TNB and Felda Palm Industries Sdn. Bhd. (FPI), will develop a 10MW Jengka Biomass Power Plant in Pahang under the Small Renewable Energy Power Programme (SREP). J-Power was initially part of the JV but officially withdrew from it on 12 December 2010. SREP was launched by the Government to promote renewable energy in power generation in line with the Fifth Fuel Policy and to reduce areenhouse aas emissions. The plant, located at Jengka 8, Mukim Chenor in Maran will use palm oil empty fruit bunches (EFB) as its primary source of fuel for firing its boiler. The EFB will be supplied by neighbouring Felda palm oil mills.

The project commenced in May 2011 and is expected to be completed by December 2012. There are plans to apply for Certified Emission Reduction and sell carbon credits to the market at rates agreeable between buyer and seller. Annually, the project is expected to contribute to a reduction in CO<sub>2</sub> emission of about 45,000 tonnes.

#### Feasibility Study MOU of Potential Biogas Projects at Sime Darby Plantation Palm Oil Mills

TNB entered into an MOU with Sime Darby Plantation Sdn. Bhd. (SDP) and Mitsui & Co Ltd in April 2011 to conduct technical and financial feasibility studies to power new generation plants using biogas from palm oil mill effluent that is currently disposed. The feasibility studies are expected to be completed in first quarter of the next financial year, upon which a joint venture company for the development and implementation of the power plant will be formed.

## **Operations Review – Generation**

#### Geothermal Development Programme

Phase 2A of research and development on the potential of geothermal sources for power generation in Peninsular Malaysia is on-going. This phase is to determine if the geothermal reservoir characteristics support a project confidence level of 30%. Exclusive access rights to the potential site(s) are being sought before specialist collaborators are engaged for the geological, geochemical and geophysical investigations.

#### **FUTURE PROJECTS**

Proposed projects in Telom (132MW), Tekai (156MW), Sungai Pelus (34MW), Talong Sengoh (200GWh/yr), Lebir (274MW) and Nenggiri (416MW) are in various stages of discussion/action between TNB management and state authorities.

## TNB REPAIR AND MAINTENANCE SDN. BHD.

TNB Repair and Maintenance Sdn. Bhd. (TNB REMACO) was set up initially to focus on TNB's power plants in the fields of scheduled maintenance and repair, the refurbishment of components and testing services. Over the years, however, it has expanded beyond TNB and diversified its business into other areas such as project development and operations & maintenance (O&M), While TNB and its subsidiaries, namely Sabah Electricity (SESB), Kapar Energy Venture (KEV) and TNB Janamanjung (TNBJ), contribute to 90% of TNB REMACO's revenue, the company aims to derive 40% of its revenue from non-TNB customers by year 2015.

During the financial year, TNB REMACO was awarded a contract to be the operator for Laraib Energy's 84MW hydro power plant in New Bong, Azad Jammu & Kashmir, Pakistan. The contract is for five years, with an option to extend it for a further seven years. TNB REMACO was also awarded two major contracts by SESB, namely the Rehabilitation of Tenom Pangi hydro plant and the Operation & Maintenance (O&M) of Sandakan Power Station. The O&M contract for Sandakan Power Station is for a period of five years with an option to extend it for another five years. TNB REMACO signed a Multi-Year Maintenance Program Agreement with GE Energy for Tuanku Ja'afar Power Station for a period of three years. To enhance TNB REMACO's technical capability, it signed an agreement with KC Engineering from United Kingdom for bearing repair works. By collaborating with KC Engineering, TNB REMACO will be able to perform bearing repair at its workshop located in Repair Centre, Klang. TNB REMACO had undertaken its first job in Yemen for Public Electricity Corporation (PEC). The job was to perform minor inspection for three units of Siemens V94.2 gas turbine at PEC's Maarib Power Station.

TNB REMACO is currently exploring some O&M contracts within the target market, among others:

- 860MW co-generation (power and water) plant in Shuaiba North, Kuwait
- 225MW diesel combined cycle plant in Lahore, Pakistan
- 80MW bagasse and coal-fired power plant in Rahim Yar Khan, Pakistan

- Coal O&M for Kapar Energy Venture
- Biogas plants for a consortium led by Sime Darby
- 10MW biomass plant in Pahang
- 2400MW hydro plant in Bakun, Sarawak

Besides exploring O&M contracts, TNB REMACO is also exploring maintenance and repair works in ASEAN countries, Saudi Arabia, United Arab Emirates and other countries in the Middle East.

#### CHALLENGES AND PROSPECTS

In the financial year under review, the division provided technical support and project management services for TNB's overseas generation business ventures, especially in the Gulf region. In line with TNB's global expansion initiative, Generation Division focuses on maintaining world-class standards of performance. It continues to build the capacity and capabilities of its human resources via training programmes, while upgrading its systems to deliver optimum efficiency.

The development of the Generation Plant Management System (GPMS) to analyse plant performance in real time and the implementation of Total Productive Maintenance (TPM) will serve to ensure that TNB's Equivalent Availability Factor (EAF) continues to increase and consistently exceeds the target value.



## Operations Review ~ TRANSMISSION

DATUK ROZIMI BIN REMELI Vice President

#### **BUSINESS REVIEW**

Transmission Division connects electricity supply between generation and distribution system via its National Grid network. The division is committed to providing safe, secure and reliable electricity supply at optimal cost while ensuring quality service, practising good corporate governance, caring for the environment and meeting its corporate social responsibilities. The division aims to be the leading transmission entity and grid system operator in ASEAN, and among the best in the world.





Transmission Division has achieved a number of milestones in operational and corporate performance over recent years, some of which are highlighted below:

- Superior performance in System Minutes, which has not exceeded 1.02 minutes for the last three years.
- Zero major disturbance over the last six years.
- Zero tripping with load loss at 500kV and 275kV levels for three consecutive years.
- 2.18% transmission system loss, inclusive of losses for distribution power transformers.
- Highest maximum demand of 15,476 MW (recorded on 9<sup>th</sup> May 2011).

## **Operations Review – Transmission**

- Increased system capacity with additional 2,940 MVA transformer capacities, 308.5 circuit km of transmission lines and 19 circuit km of underground cables through the completion of 65 transmission projects.
- Transmission headquarters was the highest scorer in the TNB President's Quality Award (AKP) desktop assessment in FY2010/11.
- Three business units Asset Maintenance (Melaka), Asset Maintenance (Johor 2 - Kluang) and Asset Development (Central) - were recognised as members of TNB's AKP 800 point club.
- 16 Gold awards from the Malaysian Society for Occupational Safety & Health (MSOSH) with 100% involvement from all business units.
- Passed the SIRIM Surveillance Audit with zero NCR (Non Conformance Report), receiving commendation from the auditors for the effective management of the internal quality audit.

#### **OPERATIONAL AND TECHNICAL PERFORMANCE**

Transmission Division manages and operates TNB's 132kV, 275kV and 500kV transmission network, known as the National Grid System. Its primary responsibility is to ensure high reliability and security of this National Grid System, which in turn requires the proper maintenance of all the equipment.

Accordingly, the main activities of the division include control operations, asset maintenance, project management, engineering and procurement.

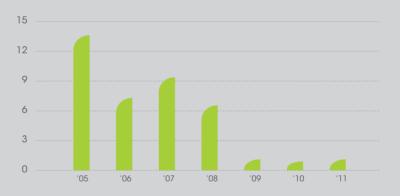
The National Grid is connected to Thailand's transmission system, operated by the Electricity Generating Authority of Thailand (EGAT), in the north; and to Singapore's transmission system, operated by SP PowerGrid, in the south. The connection with Thailand is via a High Voltage Direct Current (HVDC) interconnection with a transmission capacity of 300MW and a 132kV High Voltage Alternating Current (HVAC) overhead line with maximum transmission capacity of 80MW. The connection with Singapore, meanwhile, is via two 230kV submarine cables with a firm transmission capacity of 200MW.

#### A NUMBER OF KEY INITIATIVES WERE UNDERTAKEN IN FY2010/11 TO IMPROVE SUPPLY RELIABILITY



Transmission Division has started implementing initiatives identified in the second phase of TNB's 20-Year Strategic Plan. These comprise four breakthrough strategies:

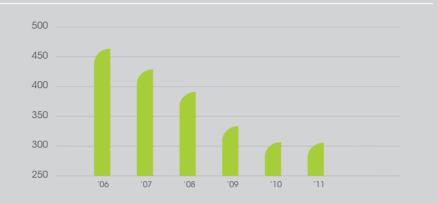
- Enhancing supply reliability via a Zero Tripping Action Plan (ZTAP) & Critical Installation Maintenance (CRIM) to maintain low system minutes
- 2) Enhancing supply reliability via the development and implementation of a SmartGrid – Wide Area Intelligence System (WAIS) to maintain zero major disturbance
- 3) Reducing transmission losses by introducing a low loss conductor
- 4) Deploying innovation and proven technology through the International Electrotechnical Commission Standard IEC 61850 based Substation Protection Automation and Control System (SPACS)



Transmission Division managed to reduce system minutes from 6.56 minutes in FY2007/08 to 1.01 minutes in FY2010/11. Besides reducing system minutes, the division has also managed to reduce the number of tripping with load loss incidents from 26 in FY2008/09 and to only 15 in FY2010/11.

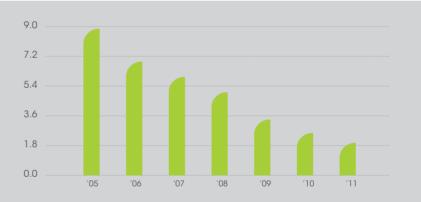
## DELIVERY POINT UNRELIABILITY INDEX (SYSTEM MINUTES)

## **Operations Review – Transmission**



Transmission Division also reduced transmission-related tripping to 305 incidents in FY2010/11 from 333 incidents in FY2008/09 despite the installation of more equipment since 2008.

For 500kV and 275kV systems, the division achieved a zero load loss tripping incident for three consecutive financial years.

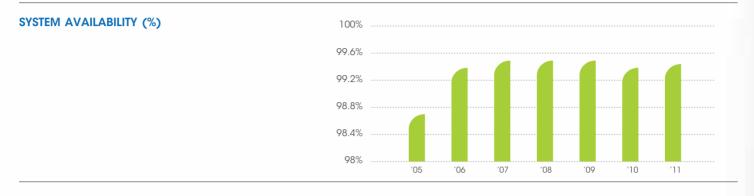


In terms of transmission project delivery, the division reduced the monthly delay index from 3.37 months in FY2008/09 to 1.96 months in FY2010/11.

In the year under review, a total of 65 projects were fully completed and commissioned, contributing to an additional 2,940 MVA in transformer capacity, 308.5 circuit km of transmission lines and 19 circuit km of underground cables in the system.

**MONTHLY DELAY INDEX (MONTH)** 

TRANSMISSION-RELATED TRIPPING (NO)



For the sixth consecutive financial year, the division maintained zero occurrence of major disturbance. At the same time, system availability improved to 99.44%.

The National Grid recorded transmission losses of 2.18%, including losses of 132/ 33kV, 132/ 22kV and 132/ 11kV power transformers.

The system also recorded a maximum electricity demand of 15,476MW (on 9<sup>th</sup> May 2011), an increase of 2.68% from 15,072MW maximum electricity demand in the previous financial year.

In FY2010/11, the division completed Phases 1 and 2 of the Transmission Operation Monitoring & Analysing System (TOMAS), a centralised information system consisting of work process management and dashboard monitoring. TOMAS has been rolled out to all Asset Maintenance State Offices nationwide. In the course of establishing TOMAS, Transmission Division has enhanced the accuracy and adequacy of its existing asset database. The establishment of TOMAS will further provide Transmission Division with an overall information system capable of making rigorous and consistent technical and financial decisions based on the high level of accuracy of asset data.

The entire National Grid network is continuously monitored by a group of engineers stationed at the National Load Dispatch Centre (NLDC) who are responsible for controlling the flow of power within the grid in real time, and ensuring that supply meets ever-growing demand in the most secure, optimal and safe manner.

The state-of-the-art computerised Supervisory Control and Data Acquisition/Energy Management System (SCADA/EMS), commissioned at the NLDC in December 2009, has been functioning smoothly, further enhancing NLDC's effectiveness in operating TNB's transmission grid. The new SCADA/EMS system is among the best in the Asia-Pacific region and is comparable to those of major utilities in North America. Many foreign and local delegates have visited the division to view the system.

#### PROSPECTS

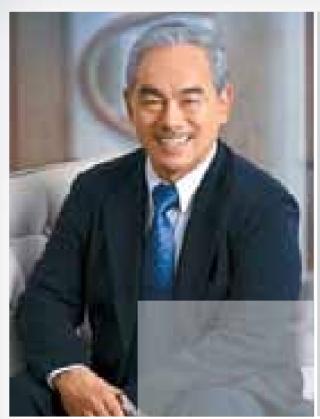
Transmission Division will continue to implement initiatives identified under the second phase of TNB's 20-Year Strategic Plan – Gemilang 2015. These have been laid down in line with the division's goal to be the leading transmission entity and grid system operator in ASEAN and among the best in the world.

The division is committed to completing and delivering all its projects on time, as any delay in critical transmission development projects would pose a risk to the security and reliability of the National Grid. Towards this end, it seeks the support and cooperation of all relevant stakeholders.

At the same time, Transmission will continue to focus on building and enhancing its human capital and competency by providing training and platforms for the sharing of knowledge such as technical forums and colloquiums.

The division is gearing up to achieve Occupational Health Safety Assessment Series (OHSAS 18001) certification in the year 2012. Currently, all efforts are being focused on developing a proper Hazard Identification Risk Assessment and Determining Control (HIRADC), ensuring the existing safety and health requirement is incorporated in all work instructions.

Last but not least, the division remains committed to ensuring excellence in its products and services towards becoming the leading transmission entity and grid system operator in ASEAN, and among the best in the world.



## Operations Review ~ DISTRIBUTION

HUSSIN BIN OTHMAN Vice President

The year under review signalled the start of the Second Phase (FY2011-2015) of TNB's 20 Year Strategic Plan, called Gemilang 2015. Distribution Division continued to make progress under the able leadership of its Vice President, Hj Hussin Othman. Strategies to enhance customer satisfaction and network supply reliability have been implemented, along with associated action plans.

# **43.1%** sales of electricity (units)



#### **OPERATIONAL SUMMARY**

The Distribution Division is responsible for two main and distinct business functions, namely distribution network operations and electricity retail operations. The former ensures that Distribution has a reliable and robust network to deliver electricity efficiently at voltage levels of 33kV, 22kV, 11kV, 6.6kV and 415/240V to customers. Towards this end, distribution network operations plan, design, construct, operate and maintain the electricity supply system.

The retail aspect of the business is conducted through a network of 13 state and 45 area offices. It markets and sells electricity, connects new supply, provides counter services through Pusat Khidmat Pelanggan (PKP), collects revenue, operates the Call Management Centres (TNB CareLine 15454 and One Stop Enquiry Centre 1-300-88-5454), handles customer enquiries/complaints and nurtures strong relationships with customers as well as the Government.

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For the period under review, Distribution • connected 220,403 new customers, thus increasing TNB's customer base in Peninsular Malaysia to 7.6 million. In the same period, sales of electricity (units) grew by 3.1% to 92,300GWh.

#### ACHIEVEMENTS

Distribution Division's main achievements in FY2010/2011 include:

- Launch of new Customer Charter and People 1st Programme by the Minister of Energy, Green Technology and Water on 8 December 2010 to reinforce Distribution's commitment to its customers.
- Improved network reliability, as shown by a reduction of System Average Interruption Duration Index (SAIDI) by 8.5mins/customer/year from the previous FY to 78.9mins/ customer/year.
- 2,621 fewer breakdowns on the medium voltage side from 13,428 cases in the previous FY.
- A positive and significant drop of 0.5% in Distribution Losses from 7.29% (FY2009/10) to 6.79% (FY2010/11), translating to a financial gain of more than RM100 million annually.
- Collection of RM56.8 million in backbilling from detected cases of meter tampering, marking an increase of RM11.8 million from the previous FY.
- Launch of a massive rehabilitation programme, which includes strengthening the reliability of electricity supply in Johor under the Iskandar Malaysia Project (IM10).
- Contribution to winning the Asia's Best Brand Awards 2010.
- Upgrade of TNB CareLine with the establishment of a One-Stop Enquiry Centre (1-300-88-5454) to handle enquiries on billing and accounts.

Establishment of a secured web portal https://e-services.tnb.com.my that offers customers access to basic information on their accounts and provides other billing related services.

#### **OPERATIONAL IMPROVEMENT**

#### **Customer Service**

#### Customer Charter

Minister of Energy, Green Technology and Water Dato' Sri Peter Chin Fah Kui launched TNB's new Customer Charter on 8 December 2010. The Charter, which is to further improve TNB's services to its customers took effect from 1 January 2011. The Customer Charter reiterates Distribution's, and hence TNB's, commitment to meeting the needs of all its customers. It addresses and sets the standard performance requirements on seven customer-related areas:

- 1. Individual domestic new electricity supply
- 2. Change of tenancy
- 3. Refund of deposits
- 4. Billing
- 5. Service level
- 6. Disconnection of electricity supply
- 7. Reconnection of electricity supply

In just one year, TNB achieved a Customer Charter performance level of 90%, as measured by its customer service level. The initiatives implemented to improve the seven operational areas are expected to further improve the level of service provided to customers.

#### The People 1st Programme

The People 1st Programme instils a culture of service excellence. Accordingly, Distribution has expanded the role and number of Customer Relations Officers (CROs) attached to its Customer Service Centres. During the year under review, CROs were appointed to all 45 Areas in the 13 States. In addition, all front staff received extensive training in customer relationship and service to enhance their day-to-day dealings with TNB customers. This included training on the soft skills required to manage "the Moment of Truth" and to be more professional in performing their duties.

#### **Enhancement of Call Centres**

Distribution Division manages two main call centres, the 1-5454 Call Management Centre (CMC) and 1300-88-5454 One Stop Enquiry Centre (OSEC). The former manages calls on issues such as power breakdown and street lighting, while the latter is responsible for managing enquiries and customer feedback regarding electricity bills and customer accounts.

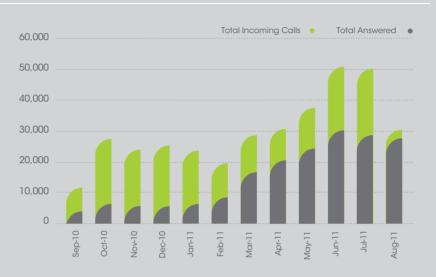
While CMC was set up much earlier, OSEC was established on 1 September 2009 as a pilot project for Klang Valley customers. It received an average 30,000 calls per month, prompting Distribution Division to make this hotline available to all customers in Peninsular Malaysia from 1 September 2011. CMC and OSEC have met the performance standards as set by the Contact Centre Association Malaysia (CCAM).



## **Operations Review – Distribution**

#### OSEC 1-300-88-5454 (Electricity Bills & Customer Accounts)

TOTAL INCOMING VS ANSWERED CALLS 1-300-88-5454



#### 1-5454 (Power Breakdown & Street Lighting)

TOTAL INCOMING VS ANSWERED CALLS 1-5454



To increase customer usage of OSEC, the system was enhanced in FY2010/11 with: (1) a call back facility, (2) voice message, (3) SMS, (4) chat facility, and (5) online feedback. TNB will continue to add value to the service with additional user-friendly features.

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#### e-Services

Distribution has rolled out a secured web portal https://e-services.tnb.com.my for TNB customers to access basic information regarding their accounts and to provide billing related services. Customers can view and track their monthly electricity consumption online, monitor their billing details as well as pay their bills online. At the same time, owners of premises can monitor their tenants' billing and payment information. TNB's e-Services include an eBulk Payment facility to government and private agencies with many accounts and high consumption, in order to better manage their payments.

#### 45% 40% 35% 30% 25% 20% 15% 10% 5% 0% Oct-10 Vov-10 0 0 Aug-11 Jan-11 Mar-11 Apr-11 Vay-11 l l-nul Jul-11 Feb-1 Sep-1 l-oe

#### **E-APPLICATION USAGE TREND FY2010/2011**

#### e-Application

e-Application offers customers, electrical contractors and developers the convenience of applying for electricity online. This web service also provides a list of contractors registered with the Energy Commission to allow customers to select qualified electrical contractors to carry out supply connection work on their premises. An additional feature introduced in FY2010/11 enables customers to track their application status online.

As at August 2011, the system processes an average of 10,796 applications per month, representing about 40.8% of the total number of new electricity supply applications.

Distribution is committed to further enhancing this facility and expects to be able to offer customers exciting new features by Q1/Q2 FY2011/12 such as applications for Express Electricity Supply (EES), Street Lighting and Change of Tenancy (COT).

## Express Electricity Supply (EES) for Low Voltage (LV) Individual Customers

Express Electricity Supply (EES) for LV Individual Customers has been fully implemented throughout TNB in Peninsular Malaysia since February 2011. In order to meet the Government's and customers' high expectations, EES is implemented to simplify and expedite the process of electricity supply application.

Through this initiative, service connection and meter installation is carried out within 24 hours of customers paying their connection charges and deposits. A necessary condition of EES is the availability of TNB electricity supply infrastructure nearby.

## **Operations Review – Distribution**

#### SUPPLY RELIABILITY IMPROVEMENT

#### **Network Reliability**

A number of key initiatives were undertaken in FY2010/11 to improve supply reliability. These initiatives, grouped under the tagline *Towards SAIDI 50*, involve four main operational strategies targeting cable failures, repetitive breakdowns, restoration time and Distribution Intake Station tripping. Collectively, they have: 1) reduced the number of Medium Voltage breakdowns by 19.52% (or 2,621 cases); 2) reduced the restoration time by 11.4% or 9.25mins/ customer/year as measured by CAIDI; and 3) reduced mal-tripping at Intake Stations by more than 30%.

#### **New Technology**

A number of new equipment and tools, pilottested over a period of time and adapted to the Malaysian environment, have been implemented to enhance supply reliability. For the year under review, five technological initiatives were implemented, namely: (a) 11kV insulated cover H/Pole substation to reduce supply interruptions due to animal activities; (b) 5MVA mini-PPU (33/11kV) for fast construction time; (c) Plug-in termination to enhance the quality of termination; (d) SF6 Pole top Line Breaker Switch for reliability and fast restoration; and (e) 11kV Pre-moulded Transition Joint to reduce workmanship error.

#### THE KEY INITIATIVES UNDERTAKEN IN FY2010/11 TO IMPROVE SUPPLY RELIABILITY HAVE MANAGED TO:

- reduce the number of Medium Voltage breakdowns by 19.52% (or 2,621 cases);
- reduce the restoration time by 11.4% or 9.25mins/ customer/year as measured by CAIDI; and
- reduce mal-tripping at Intake Stations by more than 30%.



#### Supervisory Control And Data Acquisition (SCADA) and Distribution Automation (DA)

SCADA and DA are being implemented in phases to further enhance network operations as well as restoration activities. In FY2010/11, Phase 2 of the project was substantially completed. This involved the installation of remote terminal units on the primary and secondary sides of 33kV Distribution Intake Substations.

In addition, upgrades of the Remote Control Centre in Bangsar and the backup centre in Klang were completed. This further enhances the reliability of the daily operations in the Central and Southern Region electricity supply network system. In the year under review, network reliability as measured by SAIDI decreased by a significant and commendable 8.5mins/ customer/year from 87.4mins/customer/ year (FY2009/2010) to 78.9mins/ customer/year.

#### **Power Quality Improvement**

In FY2010/11, Distribution undertook several initiatives to improve Power Quality (PQ) to industrial customers and to manage PQ disturbances. Online PQ Monitoring Systems (PQMS) were installed at 60 Main Intake Substations (PMU) and Distribution Intake Substations (PPU) to improve network performance. In addition, a Power Quality Diagnosing System (PQDS) was developed to automate the detection, classification and diagnosis of recorded PQ events by PQMS. The PQDS will be able to provide fast information on types and sources of disturbances that affect customers. All this information will be analysed by the Asset Management Department to alleviate any discrepancy in supply quality. These initiatives ensure Distribution Division's PQ performance is on par with that of other utilities.



#### LOSS REDUCTION

#### Activities to curb energy loss

During the year under review, Distribution focused on reducing energy loss due to meter installation tampering. Overall distribution loss was reduced from 7.29% in FY2009/10 to 6.79% in FY2010/11, amounting to the recovery of more than RM100 million in revenue for the year. This successful outcome was brought about by: (1) heightened operations to detect the illegal abstraction of electricity; (2) support and involvement of Energy Commission and police officers in conducting raids on suspected premises; and (3) the use of technology such as Remote Meter Reading to secure TNB's revenue. Distribution also recovered a total of RM56.8 million from the owners of tampered meters in FY2010/11.

## **Operations Review – Distribution**

#### ISKANDAR MALAYSIA SALIENT FEATURES, AREA OF COVERAGE, COMPARISON

#### ISKANDAR MALAYSIA Salient Features, Area of Coverage, Comparison



#### **ISKANDAR MALAYSIA 10 PROJECT (IM10)**

Distribution Division, through TNB Johor, is entrusted to develop new electricity supply infrastructure and reinforce the existing system in Iskandar Malaysia, south Johor, to attract global investment. Towards creating a world-class electricity supply infrastructure in this economic zone, Distribution Division has been given the very challenging SAIDI target of 10mins/customer/year by 2020. This massive project requires novel and innovative network design, security criteria and SCADA/Automation.

The IM10 Project is divided into three phases. The first phase, from April-December 2011, involves strengthening the existing network in Iskandar region. As of 31 August 2011, about 20% of the physical work of this phase had been completed.



#### ORGANISATIONAL DEVELOPMENT (OD)

In FY2010/11, Distribution Division implemented a number of Organisational Development (OD) projects to enhance its business performance and delivery system to customers. These projects are described below.

#### Management Control System

Distribution Division rolled out the Unit Review Meeting (URM) and Supervisory Review Meeting (SRM) methodology to all stations as a means to improve their work performance. Constant monitoring of staff performance via URM and SRM have addressed most of the issues at the lower level. Strategic KPIs formulated at the Division are cascaded down to front liners via a monitoring process inherent in URM and SRM. Hence, the whole Division is aligned strategically. This review culture has added value through a structured and systematic way of monitoring operational activities.

## Area Manager Operations Manual and Dashboard

To facilitate the efficient management of operations at all Area offices, a structured and documented guideline, known as the Area Manager Operations Manual, has been developed for Area Managers. It covers all aspects of operational tasks and related responsibilities such as industrial and public relations.

Meanwhile, an Area Manager Dashboard has been developed as a centralised IT System application to oversee the overall business performance and assist in decision-making. This dashboard provides easy access by Area Managers to up-to-date information on daily approval items, alerts, reports, KPIs and other business related information. This initiative is jointly developed with the Information and Communication Technology Division of TNB.

#### TARIFF

During the financial year, a new electricity tariff rate was approved by the Government, taking effect from 1 June 2011. This new tariff reflects an increase in the price of gas (from RM10.70 per mmBTU to RM13.70 per mmBTU) and a coal price of USD85 per tonne (CIF), as set following the March 2009 tariff adjustment. The tariff rates were revised upwards also partly to recover from the increase in cost of electricity supply since the last base tariff review in June 2006.



## **Operations Review – Distribution**

## THE MAJOR FEATURES OF THE NEW ELECTRICITY TARIFF RATES ARE AS FOLLOWS:

Average tariff is increased by 7.12%, contributed by:

- Average 5.12% increase due to the 28% upward revision of natural gas price to the power sector from RM10.70/mmBTU to RM13.70/mmBTU; and,
- Average 2.0% increase to partly recover the increased cost of supply since June 2006.
- Industrial Consumers: average increase of 8.35% (ranging from 6.2% to about 10%).
- Commercial Consumers: average increase of 8.35% (ranging from 6.2% to about 8.35%).
- Domestic / Residential Consumers:
  - No tariff increase for monthly consumption of up to 200kWh (Lifeline Band). This rate has been maintained at a highly subsidised rate of 21.8 sen/kWh since 1997.
  - Consumers using 300kWh per month and below will not experience any tariff increase.
  - Overall, the tariff review does not affect 75% of household consumers in Peninsular Malaysia (4.4 million consumers).
- Special Industrial Tariff (SIT) consumers experience an increase of about 10%, in line with the Government's effort to gradually reduce subsidies to industries. Even with this increase, SIT consumers will continue to enjoy discounted tariff rates as compared to the rates for normal Industrial consumers.
- In addition, the following new incentives have been introduced:
  - Thermal Energy Storage (TES) consumers are given higher discount for off-peak electricity consumption.
  - Firm Standby charge for Co-generators will be reduced to encourage Green Technology, Energy Efficiency and Demand Side Management (DSM) initiatives.
  - Water treatment, water distribution and sewerage companies to be categorised under Industrial Tariff.

In FY2010/11, TNB gave out RM68 million in discounts to selected privileged customers such as government schools and institutions of higher learning, welfare centres and places of worship. In addition, RM460 million\* in discounts were provided under the Special Industrial Tariff scheme.



## Operations Review ~ ENTERPRISE MANAGEMENT

Managing and ensuring the security of all TNB's properties and assets

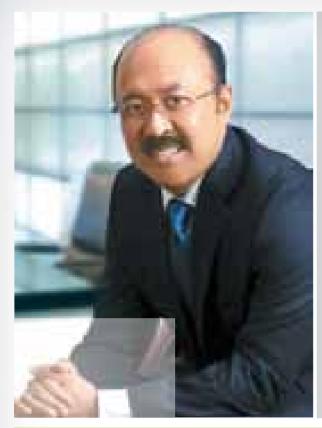
TNB's Generation, Transmission and Distribution Divisions are strongly supported by other divisions in the Group that bring into play their fundamental strengths to ensure TNB operates as a dynamic, well-run enterprise that is able to fulfill the country's energy requirements.

**Group Finance Division** is responsible for strategising TNB's overall financial management. Aside from undertaking conventional financial functions such as financial and management reporting, taxation, budgeting, corporate finance and treasury operations, this division also undertakes the financial planning, business development, enterprise wide risk management and investor relations aspects of our business.

TNB's Planning Division comprises departments responsible for strategic planning, system planning and development, as well as energy procurement activities. These departments collaborate to formulate and implement TNB's long-term strategies, ensure reliable national supply as well as manage energy procurement activities including power purchase agreements (PPAs). The Corporate Affairs Division is responsible for effective internal and external communication of the Group in order to forge and maintain close relationships with TNB's various stakeholders and build the TNB brand. The division also oversees the Group's foundation, Yayasan Tenaga Nasional (YTN), which drives TNB's commitment to supporting the educational and welfare needs of deserving students. In addition, Corporate Affairs coordinates the activities of Regulatory and Relationship Management.

The Procurement Division support the other divisions by formulating effective procurement policies and implementing strategic supply chain initiatives that enhance procurement activities.

Last but not least, TNB's Corporate Services Division is tasked with managing and ensuring the security of all TNB's properties and assets as well as providing logistics, project management and consultancy support services.



## Operations Review ~ GROUP FINANCE

MOHAMED RAFIQUE MERICAN BIN MOHD WAHIDUDDIN MERICAN Chief Financial Officer/Vice President

USD 76388 Million USD bond as at August 2011



The financial year under review saw TNB enter a new phase under its 20-Year Strategic Plan – Geographical Expansion by 2015 – with the launch of Gemilang 2015. Group Finance Division is supporting the Gemilang 2015 objectives of Growth, Global and Green by helping the Group enhance its financial management and spearheading TNB's global expansion initiatives. While managing the conventional finance functions of financial and management reporting, taxation, budgeting, corporate finance and treasury operations, the division is also responsible for financial planning, business development, enterprisewide risk management and the investor relations functions of the Group.

Among Group Finance Division's key roles are:

- To keep TNB's costs at manageable levels.
- To act as a focal point in assisting other business units to make informed business decisions on financial and commercial matters.
- To identify, assist and track value creation opportunities.
- To explore new business opportunities locally and abroad.

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#### **KEY ACHIEVEMENTS**

During the year, Group Finance Division continued to play a significant role in overseeing the finance functions of the TNB Group. Key achievements include the following:

- Taking the financial lead in the development of the 1,000MW coal-fired power plant project by TNB Janamanjung.
- Implementing prudent tax management as part of TNB's cost optimisation initiatives.
- Implementing successful hedging strategies to minimise foreign exchange risk and managing the volatility of currency movements under the Debt Liability Management programme.
- Revising the investment fund allocation for TNB's Retirement Benefit Trust Fund (RBTF) in line with TNB's Investment Policy, and selecting fund managers for the RBTF.
- Upgrading of TNB's Treasury System AG Integrity from version 7.1 to version 7.8.
- Completing the Cost of Service and Long Run Marginal Cost Study.
- Developing potential business opportunities locally and abroad, particularly in the emerging markets.
- Setting the strategic direction and formalising the five-year plan to improve the performance and competitiveness of subsidiaries.



#### A NUMBER OF KEY INITIATIVES WERE UNDERTAKEN IN FY2011 TO SUSTAIN FINANCIAL VIABILITY

#### TAKING THE FINANCIAL LEAD IN THE 1,000MW COAL-FIRED POWER PLANT PROJECT

Group Finance Division, in collaboration with Generation Division, was engaged in arranging the financial advisory and financing of the 1,000MW coal-fired power plant expansion project at the site of the 2,100MW Sultan Azlan Shah Power Station in Manjung, Perak. Financing for the project will be via an Islamic Securities Programme based on the Sukuk Ijarah concept. The programme will be structured as a GCC Syariah-compliant sukuk issuance with the objective of diversifying TNB's investor base as well as supporting the Government's aspiration to position Malaysia as a competitive international Islamic financial hub.

#### PRUDENT TAX MANAGEMENT

To achieve efficient tax management and administration objectives, and as part of TNB's cost optimisation initiatives, the Group Tax Unit has been requesting for tax incentives for the 1,000MW coalfired power plant. Group Tax Unit was also involved in obtaining import duty and sales tax exemption for Generation and Transmission projects, in particular for cables, transformers and switchgears, as well as providing advice on tax efficient structures for TNB investments, both locally and overseas.

#### DEBT LIABILITY MANAGEMENT PROGRAMME

The Treasury Unit, as part of its strategic initiatives to ensure prudent Debt Liability Management, has executed an effective hedging mechanism for the payment of USD404.7 million bonds maturing in April 2011 by gradually purchasing through spot and forward transactions, and investing the dollar proceeds to benefit from the favourable foreign exchange movements. This strategy has resulted in a transaction gain of RM29.8 million for TNB.

## **Operations Review – Group Finance**

#### **REVIEW OF TNB RBTF**

Based on the new strategic asset allocation, Treasury Unit has selected new fund managers for TNB RBTF's new term which also involved a transition management programme. The appointment of fund managers for a period of three years effective from 1 December 2010 will add value and optimise returns to the TNB RBTF in the long run, based on an identified risk reward profile.

## UPGRADING OF TREASURY SYSTEM - AG INTEGRITY

During the year, TNB Treasury System – AG Integrity was upgraded from version 7.1 to version 7.8. The latest version has added functionalities on contract processing, accounting and back office modules and will equip Group Finance Division with the best tool for carrying out Centralised Treasury Management functions. The upgrade was implemented in collaboration with SunGard Asia Pacific and TNB ICT Division in the 4th quarter of FY2011.

#### COST OF SERVICE & LONG RUN MARGINAL COST STUDY

During the financial year under review, the Financial Planning and Divisional Accounting Unit completed the Cost of Service and Long Run Marginal Cost Study with the objectives of ensuring greater transparency, robust processes and accountability for cost allocation and better monitoring of the Company's performance. Completion of the Cost of Service Study for FY2010 and Long Run Marginal Cost Study supported the tariff design and analysis, internal efficiency management, performance monitoring and benchmarking. The studies allow all divisions, particularly Generation, Transmission and Distribution, to assess their own capabilities and compare their

performance with that of other utilities in the world. This is in line with Gemilang 2015 and TNB's vision of becoming a leading corporation in energy and related businesses globally.

#### DEVELOPING POTENTIAL BUSINESS OPPORTUNITIES

In the spirit of expanding its footprint globally, the Group has focused on strengthening its earnings base locally and in emerging markets which are expected to see continuous growth. The Business Development Department continues to spearhead this initiative by exploring opportunities for partnerships and cooperation with international counterparts in utility services. In its early exploratory phases, TNB's investment decisions will be based on sound economic objectives.

To date, TNB has pursued leads in the Kingdom of Saudi Arabia, Arab Republic of Egypt, the Emirate of Dubai, Sultanate of Oman and Syrian Arab Republic before unrest in the Middle East forced their authorities to defer their planting up programmes. However, the region continues to be under TNB's investment radar due to the significant potential it holds. Within Southeast Asia, TNB explored potential business opportunities in Indonesia, Vietnam and Bangladesh.

While TNB's prospects are challenged by the political instability and the increasingly competitive market, opportunities are greater than ever given the liberalisation of power markets throughout the region. TNB has therefore outlined several strategies to gain a competitive edge, which includes creating effective market intelligence and partnership programmes for implementation over the next five years. TNB looks forward to collaborations with major players in the industry to broaden its business opportunities and enhance its investment prospects in the longer term.

#### **INVESTMENT MANAGEMENT**

Investment Management Department ensures that long-term investments bring positive value to the Group as a whole. The objective is achieved by close monitoring of the financial and operational aspects of all TNB investments, including long-term investments of the subsidiaries and associates. The Department has set Gemilang 2015 -Growth, Global, Green as a strategic direction for each subsidiary and continuously monitors the implementation of the subsidiary's plans and achievements to ensure the Group is on track to increase its non-regulated revenue through the business activities of subsidiaries and associates.

#### TNB Engineering Corporation Sdn. Bhd.

TNB Engineering Corporation Sdn. Bhd. (TNEC) was established in October 1993 as a wholly-owned subsidiary of TNB. TNEC is the leading provider of district cooling systems (DCS) with thermal energy storage in Malaysia, specialising in project development ownership, engineering, procurement and construction (EPC) as well as comprehensive operations and maintenance (O&M).

Among TNEC's major achievements during the financial year was the award of the concession for an 18,000 RT DCS plant for KLIA-2 (the new Low Cost Carrier Terminal) to be developed by Airport Cooling Energy Supply Sdn. Bhd. (ACES), a joint venture company between TNEC and Malaysia Airports Holding Berhad. The total project cost is estimated at RM388 million, in which ACES will finance, build, own and operate the plant for 20 years. The DCS plant will supply cooling energy to the KLIA-2 Main Terminal Building and the Integrated Complex (Airport Mall and Transportation Hub). TNEC has also extended its presence abroad through an associate company, Abraj Cooling LLC, and TNEC-Abu Dhabi in Abu Dhabi, UAE. TNEC is involved in the EPC of a 20,000 RT and an 8,000 RT DCS plant for the Building Material City and Al Reef Development. The plants are scheduled to be handed over by October 2011 and December 2011 respectively.

#### **Prospects**

Under TNEC's five-year business plan (2011-2015), it targets to triple its total DCS business revenue via mergers, acquisitions and expansion of existing DCS projects, which are currently owned and operated by other concessionaires. In addition, TNEC plans to establish strategic partnerships with Governmentlinked developers, private property developers and facility managers to participate in new EPC and O&M projects in the Middle East and the ASEAN region and to gain a footing in future energy management projects.

#### TNB Energy Services Sdn. Bhd.

TNB Energy Services Sdn. Bhd. (TNBES) is a wholly-owned subsidiary of TNB which specialises in Green Business, providing quality and reliable green energy solutions and services for the development, operation and maintenance of renewable energy (RE) projects (e.g. wind/solar hybrid, biomass and mini hydro). TNBES is also involved in power quality (PQ) audits, monitoring, testing and mitigation, energy efficiency (EE) audits and implementation as well as power system studies for the interconnection of RE plants into the grid system.

TNBES plays an important role in driving and realising TNB's Green objective under Gemilang 2015. TNBES' activities over the years testify to TNB's support of the Government's green agenda encompassing both RE and EE.

TNBES has been appointed by the Public Private Partnership Unit as a consultant to its proposed solar hybrid station and supply system to rural areas in Sarawak. It has also secured a contract from the Ministry of Rural and Regional Development to develop a solar hybrid station for RPS Kemar in Grik, Perak. At the same time, TNBES is currently in the final stages in the supply and delivery of RM98 million worth of solar hybrid systems to rural schools under the Ministry of Education. TNBES has also been awarded the EPC for TNB's own 5MW Solar Showcase which will be carried out in stages with the first 2MW currently at tendering stage. With the introduction of the Feed-in Tariff (FiT) to promote RE, TNBES has increasingly been involved in power system studies for future RE developers.

#### **Prospects**

TNBES is optimistic that the Green Technology Financing Scheme launched by the Government in January 2010 to promote green technology and help finance potential projects will further boost the industry. In terms of global expansion, TNBES is looking at opportunities within the ASEAN region and Middle East. TNBES was recently involved in a preliminary discussion with Perusahaan Listrik Negara (PLN) Indonesia on a possible collaboration to promote solar hybrid in the country. This will act as a stepping stone for TNBES' regional expansion.

#### Tenaga Switchgear Sdn. Bhd.

Tenaga Switchgear Sdn. Bhd. (TSG) was incorporated on 26 October 1994

as part of TNB's plan to diversify into the manufacturing of high voltage switchgears through joint ventures and collaborations with business partners. At present, TSG is the only manufacturer of high voltage switchgears in Southeast Asia that offers turnkey contracting of transmission and distribution substation services, substation engineering and design services, and specialised maintenance and repair of high, medium and low voltage equipment services. With an extensive range of products and services, TSG strives to become a one-stop provider of equipment and related technical services.

Since its inception, TSG has successfully supplied and commissioned substations while providing maintenance and switchgear refurbishment as part of its value added activities. It has an annual production capacity of 200 bays of gas insulated switchgear (GIS), 1,000 units of gas circuit breakers (GCB) and 2,000 units of disconnectors. All TSG products are accredited by international test labs with Type Test Certificates for conformity to IEC standards and safety. In delivering its commitment to quality management, safety and reliability, TSG has applied quality management system in its operations, which is manifested in its ISO 9001:2008 certification. TSG is also certified with the latest ISO 14001 Environmental System and OHSAS 18001:2007.

#### **Prospects**

To date, TSG has secured contracts and supplied GCB to Pakistan, Vietnam and Indonesia. This includes providing the engineering design and solution to PLN Indonesia.

## **Operations Review – Group Finance**

#### Universiti Tenaga Nasional

Universiti Tenaga Nasional (UNITEN) is making steady progress in becoming a tertiary education of choice in the region. This is partly due to the state-of-the-art infrastructure available on campus coupled with a world-class teaching faculty. UNITEN takes pride in its ability to blend soft skills with knowledge in engineering, information technology and business management to equip its graduates with sound professional and intellectual integrity.

During the year, UNITEN was rated Tier 4 by the Malaysian Qualifications Agency (MQA). The 2009 MQA Rating System for Higher Education Institutions in Malaysia, better known as SETARA '09, gauges the efficacy of teaching and learning activities at the undergraduate level in Malaysian universities and colleges. The assessment ranges from Tier 1 (Weak) to Tier 6 (Outstanding). Tier 4 is classified as "Very Good".

UNITEN also made great strides in its research and innovation, winning awards at the national and international levels

such as the Persidangan dan Ekspo Ciptaan Institusi Pengajian Tinggi Antarabangsa (PECIPTA), International Invention, Innovation Technology Exhibition (ITEX) and the Malaysian Technology Expo (MTE). UNITEN's research and innovation also received international recognition at events such as EUREKA, the British Innovation Show (BIS), the World Exhibition on Innovation, Research and New Technologies (INNOVA) and the Invention & New Product Exposition (INPEX).

The university's engineering courses are recognised by UK-based professional bodies such as the Institution of Engineering and Technology, Institution of Civil Engineers and the Institution of Mechanical Engineers. Its accounting programme, meanwhile, has been accredited by the Chartered Institute of Management Accountants (CIMA), the Association of Chartered Certified Accountants (ACCA), the Institute of Chartered Secretaries and Administrators (ICSA), the CPA Australia and the Institute of Chartered Accountants in England and Wales (ICAEW).

#### Prospects

UNITEN aspires to be a premier education and research institution in the country, and has drawn up a well-defined roadmap leading to its vision and mission. Known as W15E Strategic Plan 2011-2015, the five-year plan aims to transform UNITEN into a research-led university by 2015, offering world-class staff, facilities, research, courses, teaching and learning.

The year under review saw UNITEN continue in its drive towards the total adoption of Green Technology. This was done through promotions and campaigns as well as collaborative efforts with government agencies, industry players and research institutes. Working with counterparts from The Energy and Resources Institute (TERI) in India, UNITEN's Institute of Energy Policy and Research (IEPRe) is in the process of introducing new energy related post-graduate courses that will focus on energy policy, energy economics, energy safety as well as energy and the environment.

#### OUTLOOK AND THE WAY FORWARD

FY2011 was particularly challenging due to the economic slowdown in the United States, the European sovereign debt crisis and the triple disasters in Japan, which together caused instability in growth of the global and local economy. The key challenge for Group Finance Division, both in FY2011 and in the year ahead is to maintain TNB's profitability despite the internal and external market conditions.

In addition, increasing use of expensive alternative fuels (oil and distillate) for electricity generation due to the severe gas curtailment as well as persistently high commodity prices, with coal trading above USD100 per metric tonne, are expected to lead to higher operating expenses for TNB.

Bearing these challenges in mind, Group Finance Division will continue to strive for efficient and effective cost-management initiatives in FY2012. As the Group moves forward to expand globally, the division will continue to play a leading role in the quest to achieve TNB's strategic objectives and ensure its financial sustainability.



## Operations Review ~ CORPORATE AFFAIRS

PUAN ADELINA BINTI ISKANDAR Vice President

#### **BUSINESS REVIEW**

Corporate Affairs is responsible for effective internal and external communication of the Group in order to forge and maintain close relationships with TNB's various stakeholders and build the TNB brand. In FY2010/11, Corporate Affairs' performance improved significantly, as demonstrated in its President's Quality Award (AKP) assessment. The Division increased its score from 660 points in FY2008/09 to 746 points in the assessment, which is based on nine criteria from Leadership to Business Results (Fiaure 1).



746 points

based on nine criteria

BISNES UNIT	SCORE 2010/2011	SCORE 2008/2009	INCREMENTS POINTS	
TNB Energy Services	802	652	150	
Pejabat Perolehan	784	678	106	
TNEC	779	674	105	
Pejabat Perancangan Korporat	786	698	88	
SJ Sultan Salahuddin Kapar (KEV)	776	602	66	
Pejabat Hal Ehwal Korporat	746	660	86	
INBI Pemb. Asset lengan (P.Jaya)	800	722	78	
TNBT Seng. Asset Dungun, Terengganu	779	701	78	
TNBT Seng. Asset Selatan (Johor Bahru)	745	689	56	
Pejabat Perkhidmatan Korporat	800	751	49	

Figure 1

The division is mindful that its success is reflected not only by its AKF performance, but also by its commitment to fostering an open and collegial approach to business and corporate affairs, and fostering strong relationships and communication links with TNB's stakeholders, ncluding government agencies, non-governmental organisations and customers at large.

## **Operations Review – Corporate Affairs**

In the financial year 2010/11, Corporate Affairs established various strategic documents for better and systematic communication and issues management, such as the Communication Policy, the Corporate Communication Plan and Regulatory Relations internal processes and procedures. The division is also in the process of reviewing TNB's Corporate Identity Manual to reflect current needs. To ensure TNB's interest is protected at all times through close relations and networking, the Stakeholder Management Committee (SMC), comprising representative officers from core and non-core divisions, meets every quarter to discuss related issues. A report on issues and action plan proposals is submitted biannually to the Group Executive Committee. In the year under review, the division also widely publicised TNB's efforts with regard to energy efficiency, conserving energy, safety reminders, green efforts corporate social responsibility to support the organisation's sustainable energy and green energy initiatives. Corporate Affairs' effective external communication efforts contributed towards TNB receiving the Best Brand Award for Energy Utilities at the BrandLaureate 2010 – 2011.

#### RECEIVING THE BEST BRAND AWARD FOR ENERGY UTILITIES AT THE BRANDLAUREATE 2010-2011





Figure 2: BrandLaureate Photo

#### PROSPECTS

Corporate Affairs is supporting the second phase of TNB's 20-Year Strategic Plan – Gemilang 2015 – via the development of strategic communication and regulatory relations initiatives. It has produced a number of documents that ultimately serve to strengthen TNB's image and brand. Some of the major documents are:

- GEMILANG 2015 Communication Plan
- Vertical Integrated Utility (VIU) Communication Plan
- Regulatory Database
- Regulatory Framework
- Communication Policy Assessment Tool Kit/Check List

The division collaborates with the Strategic Planning Department to develop the VIU Communication Plan and Programmes, aligning these with Energy Structure Industry issues and other related matters. Corporate Affairs will continue to focus on communication and a stronger sustainability and green energy branding, via a mixture of advertising, publicity in the mass media and awareness sessions for staff. The division will lead in preparing reports, communication and brand initiatives for TNB's Green Energy Policy and Master Plan. It will also continue to align various Corporate Social Responsibility initiatives with TNB's Strategic Plan and GLC Transformation Plan.

The division is committed to providing the best Corporate Affairs services to the TNB Group via effective brand management and corporate relations as well as regulatory relations, employing the best management practices.



## Operations Review ~ PLANNING

**DATIN ROSLINA BINTI ZAINAL** Vice President

#### **KEY ACHIEVEMENTS:**

- PPA Monitoring and Re-negotiation
- Tariff Review in June 2011
- Launch of Phase 2 of TNB's 5-Year Strategic Plan: Gemilang 2015
- TNB Green Energy Policy Formulation

## The Planning Division within TNB is entrusted with three key responsibilities:

- To ensure sufficient, reliable and economic power supply to meet the nation's electricity requirements
- To ensure activities related to energy procurement, including negotiations and the management of Power Purchase Agreements (PPAs) with power producers and cross-border interconnections, are administered effectively and professionally while adhering to the provisions of the PPAs
- To ensure all long-term strategic plans are aligned with TNB's vision, mission and strategic objectives, and see to their effective implementation

# **+7.12%**





## **Operations Review – Planning**

#### MANAGEMENT OF MAJOR STRATEGIC ISSUES

#### Power Procurement for the Power Sector

Planning Division cooperated with the Energy Commission on the first Competitive Bidding process for generation development, which was applied to the 1,000MW coal plant in Manjung. The Competitive Bidding process marks a new, more transparent era in power generation development.

#### **Electricity Tariff Review**

Planning Division led a cross-divisional team that engaged the relevant stakeholders (Government agencies) in the recent tariff review. An average tariff increase of 7.12% (5.12% due to gas price adjustment and 2% due to base tariff) was approved by the Government effective 1 June 2011. The base tariff review was required to partly cater the increase in cost of electricity supply since the 2006 base tariff review. Prior to launching the new tariff, Planning worked with other departments to formulate a strategic communication plan. It also assisted Sabah Electricity Sdn. Bhd. to restructure its tariff for the state of Sabah in July 2011.

In line with the Renewable Energy (RE) Act 2011, the Government announced the implementation of Feed-in Tariff (FiT), a contribution of 1% of electricity bills (kW and kWh charges) towards an RE Fund, effective 1 December 2011. The fund will be utilised for the promotion and development of RE projects and initiatives. Planning Division worked closely with Distribution Division to ensure the smooth implementation of the RE Act and FiT.

#### GOVERNMENT ANNOUNCED THE CONTRIBUTION OF 1% OF ELECTRICITY BILLS (KWH CHARGES) TOWARDS RE FUND TO PAY FOR THE FEED-IN-TARIFF (FIT)



Planning workforce

Planning also leads the cross-divisional Fuel Cost Pass-Through (FCPT) committee which has been formed following the Government's announcement that gas prices will be reviewed every six months.

#### PRIMARY DRIVER OF GREEN ENERGY INITIATIVES IN MALAYSIA

TNB is fully committed to sustainable development and growth, as reflected by the adoption of business strategies and practices that take into consideration the environmental and impact of economic activities. TNB's green initiatives are coordinated under the Green Renewable Energy and Energy Efficiency Roundtable (GREENER TNB) and encompass:

- Developing Low Carbon Generation Technologies: These include a pilot 5MW solar photovoltaic (PV) plant in Putrajaya, 10MW biomass JV plant in Jengka Pahang, mini-hydros, solar hybrids and bio-gas projects. In addition, TNB has signed Renewable Energy Power Purchase Agreements (REPPAs) with Renewable Energy (RE) developers under the Small Renewable Energy Programme (SREP).
- Demand Side Management (DSM) and Energy Efficiency (EE) Initiatives: These include DSM analysis of the tariff scheme, continuous communication and awareness programmes, efficiency enhancement at power plants and substations, EE in buildings and paperless offices.
- Carbon Footprint Coordination Efforts: TNB is to conduct a carbon footprint study across the whole value chain of its business leveraging on the expertise, resources and capabilities of TNB Research (TNBR) and UNITEN.
- Funding for Green Energy Initiatives: TNB has committed to a fund specifically for Green Energy efforts.
- Formulate Models of RE, EE and DSM in Load Forecasting: To incorporate RE, EE and DSM in electricity demand projections, in line with a new era of low-carbon and changing demand trends.
- Smart Grid Plan and Projects: Three sites have been designated for the implementation of pilot smart grid projects the Bukit Bintang commercial area, Bayan Lepas industrial area and Medini (Wilayah Iskandar, Johor).

#### SUPPORT OF MESI ENHANCEMENT INITIATIVES

Despite stable and good performance in the past, TNB is aware of the challenges and potential obstacles in the future. To ensure sustainable growth, enhanced transparency and efficiency of the industry, TNB fully supports the Government in its efforts to reform the Malaysian Electricity Supply Industry (MESI) through various initiatives, workshops and LAB engagements.



Recent Government policies and programmes relevant to the energy sector include the New National Energy Policy, Subsidy Reduction Plan, Electricity & Gas Tariff Structure and Rationalisation (which includes a fuel cost pass through mechanism) and the KeTTHA/MyPower MESI reform. These are underpinned by the New Economic Model (NEM), Economic Transformation Programme (ETP) and Government Transformation Programme (GTP).

#### FUEL SUPPLY SECURITY

#### Natural Gas and LNG Supply

A 30% reduction of gas supply (930 mmscfd versus the Government approved allocation of 1,250mmscfd) during the financial year posed a heavy financial burden on TNB. There was an average shortfall of 2,100MW of gas-based generation capacity even after dispatching all the available non-gas fired coal and hvdro units. This shortfall was mitigated using expensive options of liquid fuels (distillate and medium fuel oil, or MFO) and imports from the Electricity Generating Authority of Thailand (EGAT) and Singapore. Meanwhile, Planning Division continues to engage Petronas to optimise available gas and coordinate future supply.

Planning Division is confident of an improvement in gas supply with the

commissioning of Petronas' LNG regasification facility at Sg Udang, Melaka by mid-2012. The division is also revisiting the Gas Supply Agreement (GSA) with Petronas, which is due to expire in 2014.

## High-Efficiency Coal Plant with Low Carbon and Nuclear

Going forward, TNB is leading the nation with the first ever high-efficiency supercritical coal plant in Manjung, Perak. In this project, Planning Division is responsible for securing the Government's approval for the state-of-the-art coal power plant. The plant will be commissioned by March 2015, setting the benchmark for future coal developments in terms of efficiency and environmental standards.

Planning Division is also actively monitoring new and advanced technology for future power generation. These include nuclear, integrated coal gasification combined cycle (IGCC) and hydro from Sarawak. In terms of nuclear, Planning Division is collaborating with other divisions to study its feasibility.

#### Long-Term Generation Fuel Mix Study

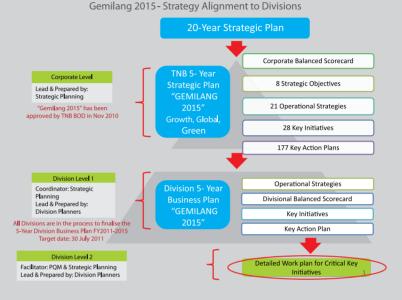
The Generation Planning Unit of the Planning Division is conducting a long-term generation fuel mix study in collaboration with the Energy Commission, Ministry of Energy, Green Technology and Water, Economic Planning Unit, Petronas and other related agencies. With various challenges ahead, such as depleting fossil fuel resources, increasing use of RE sources and the uncertainties of nuclear power development, the study is crucial to establishing reliable and safe future energy supply. The study also serves as a strategic guide for future fuel procurement planning and generation system expansion.

## **Operations Review – Planning**

#### **GEMILANG 2015 IMPLEMENTATION**

Gemilang 2015 marks the second destination of TNB's 20-Year Strategic Plan, focusing on the organisation's commitment to expanding its business globally by 2015.

Planning Division has played a major role in disseminating information and communicating the Gemilang 2015 initiatives within TNB. The division, together with Production and Quality Management (PQM), facilitates Divisions in driving and coordinating their Key Initiatives and KPIs towards the successful implementation of Gemilang 2015. By closely monitoring and tracking these KPIs, Planning helps TNB's management to react optimally in meeting the demands of the changing operating environment.



## LONG-TERM SYSTEM PLANNING & DEVELOPMENT

Component and System Design in Reducing Transmission Losses.

TNB strives to improve supply reliability and quality while lowering costs. Loss reduction is critical to TNB achieving its goal of increased efficiency, sustainable supply and low costs. Planning Division plays a role in reducing transmission loss, by for example optimising the location of future power plants in the system and designing transmission system to minimise transmission losses.

## Feasibility Study on Transmission System for 1,000MW Coal Plant

By virtue of TNB being the national grid owner, Planning Division conducted a strategic study on optimising transmission system reinforcements in terms of losses and cost using power from the planned 1,000MW coal power plant in compliance with the requirements of the Malaysian Grid Code. The outcome was incorporated in the request for proposal (RFP) in the bidding process. The division expects to conduct similar studies for future plants, given the new competitive bidding process.

#### Joint Studies with ASEAN Utilities

TNB, primarily through Planning Division, has been actively involved in the formulation of the ASEAN Interconnection Masterplan (AIM) since 2000. AIM was reviewed recently to reflect the latest power system developments in ASEAN countries. The competency and commitment of TNB's technical team in formulating the initial masterplan led to the organisation being entrusted to lead the full power system studies of the interconnected ASEAN network. The masterplan was presented and endorsed at the recent Heads of Power Utilities/ Authorities (HAPUA) meeting. Against the backdrop of uncertainties in the global economy and relatively moderate increase in electricity demand, the coming years are expected to be more challenging. This is in view of depleting indigenous energy resources, volatile fuel prices, regulatory challenges with respect to efficiency and transparency as well as increased environmental concerns and customer expectations.

Within this environment, Planning Division will continue to play a critical role in identifying suitable strategies that will allow TNB to optimise on opportunities that lie ahead in order to realise its Gemilang 2015 – Growth, Global, Green aspirations and its longer-term 20-Year Strategic Plan.

#### PROSPECTS

Planning Division has thrived in recent years despite various issues and challenges. Planning's response to the gas supply issue in 2011 is indicative of its strengths in coordinating strategies and plans to mitigate the impact of potentially adverse events.



## Operations Review ~ PROCUREMENT

Ir. NOR AZMI BIN RAMLI Chief Procurement Officer

Procurement Division continues to pursue its strategic role of managing TNB's procurement efficiency and effectiveness, in support of Gemilang 2015 – Growth, Global, Green, the second phase of TNB's 20-Year Strategic Plan.



#### **DIVISIONAL GOALS**

Procurement Division has transformed over the last five years to build a sound foundation to embrace Gemilang 2015 – Growth, Global, Green, the second phase of TNB's 20-Year Strategic Plan. It continues to optimise procurement costs, benchmark and emulate procurement best practices, develop a stable and competitive supplier base for the organisation, implement supply chain management initiatives and enhance procurement expertise and capabilities

In FY2010/11, Procurement Division embarked on eight key initiatives as part of the five-year Gemilang 2015 to enhance procurement efficiency and effectiveness as listed below:

- Enhance procurement value creation
- Explore and promote new businesses for Bumiputera Vendor Development Programme vendors
- Increase value to internal and external customers



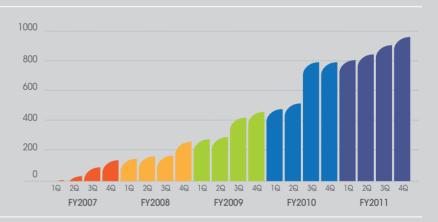
- Develop Green Procurement Policy and Strategy
- Implement procurement best practices
- Implement international Supply Chain Management benchmarking activities
- Develop Procurement expertise and capabilities
- Implement ICT Supply Chain Management Framework

## **Operations Review – Procurement**

The success of Gemilang 2015 depends largely on the ability and operational performance of the division's five departments, namely Sourcing Controller, Best Practice and Policies, Shared Purchasing, Strategic Supplier Management and Human Resources Management & Administration Services.

#### **HIGHLIGHT OF ACHIEVEMENTS**

- Significant Procurement Value Creation in FY2010/11, amounting to RM166.6 million
- Implementation of Value Management initiatives, resulting in potential savings of RM86 million
- Roadshow dissemination of the revised TNB Procurement Policy and
  Procedures to Nationwide Procurement Community 2011
- Implementation of Supply Chain Management project to enhance the technological backbone of procurement functions
- Implementation of Customer Excellence Programme for internal customers
- MoU with the Persatuan Usahawan Tenaga Malaysia (PUTM) to enhance implementation of the Bumiputera Vendor Development Programme (BVDP) and establish strategic partnerships



(CUMULATIVE) 2007 - 2011

**PROCUREMENT VALUE CREATION TREND** 

#### **OPERATIONAL SUMMARY**

#### **Procurement Value Creation**

Procurement Division achieved a significant value creation of RM166.6 million in FY2010/11, mainly through e-Bidding, the application of tax exemption and negotiations. Other contributing factors were Purchase Consolidation and Category Sourcing.

#### Value Management Initiatives

Value Management (VM) is a structured analytical process which seeks to achieve value for money by providing all the necessary functions at the total optimum cost, while meeting the required levels of quality and performance. For example, FY2010/11 witnessed a detailed technical study conducted on the KULE 275kV rehabilitation project and its recommendations approved by the Energy Supply Committee (ESC), resulted in capital expenditure savings of RM86 million.

The development of VM initiatives includes nurturing a pool of internal VM facilitators to facilitate VM studies and awareness sessions, involvement of our personnel in the creation of a VM Manual for projects initiated by the Economic Planning Unit (EPU) and VM Competency Standards initiated by the Construction Industry Development Board (CIDB).

#### **Revision & Dissemination of TNB Procurement Policy & Procedures**

The revised TNB Procurement Policy & Procedures (PPP) was launched by Chief Executive Officer Dato' Sri Che Khalib Mohamad Noh on 13 June 2011. The PPP serves as a general guideline for divisions and whollyowned subsidiaries to realise the Company's business objectives, and also to increase corporate transparency, enhance corporate governance and implement best business practices. Fourteen policies and procedures were improved and three new policies and procedures incorporated into the revised PPP. The PPP was disseminated to employees via series of roadshows throughout Peninsular Malaysia from 18 May – 21 July 2011.



#### **TNB Supply Chain Management Project**

TNB embarked on the ICT Supply Chain Management Framework project in July 2011 to equip the division with the technology as an enabler to support best practices in procurement processes, monitor policy and process compliance, give a holistic visibility and control of TNB suppliers, and to ensure transparency of TNB's procurement spend. With the ICT Supply Chain Management Framework, TNB can reduce its procurement costs, build collaborative supplier relationships, better manage supply bases, and improve its bottom line with better analysis and procurement strategies.

The ICT Supply Chain Management Framework includes modules on e-Tender, e-Contract Management, Supplier-Buyer Service Portal, Spend Analytics and Supplier Relationship Management. The project is targeted for completion by August 2012.

#### MoU Between TNB And PUTM

In an effort to create a win-win situation for vendors under the Bumiputera Vendor Development Programme (BVDP) and TNB, a Memorandum of Understanding (MoU) was signed with the Persatuan Usahawan Tenaga Malaysia (PUTM) on 30 November 2010, with Chief Executive Officer Dato' Sri Che Khalib Mohamad Noh acting on behalf of TNB. The main areas of cooperation in the MoU are:-



- (a) to share technology road map including migration of products towards the latest technology
- (b) to enhance the quality of products/services provided by vendors at competitive prices.
- (c) to implement a supplier fitness programme to increase the vendors' level of performance.

The MoU underlines the collaboration and commitment by both parties to ensure the success of the BVDP and to develop winwin business partnerships.

#### **TNB Vendor Retreat Programme**

Procurement Division conducted a successful Vendor Retreat from 6 – 8 July 2011, which involved 64 vendors from 42 companies as part of its Supplier Relation Management programme. The retreat served as a platform to discuss and deliberate matters pertaining to the Bumiputera Vendor Development Programme (BVDP). The ultimate aim was to formulate resolutions and action plans to further enhance the effectiveness of the BVDP.

## **Operations Review – Procurement**

#### **Customer Excellence Programme**

The Customer Excellence Programme (CEP) was launched by the Chief Procurement Officer on 13 July 2011 in an effort to improve the internal Customer Service Index (CSI). Among the objectives of the CEP are to improve and enhance the Basic Courtesy and Functional Skills of Procurement staff, install monitoring controls of these practices and to provide feedback on factors that affect customer excellence involving other divisions. Training sessions were conducted from 9 – 11 March 2011 for the Change Leaders Team (CLT) and Change Task Force (CTF), and from 22 – 24 March 2011 for frontliners.

#### International Networking & Study of Korean Smart Grid Technology

Procurement Division organised study trip to Jeju Island and Seoul, Korea, from 10 – 15 April 2011 to understand the Korean Smart Grid Technology. TNB and its vendors are leveraging on the Korean comprehensive Smart Grid Technology Road Map to establish business networking with Korean companies.



#### **CHALLENGES AND PROSPECTS**

As TNB embarks on Gemilang 2015 – Growth, Global, Green, the main challenges for the division are still related to enhancing its strategic role to meet the increasing expectations of stakeholders.

Implementation of the ICT Supply Chain Management Framework entails a holistic overhaul of procurement processes, thus poses a big challenge to the division. However, its success would result in an integrated system that employs procurement best practices, enhancing efficiency, transparency and consistency of processes for the procurement community. With timely and effective analysis on procurement strategies, moreover, the ICT Supply Chain Management Framework will reduce procurement costs hence improve TNB's bottom line. In order to prepare for geographical expansion, the enhancement of procurement expertise and capabilities through internationally recognised skills training and development programmes is essential. Procurement Division is committed to provide continuous professional development opportunities for its staff to produce capable and competent personnel in the global arena through international networking, benchmarking and knowledge sharing.

With increasing concern on the preservation of natural resources and conservation of a green environment, Procurement Division supports the Go Green initiatives as outlined by the Government and TNB's Green Policy. Pursuant to this, the challenge is to develop a Green Procurement Policy and Strategy that best suits TNB and its customers, without compromising environmental sustainability.



## Operations Review ~ CORPORATE SERVICES

MD. JAILANI BIN ABAS Senior General Manager

Against a very challenging landscape of operations, land procurement for project implementation and new functions, Corporate Services Division (CSD) continues to strive for effectiveness through innovations and competency enhancement to ensure TNB continues to excel.

Reducing Cases reported intrusion compared to 2009/10



CSD is committed to provide efficient and effective support services in project implementation as well as day to day operation to ensure TNB continues to meet its objectives. CSD provides support services to TNB Group in the areas it specialises i.e. security services and intelligence, land procurement and wayleave, project management, consultancy in asset management, consultancy in architectural related works, building maintenance, fleet management, freight management, custom clearances, mobile gen set services, printing services, archive and management of telephone and mail in TNB HQ through its core departments i.e. Security and Intelligence, Property Services, Logistics Services, Land & Wayleave Management and also its Support Services department.

### **Operations Review – Corporate Services**

#### **HIGHLIGHTS OF ACHIEVEMENTS:**

Some of the achievements by the core departments of the Division are:

#### Security Services & Intelligence Department (SSID)

Successful implementation of Integrated Security Management System (ISMS) in Northern Zone (Perak, Pulau Pinang & Kedah/ Perlis), Central Zone (Kuala Lumpur, Selangor & Putrajaya) and South Zone (Johor, Melaka & Negeri Sembilan).

Initial implementation of the power of investigation approved by Polis DiRaja Malaysia (PDRM) under the Criminal Procedure Code (CPC) to investigate offences under the Panel Code.

#### Land & Wayleave Management Department (LWMD)

Get approval from various state governments to use Section 3 (1) (a) Land Acquisition Act 1960. TNB would be able to shorten the timeline in procuring land and will result in reduction in land procurement cost.

#### Property Services Department (PSD)

Purchased a 33-storey building Dua Sentral to house and consolidate most of TNB's Departments/Divisions in Kuala Lumpur and Petaling Jaya.

Value creation from idle assets and asset management amounting to RM94 mil.

#### Logistics Services Department (LSD)

Review of panel workshops performance and appointment of new panel workshops, schedule rate for inland transport and the new panel of transporters and Multimodal Transport Operators (MTOs) and manage import clearance.

Value creation through daily operations of freight management, fleet management and mobile genset services is RM22 million.



#### **DIVISIONAL GOALS/OBJECTIVES**

CSD will continuously provide cost effective services to its internal and external customers, both in project implementation and operations in line with TNB's vision, mission and strategies.

CSD's core operational focus and objectives, apart from supporting TNB's strategic plan is also to give assurance and confidence to TNB stakeholders and shareholders on the security services, land procurement for projects, property management and logistics management.

#### **OPERATIONAL SUMMARY**

Security Services & Intelligence Department (SSID) consists of four (4) units, i.e. Operation, Planning & Crisis Management, Investigation & Intelligence and Support Services which provide security protection to thousands of TNB installations across the country. SSID is also given the responsibility to investigate criminal related cases involving TNB assets and assisting SEAL TNBD in cases of electricity power theft.

SSID operational activities for FY2010/2011 includes physical protection by in-house security personnel at TNB's strategic and critical installations such as Power Station, 500kV and 275kV substations, Regional Warehouses and Control Centres and by private security personnel at TNB's installation such as 132kV substations, PPU's, PE's, Kedai Tenaga, State and District Offices, provide support in surveillance, enforcement and preventive operation to reduce/curb theft of electricity through the use of technology and conduct investigation and intelligence operations in relation to TNB assets.

The Land & Wayleave Management Department (LWMD) comprises five units i.e. Transmission Services Unit, Distribution Services Unit, Generation Services Unit, Geomatics & Technical Services Unit and Planning & Support Services Unit. Among core functions of the department includes to procure land & wayleave to facilitate the construction of Distribution, Transmission and Generation projects. The Property Services Department (PSD) comprises five units that provide property support services to the core business of TNB, in the form of property planning and development, project management, property management and property maintenance with the objective to enhance TNB's asset value.

Logistics Services Department (LSD) comprises three units i.e Fleet, Mobile Genset and Freight Management and plays the role of one stop integrated centre that coordinates and provides cost effective and timely logistics services to TNB through the appointment of panel workshops, procurement of new vehicles, vehicles disposal, provide Generator set services as a back-up for system availability and freight services.



#### **MAJOR PROJECTS**

SSID is entrusted to implement Integrated Security Management System (ISMS) consisting of deterrent, detection and response since FY2007/2008 at 4 zones i.e Northern, Central, Southern and Eastern.

LWMD undertakes the process of securing sites and wayleaves for major projects, among others are 275kV line for Central Area Reinforcement (CAR) Project, 275kV LILO Mahkota Cheras, 275kV Kg. Pandan – Ampang East, 500kV for S.J. Janamanjung, 275kV for bulk supply VALE Iron Ore, Manjung, 275kV Ulu Jelai Hidro Project, 275kV Air Tawar – Bukit Merah and 275kV Nusajaya.

PSD is responsible for the procurement, management and monitoring for TNB offices, stores and renovation works.

LSD has undertaken some major projects, i.e purchase of a 800kW and 500kW Mobile Generator Set and transported refurbished Compressor Rotor weighing 60 tonne from SJ Sultan Ismail, Paka, Terengganu to PT Sulzer Hickham, Puwarkarta, Indonesia and transported 1 unit of 145MVA Power Transformer from Indonesia to Connaught Bridge Power Station, Klang via sea freight.

## **Operations Review – Corporate Services**

#### **OPERATIONAL IMPROVEMENTS**

To ensure continuous improvement in its daily operation, CSD has initiated various programmes covering human resource management, risk management, KPI monitoring, customer engagement, networking with Regulators i.e. Land Offices, PUSPAKOM, Customs, PDRM, SPRM, Local Authorities to foster better relationships and Vendor management.



#### **KEY PERFORMANCE INDICATORS (KPIs)**

CSD measures the quality of its products and services through various methods, including seeking feedback from the customers, benchmarking, auditing and through KPI application. Through the Business Planning process, KPIs are identified to measure the level of the Division's performance in the area covering Finance, Customer, Internal Process and Learning & Growth. CSD's Major KPIs are Management of OPEX, Value creation, Management of Assets, Management of Security, Fleet, Mobile genset (ISMS, IFMS, IGMS) and Wayleave & Land Procurement Management.

#### **CHALLENGES AND PROSPECTS**

It is a challenge for SSID to provide security protection to thousands of TNB installations across the country. Hence, SSID proactively undertakes strict compliance and conformance measures, adopting and implementing necessary legislation and also by effectively sharing information at the bilateral, regional and multilateral levels as well as new technology of security mechanism. SSID works closely with enforcement agencies to maintain an orderly approach to face these challenges.

Another challenge faced is to centralise land procurement management at CSD. Apart from land market values increasing each year, LWMD also has to tackle and deal with public objection towards TNB projects especially in the urban areas and to review the method for procuring land for Transmission lines by using Land Acquisition Act 1960.



## Human Capital DEVELOPMENT

DATO' MUHAMMAD RAZIF BIN ABDUL RAHMAN Vice President



As TNB moves into the next phase of its 20-Year Strategic Plan, Gemilang 2015 human capital development is critical to achieving the main objective of geographical expansion. The challenge of developing a workforce that is competent, talented and productive, with diverse geographical and technological expertise, will be the main focus of Group HR Division over the next five years, in line with the Company's aspiration of becoming a regional and global player to be reckoned with.



As a strategic business partner to the Company, Group HR has outlined the action plans necessary to achieve the following key performance indicators over the next five years:

- Labour Productivity Index of 4.0 GwH per employee
- Organisational Competency Index of 83%
- Employee Engagement Index of 85%

The division has issued a TNB Mobility Policy, which sets out guidelines for employees assigned or seconded to TNB's subsidiaries or other business entities overseas. In order to ensure effective workforce redeployment for overseas assignment, the division is in the process of identifying a pool of talented and capable employees who are willing and ready to fill up any requirements within 30 days.

## Human Capital Development



## GETTING THE RIGHT PEOPLE AT THE RIGHT TIME

Group HR achieves a high staff optimisation rate by identifying TNB's short-term and long-term manpower requirements based on the Company's strategic plans and operational needs. Using this information, the division effectively plans and recruits the right people at the right time, thus ensuring that the Company's operations run smoothly while maintaining a high level of productivity.

The Trainee Executive Programme (PEP) for new recruits has been improved significantly, allowing for candidates with leadership potential to be identified through a rigorous screening process which involves three stages:

- Group Discussions
- Technical Interview
- Selection of PEP Through Competency Experiential Learning (SPECIAL)

#### **CAPACITY BUILDING**

Efforts to increase the organisational competency index include ensuring continuous learning and development programmes are made available to all employees. In order to achieve this, TNB has implemented an integrated human resources and career development initiative that directly links training, education and development programmes with employees' career progression.

During the period under review, RM112.4 million was spent on training and development, and 88.8% of TNB employees attended a minimum of three days' training. The training and development programmes provided last year have contributed to a higher organisational competency index of 80%, as compared to 78% in FY2009/10. Efforts are also being made to increase the number of certified operational personnel by 2,800 in the next five years to support our growth in line with Energy Commission of Malaysia's requirements.

TNB'S CORPORATE TALENT POOL STRENGTH CURRENTLY STANDS AT 320 WHILE A TOTAL OF 720 EXECUTIVES HAVE BEEN IDENTIFIED AS POTENTIAL CANDIDATES FOR THE NEWLY ESTABLISHED DIVISIONAL TALENT POOLS.



## TALENT DEVELOPMENT & SUCCESSION PLANNING

Thanks to a comprehensive talent management framework, TNB has identified potential successors for 217 Key Leadership Positions (KLPs), whose readiness levels are assessed regularly to ensure these future leaders will be capable of driving TNB's business to a higher level.

TNB's corporate talent pool strength currently stands at 320 while a total of 720 executives have been identified as potential candidates for the newly established Divisional Talent Pools. The Company has further enhanced the Leadership Development Programme (LDP) for our Corporate and Divisional Talent Pool members, with the objective of developing managers with the relevant skills and competencies to help TNB achieve its business goals.

TNB also takes the opportunity presented by the GLC-Government Cross-Fertilisation Programme to expose talented employees to different organisations within the Government machinery. Under this programme, two TNB executives have been assigned to the Malaysian Administrative Modernisation and Management Planning Unit (MAMPU) and the Economic Planning Unit (EPU) respectively. Internally, eight executives gained valuable experience and exposure through the Inter-Divisional Cross Assignment Programme and Job Attachment Programme with Group Internal Audit.

There are currently three specialists and 32 technical experts in their respective areas of specialisation under the Specialist Career Path Scheme, which has been developed for those in technical and professional positions.

#### MAINTAINING A HIGH EMPLOYEE ENGAGEMENT LEVEL

TNB is aware of the need to keep employees highly motivated, and employs various mechanisms to engage its staff. The ultimate objective is to nurture a high level of commitment towards achieving the Company's goals.

Employees are kept up to date with the latest information through communication channels such as the intranet, print and electronic newsletters. A strong relationship is nurtured between management and employees via town hall sessions, road shows, teh tarik sessions and outreach programmes.

TNB also places strong emphasis on preserving a harmonious industrial relations climate by maintaining healthy ties with its three trade unions - Kesatuan Percantuman Pekerja-Pekerja TNB (KPPPTNB), Kesatuan Pegawai-Pegawai Rendah TNB (KPPRTNB) and Persatuan Eksekutif TNB (PET).

This strong relationship with the unions is evidenced by the record time taken to conclude the 7<sup>th</sup> Collective Agreements (2011-2013) between TNB and KPPPTNB and KPPRTNB, which were signed on 15 July 2011. Meanwhile, negotiations with PET are on-going, with more than 80% of the articles already concluded.

Based on a survey conducted in July 2011, TNB's employee engagement level is at 84%, a steady improvement as compared to 81% in 2007 and comparable to Best Employers (Malaysia) 2011 employee engagement level of 85%.

#### **Increased Efficiency of HR Services**

Group HR has embarked on business process reengineering through lab methodology to increase the efficiency of HR services and work processes. In FY 2010/11, three lab sessions were conducted under the Group HR Transformation Programme (GTP) looking into the accuracy and reliability of employee data in the Enterprise Human Resource Management System (EHRMS), increasing the staff optimisation rate and improving TNB's Disciplinary Procedures.

The online Competency Based Performance Management System (CbPMS) has been upgraded to version 4.0 with further enhancements which enable the Company to cascade down its strategic objectives for Gemilang 2015 to all employees.

Employee Self Service (ESS) e-Leave module for non-executives is being implemented in phases starting from 1 December 2010, and is targeted to be completed by April 2012.

Other HR processes such as external recruitment, internal promotions and manpower planning have been made more efficient through the use of information technology which has also made the processes more transparent and traceable.

TNB is also enhancing the level of professionalism of the HR Division by acquiring recognised HR accreditations. Over the next five years, the Company aims to have a minimum of 15 certified HR practitioners.

#### Being the Employer of Choice

TNB recognises that monetary compensation alone is no longer sufficient to attract and retain the best workforce. In order to retain talent, therefore, the Company is committed to nurturing a sense of identity and belonging among employees, by reinforcing TNB's values and vision. In addition, TNB minimises employee attrition by offering an optimally conducive work environment where employees enjoy a healthy work-life balance.

## Human Capital Development

Under the HR Master Plan, the Company strives to be an Employer of Choice by implementing various measures, including:

- Competitive remuneration, compensation and benefits package
- Comprehensive career paths for executives and non-executives, and link between the two schemes
- A conducive work environment
- Performance-based rewards
- Compelling employee value proposition
  - Comprehensive welfare services for employees, retirees and eligible dependents

TNB'S EMPLOYEE ENGAGEMENT LEVEL IS AT 84%, A STEADY IMPROVEMENT AS COMPARED TO 81% IN 2007 AND COMPARABLE TO BEST EMPLOYERS (MALAYSIA) 2011 EMPLOYEE ENGAGEMENT LEVEL OF 85%.



TNB supports the national agenda through Skim Latihan 1Malaysia (SL1M), which helps unemployed graduates gain employment. In July 2011, 64 participants under this scheme were enrolled in a 12-month programme at TNB, where they are being given comprehensive classroom training and on-the-job experience in various business functions. Another 314 participants will join the programme in the next one year.

As a result of TNB's HR initiatives, the Company won the Most Admired ASEAN Enterprise in Employment 2010 award at the ASEAN Business & Investment Summit (ASEAN-BIS) held on 27 October 2010 in Hanoi, Vietnam. TNB was also awarded with Asia's Best Employer Brand Award for the second successive year at the 2nd Asia's Best Employer Brand Awards 2011 held on 22 July 2011 at Suntec, Singapore.

### **Corporate Social Responsibility**

## "Powering the Nation"

TNB'S CSR POLICY IN FACT SERVED AS A BENCHMARK IN A PILOT STUDY ON CSR FOR THE GOVERNMENT'S SILVER BOOK INITIATIVE.

As one of Malaysia's leading GLCs, TNB's CSR practices are driven by the nation's development agenda, and the organisation is committed to best practices in carrying out its corporate responsibilities. TNB's CSR policy in fact served as a benchmark in a pilot study on CSR for the Government's *Silver Book* initiative.

The Company's battle cry of 'Powering the Nation' sets the tone for its CSR activities. During the period under review, TNB continued to forge ahead with its CSR initiatives in various areas, touching the lives of many while creating sustainable value in its relentless pursuit of business excellence.

#### **POWERING COMMUNITIES**

#### Baiti Jannati Programme

Baiti Jannati, which means 'My Home, My Heaven' ('Rumahku Syurgaku') is targeted at the hardcore poor and underprivileged. Under this programme, TNB repairs dilapidated houses, converting them into decent and comfortable dwellings. The Company also provides basic amenities such as electricity, water and proper sanitation as well as furniture, basic food stuff and educational support for the recipients' children. Priority is given to senior citizens, single parents, the underprivileged and disabled. Since the programme was introduced in 2008, 86 houses have been repaired at a total cost of RM1.2 million.

#### **Electricity Safety Awareness Seminar**

The Electricity Safety Awareness Seminar is designed to promote awareness of electricity safety among school children and members of the public. It cautions the public of the dangers of tampering with electrical appliances and promotes the correct handling of electrical items. Held in close cooperation with State Education Departments, this programme aims to reduce electricity-related accidents and prevent incidents that disrupt power supply.

In FY2010/11, 3,227 participants benefitted from the programme.



## **Corporate Social Responsibility**

#### Community Leaders Outreach Programme (CLOP)

The Community Leaders Outreach Programme (CLOP) was inspired by the President/Chief Executive Officer in early 2005 to enhance TNB's engagement with customers and the local community. The programme acts as a forum where TNB management communicate directly with community leaders, heads of local governments and stakeholders on services, complaints, enquiries and suggestions. The feedback obtained is used to improve services.

In conjunction with the programme, TNB also organises exhibitions to disseminate information about the Company, its products, services and activities. In FY2010/11, TNB spent RM242,921.20 to organise 12 CLOP sessions throughout the peninsula.

#### Power Stations within the Communities

Wherever TNB power stations are located, staff become integral to the well-being of the local community, running the Baiti Jannati programme, providing free medical check-ups and getting involved in *gotong-royong* projects to improve the surroundings. The management also engages with the community during the annual Power Station Open Day.

#### Social and Humanitarian Work

In FY2010/11, UNITEN's Jabatan Keselamatan organised a safety campaign on *Wearing Helmets Properly* in collaboration with the Standards and Industrial Research Institute of Malaysia (SIRIM Berhad) and Jabatan Keselamatan Jalan Raya Malaysia.

A separate talk was organised on *Consumers' Awareness and Water Quality* in collaboration with Syarikat Bekalan Air Selangor Sdn. Bhd. (SYABAS).

During Ramadan in 2011, Tabung Amanah Zakat UNITEN and the Centre for Islamic Studies and Civilisation UNITEN organised a Majlis Berbuka Puasa Amal for single parents and UNITEN students who are orphans. At the event, Tabung Amanah Zakat UNITEN and Yayasan Canselor UNITEN handed out money and donations in kind to 10 families of single parents, 160 orphans and 100 UNITEN students.

UNITEN is the first private institution of higher learning in Malaysia to be appointed by Lembaga Zakat Selangor to collect and manage *Zakat* from the public.

#### **Rural Electrification Programme**

This programme is a joint collaboration between TNB, the Ministry of Rural and Regional Development (KKLW) and Ministry of Energy, Green Technology and Water (KeTTHA). It benefits mainly indigenous people (*orang asli*) living in traditional villages or new settlements. Electricity is provided to these areas either by extending TNB's grid lines or, for remote areas not accessible by land, via solar energy, generator sets, solar hybrid and other forms of renewable energy.

In FY2010/11, TNB was awarded a total of 65 rural electrification projects at a total cost of RM147 million. Of these, seven are funded by the AAIBE Trust Fund under KeTTHA, while 58 are funded by KKLW.



#### Special Education Centre (Pusat Pendidikan Khas)

TNB's foundation, Yayasan Tenaga Nasional (YTN), contributes to the Special Education Centre (Pusat Pendidikan Khas) in Putrajaya which caters for children with special needs. In FY2010/11, YTN contributed RM20,000 to the centre to provide the special children with basic education, medical assistance, welfare as well as individual and group developmental programmes. The children are either hearing or vision impaired, or have learning disabilities.



#### National Cancer Centre (MAKNA)

This financial year, YTN also contributed RM200,000 towards a Mobile Cancer Screening Programme run by the National Cancer Centre (MAKNA). This contribution will be used to subsidise the use of the mobile cancer screening service by rural communities. The project covers the whole of Malaysia, including remote areas.

#### National Heart Institute (IJN)

YTN allocated RM250,000 to the National Heart Institute (IJN) Foundation to finance the cost of surgery for heart patients below the age of 18 years. Recipients of these contributions are recommended by IJN Foundation in collaboration with the Ministry of Health. This programme started in 2007 and has benefitted 43 children who are now enjoying normal lives.



#### **Business Tithes**

TNB pays a business tithe to the religious authorities in all states where it operates. The distribution of tithe in each state is based on the number of poor households, as determined by the Economic Planning Unit.

#### Galeri Tenaga

Galeri Tenaga was founded in 2005 to house the organisation's corporate art collection in a dedicated space. The gallery, which is open to the public, contains one of the best collections of Malaysian artworks in the country, boasting more than 70 major works of art.

#### **POWERING EDUCATION**

#### Universiti Tenaga Nasional

TNB's CSR efforts have been expanded by the establishment of Universiti Tenaga Nasional (UNITEN), one of the pioneering private universities in Malaysia. UNITEN fulfills the dual roles of promoting the country's higher education industry as well as supporting TNB's energy business.



UNITEN offers quality programmes in engineering, information technology and business management at the foundation, undergraduate and postgraduate levels. All the programmes are recognised by the Malaysian Qualifications Agency (MQA) and satisfy the requirements of the Ministry of Higher Education and the Public Service Department (JPA) Malaysia.

The Engineering programmes, further, are recognised by the Board of Engineers Malaysia (BEM) and UK bodies such as the Institution of Mechanical Engineers, Institution of Engineering and Technology and the Institution of Civil Engineering.

By end 2010, UNITEN had produced more than 14,000 graduates from various fields who are now serving the sectors of engineering, accountancy, management and finance both locally and abroad.

## **Corporate Social Responsibility**

#### **Yayasan Canselor UNITEN**

Yayasan Canselor UNITEN is a trust fund established under Subsection 44 (6B) of the Income Tax Act 1967 to administer private funds and charitable donations for UNITEN students and other qualified students to further their studies. Incorporated for a period of five years from 2010 to 2014 under the Trustees (Incorporation) Act 1952 (Act 258) on 2 June 2009, Yayasan Canselor UNITEN enhances UNITEN as a credible institution of higher learning that serves the community as a whole.



#### Scholarships and Convertible Loans

Through YTN, TNB provides substantial educational and welfare assistance. To date, YTN has spent a total of RM691 million to sponsor 10,967 students in the form of scholarships and convertible loans. In FY2010/11 itself, YTN spent RM36.1 million to enable outstanding students to further their academic interests in local institutions of higher learning as well as overseas. This contributes significantly to nurturing a professional workforce for TNB and the country.



#### **PINTAR Project**

PINTAR stands for Promoting Intelligence, Nurturing Talent and Advocating Responsibility. It is a collaborative school adoption programme initiated by Khazanah Nasional and implemented by GLCs to enhance the educational level and promote excellence among underserved school children throughout Malaysia.

TNB has adopted 27 primary schools nationwide under the programme, and has assigned one officer in each state as its liaison officer and mentor to the adopted schools. In FY2010/11, a total of 2,635 Year 6 students benefitted from the activities organised to improve their performance in the Ujian Pencapaian Sekolah Rendah (UPSR).

#### **POWERING BUSINESS EXCELLENCE**

#### Village Street Light Project

In collaboration with the Ministry of Rural and Regional Development (KKLW), TNB installs street lights at suitable existing electric poles in villages. The Village Street Lights project started in 2005 and entered its fifth phase in FY2010/11, during which TNB installed 7,845 street lights in 2,475 villages throughout Peninsular Malaysia. To date, a total of 137,099 street lights have been erected in rural Peninsular Malaysia.

#### **TNB Bumiputera Vendor Development Programme**

TNB established its Bumiputera Vendor Development Programme (BVDP) in 1993 and to date has developed 440 companies with an average annual contract value awarded of RM400 million. Starting with one category, BVDP has expanded to include four major categories, namely Usahawan, Preferred Vendor/Supplier, Panel Contractors and Rakan Niaga Strategik. Besides nurturing the vendors via comprehensive development initiatives, TNB has also provided the opportunity to selected vendors to leverage on the TNB brand and join TNB in its business ventures globally.

The BVDP testifies to TNB's commitment to the national agenda of nurturing innovative, reliable, competitive and competent Bumiputera vendors in the manufacturing and service sectors.

#### **Electricity Tariff**

During the financial year, a new electricity tariff rate was approved by the Government and took effect on 1 June 2011. Reflecting the increase in gas price (from RM10.70 per mmBTU to RM13.70 per mmBTU) and a coal price that was revised up to USD85 per tonne (CIF) in March 2009, the new tariff aims to partly recover the increase in cost of supply since the last base tariff review in June 2006.

As part of its community service, TNB gave RM68 million in discounts to privileged customers like government schools and institutions of higher learning, welfare centres and places of worship. In addition, RM460 million\* in discounts were enjoyed under the Special Industrial Tariff scheme as at August 2011 (\* unaudited amount as at 31 August 2011).

#### **Rural School Electrification Programme**

This programme is a collaboration between TNB and the Ministry of Education to ensure all schools in rural areas enjoy 24-hour electricity supply so they can operate fully, like urban schools. Under the programme, 19 schools are to be connected to the national grid, 19 are to be provided with solar hybrid systems and four schools will be powered by standalone gen-sets, at a total cost of RM98 million. The programme started in 2010 and is expected to be completed by 2012.

#### Renewal Energy (RE) Development

TNB lends its full support to the Government's Small Renewable Energy Programme (SREP) by helping developers of potential SREP projects to identify suitable points of interconnection with the TNB distribution network, as well as conducting technical studies for the projects. As at August 2011, TNB had signed 21 long-term RE Power Purchase Agreements (REPPAs) totalling 109.65MW and installed 136 Malaysian Building Integrated Photovoltaic (MBIPV) systems totalling 1,966.141kWp. The Company is in the process of finalising negotiations to conclude a total of 15 REPPAs totalling 128.9MW with other SREP developers using biogas, biomass, mini hydro, municipal solid waste, landfill gas and solar as RE resources.

#### **Renewable Energy Resource**

Two major hydropower plants – the Hulu Terengganu Hydroelectric Project (212MW) and Ulu Jelai Hydroelectric project (372MW) – are being developed while the management has signed a joint venture agreement with Felda to set up a 10MW biomass plant in Jengka, Pahang. This RE plant should come onstream by October 2012. TNB is also collaborating with Sime Darby Plantation to develop six potential biogas plants in Peninsular Malaysia with total capacity of 12MW, using palm oil mill effluent.

#### **POWERING A GREEN NATION**

#### **Conservation of the Environment**

TNB set up the Institute of Energy Policy and Research (IEPRe) in July 2008, at the Universiti Tenaga Nasional (UNITEN). The institute, originally known as the Energy Business Technology Centre, spearheads research and consultancy activities in support of the Government's energy economics research with the cooperation of the Energy Commission of Malaysia and Ministry of Energy, Green Technology and Water.



IEPRe focuses on four keys areas – Energy Policy, Energy Economics, Energy Security as well as Energy and the Environment. The current Chair for Energy Economics (CEE) is held by the Honorable Dr Rajendra K Pachauri, Director General of The Energy and Resources Institute (TERI) and Chairman of the Intergovernmental Panel for Climate Change (IPCC). Dr Pachauri is recognised as a leading global thinker and researcher on sustainable development.

#### Free of Polystyrene and Plastic (FoP)

The No Plastic Bag Day initiative was kicked off by the Government in 2009 with the aim of reducing the use of plastic bags in the country. UNITEN subsequently took the initiative to launch its own Free of Polystyrene and Plastic (FoP) campaign in early 2011 on both campuses. Starting from January 2011, plastic bags are no longer provided at the campus cafeterias. UNITEN is the first private institution of higher learning to introduce this campaign, which forms part of agenda W15E to promote UNITEN as a green campus.

## **Corporate Social Responsibility**

#### 'Tree-for-a-Tree' and River Cleaning

TNB encourages its staff to be more sensitive towards environmental and global warming issues. Hence, the Tree-for-a-Tree programme, under which each tree felled for development purposes is replaced by the planting of a new tree in another location. To date, about 1,150 infant trees have been planted to help conserve the environment.

In addition, Transmission Division collaborates with Non-Governmental Organisations (NGOs) to carry out river and seashore cleaning activities. Some departments were also involved in turtle conservation, releasing about 50 baby turtles at the Taman Negara Pulau Pinang.



The Gemilang 2015 theme of Growth, Global and Green has been widely used by the division to drive a firmer commitment towards the environment. The division managed to collect a total of RM58,855 from staff for the CSR initiatives carried out during the financial year 2010/11.

#### **Bird Sanctuary**

TNB's early commitment to the environment is exemplified by its power plants, many of which have won recognition for clean technologies, and also for supporting valuable wildlife. The ash ponds at Sultan Salahuddin Abdul Aziz Power Station, for example, have been recognised as a migratory shorebird sanctuary by the Asia Pacific Migratory Waterbird Conservation Strategy which has included the power plant in the East Asian - Australasian Shorebird Site Network. The management is committed to working with local NGOs and the international community to preserve this manmade habitat of migratory shorebirds, which is regularly visited by bird watchers and environmentalists who are attracted by the many endangered species which make their annual winter stopover here, on their way down south.

#### **Clean Coal Technology**

In line with its motto of 'Technology in Harmony with Nature', TNB's Sultan Azlan Shah Power Station in Perak (also known as TNB Janamanjung, or TNBJ), officially opened in 2007, boasts one of the most modern clean coal technologies available, meeting World Health Organisation standards. A thorough environmental impact assessment was carried out to protect the flora and fauna of the surrounding mangrove area.

The high level of thought that went into creating an environment-friendly power plant has meant that the Manjung mangroves continue to present a healthy ground for fishing to the local community. TNB has, in fact, seen an increase in number of licences issued for the fishing of cockles (*kerang*) around the station.

#### **Ulu Pangsun Station Conservation Project**

The Ulu Pangsun Mini Hydro Station is a historical icon in the electricity supply industry in the country. Built in 1927, it is the second oldest hydro station in Malaysia and the first in Selangor. Although it ceased operations in 2001, the buildings and infrastructure of the Ulu Pangsun Lower Station were designed to blend in with the environment, making it ideal for use in CSR activities. Accordingly, there are plans to develop a Resource Centre on hydro electricity, an environment research centre, eco-tourism activities and team building at the site. Meanwhile, TNB Research regularly conducts workshops on nature studies for students and the public at the Upper Station.

#### **Firefly Conservation Project**

TNB, in collaboration with the Selangor State Government, undertook to conserve the unique firefly colony at Kampung Kuantan, Kuala Selangor, for a period of five years starting from 2008. While TNB Research Sdn. Bhd. funneled its resources into firefly conservation studies, the Company upgraded the physical infrastructure of the complex including four pavilions, a mini theatre, a public address system and jetty. TNB also improved the access road and the square of the centre, and placed directional signs at several strategic locations from Kuala Lumpur to Kuala Selangor, Selangor. As a result, increasingly more visitors are drawn to the firefly colony, providing a sustainable livelihood for the local boatmen.

TNB also sponsors basic conversational Arabic and Japanese classes for the boatmen to enable them to converse with tourists from the Gulf and Japan, who make up the majority of visitors. In addition, the Company organises an annual *Let's Go to School with TNB* programme to provide financial support to the children of the boatmen.

#### **POWERING CHAMPIONS**

#### Hockey Sponsorship and Coaching Programme

TNB has pledged its support for national hockey development through monetary sponsorships to the Malaysian Hockey Federation since 2006 to organise the TNB Malaysian Hockey League and other related activities.

Along with the Malaysian Hockey Federation and State Hockey Associations, the Company also organises a coaching programme for selected students aged 12-18 years. It is conducted by national hockey players employed by TNB. To date, 2,000 new talents have been identified from seven states through this programme.

TNB also organises hockey clinics for its PINTAR students, in line with the PINTAR goal of nurturing talent among the children.

#### **SUKMA**

Every year, TNB extends assistance in cash to support the Government in organising SUKMA. This year, TNB was a Silver Sponsor, donating RM100,000 towards SUKMA XIV which was held in Kuala Lumpur from 2-12 June 2011.

#### **POWERING THE WORKFORCE**

The Company's initiatives geared towards powering its workforce of more than 31,000 employees comprise the provision of:

- Systematic training and career development opportunities
- A safe and healthy work environment
- Attractive compensation and benefits scheme
- Work-life balance

#### **Training and Development**

TNB places strong emphasis on nurturing a highly competent workforce via continuous human capital development programmes. The Company's training policy requires all employees to attend a minimum of three training days annually. In FY2010/11, RM112.4 million was spent on training, with 88.8% of the workforce satisfying the threeday minimum. The Company has embarked on an integrated human resources and career development initiative that aligns the training, education and development programmes of employees to their career progression. Although there are distinct career paths for executives and non-executives, TNB offers a link between the two for non-executives who aspire to serve the Company in executive positions.





## **Corporate Social Responsibility**

#### **Health and Safety**

The Company provides a wide range of benefits to ensure employees and eligible dependents receive the best healthcare and medical treatment. Currently, no less than 1,049 clinics and hospitals across the country are registered on the TNB panel, including general physicians, homeopathy and acupuncture practitioners, specialist hospitals and dialysis centres.

In addition to paying for medical bills, TNB also provides its employees and retirees with medical aids such as wheelchairs, hearing aids and prosthetic limbs.

Under TNB's wellness programmes, employees aged 40 and above are encouraged to have full medical examinations at least every two years. In addition, the Company organises regular health talks and screenings for employees and retirees. In FY2010/11, 50 health campaigns were held in TNB offices throughout the country, benefiting more than 5,000 employees and retirees.

The Safety Excellence Management System (SEMS) used by the core divisions of Generation, Transmission and Distribution is now being widely adopted by all other divisions and subsidiaries in the Group to manage occupational safety and health (OSH) issues. At the same time, more departments have been certified to OHSAS 18000 and MS 1722 standards.

OSH courses, such as SEMS Auditors, Safety Representatives and Office Safety, are organised regularly, and employees are required to attend at least one day of OSH training per year.

#### **Harmonious Industrial Relations**

TNB maintains and manages its relationship with employees by ensuring a harmonious industrial relations climate through strategic alliances with its three unions – Kesatuan Percantuman Pekerja-Pekerja TNB (KPPPTNB), Kesatuan Pegawai-Pegawai Rendah TNB (KPPRTNB) and Persatuan Eksekutif TNB (PET).

The 7<sup>th</sup> Collective Agreements (2011-2013) between TNB and KPPPTNB and KPPRTNB were signed on 15 July 2011 while negotiations with PET are on-going, with more than 80% of the articles already concluded. The collective bargaining process was done amicably and in record time due to the good relationship between management and the unions.

TNB also monitors and ensures that employee issues are resolved at Joint Consultative Council (JCC) meetings held with union representatives at the local, state and national levels.

#### Employee Engagement and Effective Communication Channels

TNB strives to be the Employer of Choice by offering competitive remuneration, attractive compensation and benefits, and comprehensive welfare services to employees, retirees and their dependents. Within such a conducive work environment, it conducts regular Employee Engagement Surveys to improve employees' commitment to the organisation.

TNB has also set up direct communication channels to ensure all levels of employees are kept up-to-date with the latest information about the Company through an intranet site, *Livewire*, and other communication channels, whether in print (*Tenagawan*) or electronic (Internal Newsflash, Newstube). Employees can voice their opinions or grouses directly to the top management through Tell the CEO and HR Mesra. Various programmes are also held which provide the top management with the opportunity to engage with employees at the regional and state levels throughout the year, e.g. the CEO Walkabout, Gemilang 2015 road shows and Group HR Outreach Programmes.

#### **Recognition of Employee Contributions**

TNB recognises employees who have excelled and contributed significantly to

the Company and/or the society through the Meritorious Service Awards held at the corporate and divisional levels. At the corporate level, 33 employees in the Executive, Non-Executive (Technical) and Non-Executive (Non-Technical) categories received their awards at the Majlis Perhimpunan Warga Kerja TNB held on 4 January 2011.

The Company also shows its appreciation to employees who have dedicated the greater part if not all of their working lives to TNB. On 19-20 March 2011, 1,695 employees from all over the country who have served 25-35 years were given Long Service Awards in recognition of their contributions.







#### Work-Life Balance

A wide range of recreational facilities and social activities are provided through Kilat Clubs to enhance employees' well-being and morale. There are currently 62 registered Kilat Clubs in the country, and in FY2010/11, TNB spent approximately RM570,000 to finance various sports and social activities.

Social activities are also organised by other societies such as Pelitawanis and Pakatan/Persatuan Kebajikan Pekerja Islam TNB (PKPI). In addition, TNB provides a platform for its retirees to meet and organise social events through the Persatuan Bekas Pekerja LLN/TNB.

#### **Benefits for Immediate Families**

TNB also supports employees with young families by providing nurseries and kindergartens for the children, focusing especially on rural and remote locations where there is little alternative for childcare. Currently, there are 11 kindergartens and nine nurseries throughout the nation, the nurseries taking in children aged two months to four years and the kindergartens catering to children in the five to six-year bracket.

The Company also provides tuition for children of employees at a minimal rate under a programme called Kelas Bimbingan Tenaga.

TNB continues to care for the families of employees even after the employees have passed on. The Company provides one-off contributions of RM2,000 to widows under the Majlis Jasamu Dalam Ingatan programme, and supports orphans by giving them monthly stipends of RM60 each (children aged seven to 12 years) and RM90 each (children aged 13-17 years) under the Bantuan Pendidikan Anak Yatim programme. In FY2010/11, TNB spent approximately RM787,000 under the two programmes, benefitting 49 widows and 732 orphans.

TNB also operates a Death Levy Fund or Kumpulan Wang Khairat Pekerja dan Pesara TNB (KWKPPTNB). Incorporated on 3 June 1969, this unique scheme draws monthly contributions of RM1 from members which are then channeled to the families of deceased members to assist in the funeral expenses. KWKPPTNB's membership consists of ordinary and life members (those who have been contributing for more than 15 years at retirement). There are now 11,903 ordinary members and 3,221 life members.

#### Kem Remaja Bestari

Kem Remaja Bestari (KRB) is a motivational programme held during the school holidays for children of TNB staff and less privileged students. The programme aims to guide and encourage the students – especially those sitting for the UPSR, PMR and SPM examinations – to excel in their studies. A total of 1,300 students attended this camp in FY2010/11, which was held simultaneously in the four zones – North, South, East and Central. This annual programme began in 2001 with an approximate budget of RM500,000 per annum.

#### **POWERING UNITY**

#### TNB Family Day, Festive Celebrations and National Events

In support of the Government's aspiration to foster unity among the various communities, TNB hosts internal programmes and sends contingents to participate in programmes organised by the Government at both the federal and state levels.

Internally, TNB fosters the spirit of 1 Malaysia by celebrating Hari Raya Aidilfitri, Chinese New Year and Deepavali in a big way at the headquarters and all state offices through the traditional open house concept where management, staff, stakeholders and other guests come together in the spirit of unity.



It also organises Family Days and Sports Carnivals every two years, alternating these on a year-to-year basis. While the Family Days are held at the headquarters and the state level, the Sports Carnival brings together sportsmen from the TNB family from all over Malaysia to the Klang Valley. In addition, TNB holds an Annual Assembly in conjunction with its Anniversary celebration and New Year gathering.

At the national level, TNB participates in Government rallies and processions such as Hari Kemerdekaan, Hari Malaysia, Hari Wilayah Persekutuan, Hari Pekerja, Hari Wanita, Sambutan Maulidur Rasul and Maal Hijrah.

## **Commitment to the Environment**

TNB fully recognises that economic growth, sustainable development and quality of life go hand in hand.

We are committed to the continuous improvement of environmental performance while providing safe, efficient and reliable electricity supply.



#### TNB ENVIRONMENTAL POLICY

As the leading energy producer in the country, TNB is aware of our responsibility to manage the country's natural resources well, and to protect the environment as well as minimise our carbon footprint. The Group produced an Environmental Policy in 2005 which seeks to:

- Protect, conserve and improve the environment in all our operations
   and decisions
- Comply with all applicable laws and regulations, and establish standards that will lead to the continuous improvement of our environment performance
- Implement an Environmental Management System (EMS) that will eliminate or minimise the environmental impact of our operations
- Conduct environmental audits and training programmes in line with our corporate commitment to develop our employees' environmental awareness and competency
- Promote environmental awareness among contractors, the public and other stakeholders and to make available the Environmental Policy to them.

In line with this Policy, TNB incorporates environmental management principles in the planning and implementation of our business operations. We conduct and support relevant research and development to improve the quality of the environment, and have adopted the 3R concept of Reuse, Repair and Recycle while educating our employees on the importance of environmental preservation.



#### **Environmental Management Plan**

The Environmental Management Plan was formulated as a licensing requirement under the Environmental Quality Act, 1974 or in compliance with the specific Department of Environment's (DoE) detailed Environment Impact Assessment (EIA) or as a condition for EIA approval for the respective power stations. The programme focused on emission monitoring and water quality monitoring as well as boundary noise level monitoring.

#### Environmental Audits and MS ISO Certification

To execute an effective environment system while ensuring its continuous improvement, all TNB power plants have implemented the Environmental Management System MS ISO 14001:2004, and have been certified by SIRIM QAS International Sdn. Bhd.

## **Commitment to the Environment**

#### **Scheduled Waste Disposal**

TNB's Scheduled Waste Management programmes were implemented to comply with the Environmental Quality (Scheduled Waste) Regulation 2005. Scheduled waste includes all waste generated periodically that requires disposal by contractors registered with the Department of Environment (DoE).

The DoE is notified of all scheduled waste generated which is temporarily stored at the Scheduled Waste Store prior to disposal. Environmental Management Representatives are responsible for recording, monitoring and managing waste generated at their respective units.

#### **Recycling Programme**

Waste recycling and reduction programmes were included in the EMS initiatives within individual divisions. Currently, most of TNB's power plants are implementing this programme in addition to the Environmental Management programmes to minimise wastage and reduce the consumption of resources. Transmission Division has implemented the Condition Monitoring Programme (CMP) in its operations, in which used transformer oil is filtered employing the latest technology and subsequently reused.

#### **Crisis Management**

Crisis Management in TNB is coordinated by an Emergency Response Team (ERT), which forms a major component of the Safety Excellence Management System (SEMS). SEMS has been implemented in all the divisions and identifies every possible emergency that can take place in the divisions' business activities. An Emergency Response Plan (ERP) has been developed to mitigate these emergencies.

TNB INCORPORATES ENVIRONMENTAL MANAGEMENT PRINCIPLES IN THE PLANNING AND IMPLEMENTATION OF ITS BUSINESS OPERATIONS.



Before treatment

After treatment



#### **Halon Replacement**

All operations of the Generation, Transmission and Distribution Divisions are halon-free.

#### **Current Developments**

#### i. Contaminated Land Management & Control Using Bio-Remediation

Bio-remediation is an environmental approach to remediate pollutants, or at least to transform them into innocuous substances. It offers low-cost, low-technology techniques and potentially high public acceptance. A pilot study on the application of bioremediation was carried out successfully at one of the power plant switchyards. The findings have been accepted by DoE as an alternative approach in remediating contaminated land that is more environmentally acceptable.

#### ii. Study & Implementation of Firefly Conservation and Habitat Rehabilitation

TNB adopted a firefly conservation programme in Kampung Kuantan, Kuala Selangor, as one of its corporate social responsibility initiatives. Part of the programme includes a collaborative study between TNB Research Sdn. Bhd. (TNBR) and Universiti Kebangsaan Malaysia to determine the diversity and abundance of the firefly population, and its life cycle as well as providing a programme to enhance its population.

#### iii. Development of Methodology & Assessment of Power Plants' Carbon Footprint

Thermal power plants are known to be one of the major contributors of CO2 emission. Thus, a baseline study was conducted by TNBR to develop a suitable methodology to determine the CO2 emission of TNB's power plants, which can be used for monitoring and reporting purposes. The study has now been expanded to the other core divisions of TNB namely Distribution and Transmission. TNB ~ annual report 2011



## Other Services ~ SABAH ELECTRICITY SDN. BHD.

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Sabah Electricity Sdn. Bhd. (SESB) is 80% owned by TNB and contributes to slightly less than half the total installed electricity capacity of the state. SESB, which manages the Sabah Grid, turned in a noteworthy performance in the financial year under review and is making steady progress towards achieving its corporate objective of electrifying 95% of the state by year 2013.

#### **FINANCE**

#### Sales of Electricity (RM) and unit sold (Gwh)

The sale of electricity in Sabah for FY2011 grew by 7%, RM1.10 billion compared to RM1.03 billion recorded last year, Total units sold for FY2011 was 4,239 GWh compared with 4,030 GWh in FY2010.

Total reported operating expenditure for FY2010/2011 amounted to RM 1,244 million compared to RM1,192 million for FY2009/2010. SESB received substantial diesel and medium fuel subsidies from the Malaysian Government and the amount is presented net of total subsidy.

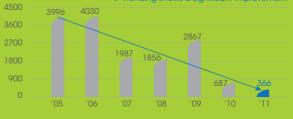


Total operating loss was at RM69,131 million. Total finance costs and foreign exchange losses for FY2011 amounted to RM73.36 million compared to RM74.68 million in FY2010. Cost Per Unit (CPU) SESB as at 31 August 2011 was 31.19 cent per kWh.

No.	Item	Denominator	FY 2011	FY 2010
1	Sales	RM'mil	1,100.19	1,029.49
2	Unit sold	GWh	4,239	4,030
3	Opex	RM'mil	1,244.84	1,192.44
4	Fuel subsidy claim	RM Mil	547	521

#### SESB SAIDI CY2005 - 2011 (As at 31st August 2011)

--> Trending shows a significant improvement



pg 140

#### GENERATION

SESB's Cost Per Unit (CPU) as at 31 August 2011 was 36.03 sen. The total installed capacity in Sabah is 1,331.69MW, of which SESB contributes 534.79MW, inclusive of 80MW of canopy gensets, while the IPPs contribute the remaining 796.9MW.

#### **OPERATION SYSTEMS**

- Maximum demand in the Sabah Grid in FY2010/11 was 830.1MW, which was an increase of 7.41% from the maximum demand recorded in FY2009/10 of 772.8MW.
- SESB generated a total of 4,964.33GWh in FY2010/11, marking a 2.96% increase from 4,821.48GWh in FY2009/10.
- The Delivery Point Unrealibility Index (DPUI) trend over the past five years for Transmission is as shown in the table below.

Financial Year	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011
Total System Minutes (Including Major Incident - GTD)	154.38	31.58	20.21	40.13
Total System Minutes (Excluding Major Incident – GTD)	11.89	31.58	20.21	40.13

 The SAIDI trend shows tremendous improvement in FY2010/11, almost halving from 687 mins/customer/year in 2010 to 366 mins/customer/year in 2011. Over the last five years it has decreased more than 10 fold, from 4,030 mins/customer/year in 2006.

Calendar Year	2005	2006	2007	2008	2009	2010	2011 (up to 31Aug)
SAIDI (mins/ customer/year)	3,996	4030	1987	1856	2867	687	366

#### PLANNING

Demand for electricity in Sabah is expected to be within the projected growth of 7% per year until 2011, and to increase substantially in the following years, reaching about 1,476MW by 2019.

SESB aims to achieve 95% electrification coverage by year 2013 to enable more people in Sabah to enjoy the benefits of electricity supply. This is part of SESB's contribution to the socio-economic development of Sabah.

#### **ORGANISATIONAL DEVELOPMENT**

SESB will focus on its Key Performance Indicators (KPIs) for FY2011 to achieve its four Strategic Themes of Enhancing Financial Sustainability, Delighting Customers, Improving System Performance and Improving Productivity. Based on a Balanced Score Card framework, there are nine Strategic Objectives under the four Strategic Themes, as indicated below:

## Five-Year Business Plan FY2011–2015 and Annual Operations Plan FY2011

SESB's management reviewed the Five-Year Business Plan (FY2011-2015) and Annual Operations Plan for FY2012 on 13 – 14 May 2011 at the Promenade Hotel in Sabah. Participants of the review session comprised SESB's Management Committee, heads of department from SESB headquarters, selected executives and members of the local union.

KPIs for the Operations Plan 2012 were drawn up following a review and analysis of the operational performance in FY2011 and the extent to which the FY2011 KPIs had been met. The review resulted in an action plan that included:

- Identifying gaps between actual business and operational achievements and targets that had been set for the purpose of taking corrective measures so that future targets can be achieved.
- Developing strategic themes and strategic objectives as defined by TNB.
- The development by each division in SESB of a Five-Year Business Plan and Annual Operations Plan based on SESB's strategic objectives.
- Using SWOT Analysis, PEST Analysis and Porter's Five Forces of Competition to identify SESB's strategic plans for FY2011-2015.
- Introducing additional initiatives to further strengthen operations and expediting their implementation.
- Modifying the title of the roadmap from SESB 20-Year Strategic Roadmap to Strategic Transformation Action Roadmap 2026 (STAR 2026) FY2007-2026 for branding purposes. This would ensure the daily activities of employees are aligned with SESB's strategic objectives as outlined in the roadmap.

## Other Services – Departmental Goals/Objectives

The Legal Services Department (LSD) provides quality legal services to TNB and its subsidiaries to support value creation in the three distinct areas of the core business, non-core business and management services.



#### **DEPARTMENT SUMMARY**

LSD consists of three distinct units and one section, as follows:

#### **Corporate Advisory Unit**

This unit is responsible for the overall provision of legal opinions on all legal matters related to the business of TNB and also for drafting, vetting and negotiating financing documentation for conventional and Islamic facilities, commercial documentation including ICT licensing agreements and intellectual property related agreements, FIDICbased contracts and all other contractual documents related to the business of TNB.

## Regulatory & Legal Documentation Unit

This unit ensures that TNB complies with all prevailing Acts of Parliament, by-laws, regulations and licence conditions. It is also responsible for advising TNB on operational legal issues in relation to electricity supply, land and wayleave.

#### **Litigation Unit**

This unit manages, supervises, coordinates and liaises with appointed panel lawyers in all court cases pertaining to claims made by third parties against TNB in Malaysia and abroad. The unit also handles the recovery of debts and enforcement of TNB's rights against third parties. The unit further handles disputes referred to the Consumer Tribunal and matters of arbitration.

#### **Business Enterprise Section**

The Business Enterprise Section handles and manages legal matters in relation to TNB's potential international and domestic investments, divestments, new businesses and identified power projects.

#### **KEY ACHIEVEMENTS**

#### Legal Management System (LMS)

In the process of updating the Legal Management System (LMS), the Litigation and Corporate Advisory Modules have been implemented. The system is very helpful in tracking and managing litigation reports. The Litigation Unit continuously uploads judgments and legal opinions prepared by LSD and panel lawyers for future reference.

The next phase of the system update involves upgrading the management of TNB's voluminous Housing Files to ensure it is more efficient.

The Litigation Unit is also developing web-based integrated LMS modules that will allow for easy access of the database by all interested parties. Panel lawyers will be able to update the status of cases using these modules, to the ultimate benefit of TNB as a whole.

#### SE 10/10 Enhanced Efficiency of Debt Recovery

This key initiative is meant to increase the recovery of debts on outstanding electricity bills by speeding up the recovery mechanism. To date, LSD has managed to obtain judgements in respect of 82.19% defaulters reported during the period between September 2010 and February 2011. This is 42.19% more than what was targeted.

#### IMPROVING CUSTOMER SERVICE

In the financial year 2010/11, LSD embarked on a number of initiatives to improve customer service.

### a. Legal Awareness

#### Brainstorming/Dialogue Sessions

LSD conducted several Brainstorming/Dialogue Sessions with Distribution Division regarding legal issues to improve customer service. The sessions were held in several states in Peninsular Malaysia by the Regulatory & Legal Documentation Unit involving executives and non-executives from Distribution. The focus was on legal issues regarding land – e.g. trespassing and the acquisition of land for the construction of TNB's installations – rechargeable job orders, terms and conditions of licencee, housing loans for TNB staff and supply matters involving Distribution operations.

### Legal Forum

The Corporate Advisory Unit of LSD organised its 6<sup>th</sup> Annual Legal Forum 2011 at the Northam All Suite, Penang, which was attended by 80 participants from various divisions and TNB subsidiaries. The participants were educated on the legal implications of specific issues that affect TNB, so as to be able to handle such matters more effectively.

The legal forum took place on 30 June - 1 July 2011, with presentations on intellectual property rights, competition law, arbitration, mediation, exclusion clauses and consequential damages, guarantees, indemnities and the Personal Data Protection Act 2010.

#### Legal Bulletin

LSD published two editions of Legal Bulletin which heightens legal awareness across the board in TNB, and prevents staff from breaching the law while performing their daily tasks.

b. Litigation Unit's Knowledge Sharing Sessions

The Litigation Unit continued to meet with representatives from Distribution Division from every state to discuss supply issues (theft of electricity and outstanding bills) and asset issues (electrical accidents and property damage). The objective is to obtain updates on the status of litigation cases in the various states and to create greater awareness of the proper management of operations and consumers to prevent, or at least reduce, the number of claims against TNB.

The Litigation Unit also conducted various sessions with Generation, Transmission and Distribution Divisions on land matters to ensure compliance with the Electricity Supply Act 1990 with regard to land procurement and wayleave.

The Litigation Unit organised a session with Group Human Resources Division, Yayasan TNB and UNITEN on recovery action against ex-staff (housing, car and computer loans) and scholars.

## Other Services – Productivity and Quality Management



The Productivity and Quality Management Department (PQM) is responsible for propelling the Company towards its mission of product and service excellence. This is accomplished mainly through strategic transformation initiatives, performance enhancement projects and quality management programmes. Among the quality management programmes carried out are the President's Quality Award (AKP), participative management programmes like Work Improvement Teams – Innovative and Creative Circle (WIT-ICC) and 5S.

AKP assessments are held every two years. Based on the desktop assessment, in FY2010/11 TNB Transmission Headquarters emerged as the top scorer with 818 points. At the same time, most of the business units managed to increase their scores, resulting in TNB's average score improving from 768.47 to 778.05 points out of 1,000. The AKP 2011 assessment focuses on business results, innovation, team work, communication, employee involvement and customer/stakeholder initiatives.

In FY2010/11, TNB entered in three categories of the Platts Global Energy Awards – Power Company of The Year, CEO of The Year and Lifetime Achievement Award.

TNB continues to maintain its tradition of WIT-ICC activities, with over 800 active teams throughout the organisation. The best teams entered the Malaysia Productivity Corporation (MPC) National Innovative and Creative Circles Convention. Eight teams took part in this competition in FY2010/11. TNB also continued to implement the 5S concept throughout the organisation in order to promote a quality, safe and conducive work environment. To date, almost all TNB business units and all 10 power plants under the Generation Division have been 5S certified by MPC. The Distribution Division is aggressive in ensuring that the 5S culture is sustained and practised in all its certified offices. Two of the division's four warehouses. Gudang Bukit Sentosa in the central region and southern region's Gudang Melaka, received their certifications in June and July 2011 respectively. The Generation and Transmission Divisions, meanwhile, were already 100% certified. TNB has also embarked on a 5S programme with a Save (Energy, Resources, the Earth) Programme in line with the overall strategy of Going Green.

The Process Standardisation & Improvement (PSI) programme is a major initiative that propels TNB towards Business Excellence. The Company as a whole is now ISO 9001:2008 certified. Currently, TNB has 1,994 standardised processes supported by a pool of appointed ISO teams consisting of management representatives, document control managers and internal auditors.



The Service Excellence 10/10 (SE10/10) and Ops-Trim-X strategic programmes have been completed successfully and are now closed.

In the year under review, TNB embarked on the second phase (2011-2015) of its 20-Year Strategic Plan, called Gemilang 2015, under which 28 key initiatives have been identified for FY2011. PQM has been tasked with facilitating these initiatives, among which is the creation of a new culture in TNB. Towards this end, PQM has identified 12 members for a culture change taskforce and a large culture community (change agents) to carry out the new initiative.

To date, 36 Special Change Projects have been undertaken by PQM throughout the company.



TNB EMBARKED ON THE SECOND PHASE (2011-2015) OF ITS 20-YEAR STRATEGIC PLAN, CALLED GEMILANG 2015, UNDER WHICH 28 KEY INITIATIVES HAVE BEEN IDENTIFIED FOR FY2011.



and satisfaction index surveys were carried out. PQM also held a few well-received sessions on how to communicate effectively, and conducted a team dynamics session for REMACO in Sandakan.

PQM aspires to carry out more initiatives and activities to enhance the productivity and quality in TNB so as to propel the organisation to the forefront of the power sector globally.



## Towards Greater

DATO' RAZALI BIN AWANG Chief Information Officer

# Lestomer satisfaction index

### **OPERATIONS REVIEW**

ICT Division is responsible for ensuring that TNB's ICT infrastructure and services are constantly aligned to the Company's strategic business direction and dynamic business requirements. The division continuously upgrades and innovates its Information and Communications Technology solutions and services to make the enterprise more flexible and efficient as well as to boost productivity.



Such dedication has earned ICT Division top ranking in TNB's Internal Customer Satisfaction Survey (TICSS) over the last three years, as well as a consistent score of over 9.0 in its service delivery Customer Satisfaction Index (CSI).



### ICT IS CRUCIAL TO REALISING THE GEMILANG 2015 ASPIRATIONS THROUGH GROWTH, GLOBALISATION AND BEING GREEN.

In moving towards Gemilang 2015, ICT has embarked on several major projects which not only support TNB's green agenda, but also directly support the strategic business initiatives of other divisions.

•	Supply Chain Management (SCM)	• This project supports Group Procurement Division's goal to improve its business processes via best practices, particularly in the areas of tendering and purchasing, spend analysis, contract management and supplier relationship management. The automation of key procurement processes will not only reduce human error but is expected to improve procurement lead-time. Solution components such as supplier and buyer self-service portals provide additional value to both external and internal customers, thereby enhancing the customer-centricity of Procurement Division. This project is also viewed as a green initiative, as the automation of processes and use of online portals will greatly reduce paper consumption.
•	Employee Self-Service (ESS) Non-Exec e-Leave	<ul> <li>This is an extension of the existing ESS leave module and caters for 12,000 non-executives who have access to corporate email. The project is part of a bigger roadmap to extend ESS capabilities to all TNB staff. ESS has already proven to improve the efficiency and turnaround time of leave and claims applications. While being green (by reducing paper consumption), it further enhances the standardisation of business processes throughout TNB to incorporate industry best practices.</li> </ul>

### **Towards Greater Innovation**

Multi-Protocol Label Switching (MPLS)
 MPLS network is an initiative within the Integrated Data Network (IDN) framework that merges the Corporate and Operations networks into a single network for enhanced data services with Quality of Service (QoS), improved security, centralised management and increased efficiency. This will result in improved service availability, better resource utilisation and enhanced customer service.

- Sustainability Achieved via Energy Efficiency (SAVE)
   SAVE is a joint effort by the Ministry of Energy, Green Technology and Water and TNB to improve energy efficiency in Malaysia. Championed by the Distribution and ICT Divisions, it encourages consumers to use energy efficient appliances. The SAVE programme was launched in July 2011 and is on-going nationwide for 7.4 million TNB ordinary power consumers. Eligible customers can log on to an online portal and print out rebate vouchers, which can then be redeemed at some 2,000 electrical goods retailers. The system is accessed by 134 Kedai Tenaga and is also extended to SESB and SESCO to cater for consumers in East Malaysia.
- Corporate Enterprise Project Management (EPM)
   This initiative is the first stage of standardising a streamlined solution to cater for all project management requirements in TNB. While Phase 1 covers Generation, Transmission and ICT Divisions, the solution will eventually be extended to all divisions. The aim is to provide a standardised PMI-compliant best practices project management platform integrated to the existing corporate back-end systems. EPM has the added benefit of providing a scalable, configurable multi-tenanted solution which replaces existing proprietary, disparate project management systems, thereby reducing the complexity of TNB's IT environment.
- Governance, Risk and Compliance (GRC)
   This project manages and monitors access to TNB's enterprise systems, and facilitates the governance and management of selected privileged users who have full access of their modules for a certain timeframe to handle high-impact system crises. Its benefits include identifying Segregation of Duties (SoD) risks that may result in fraud; Automated Continuous Compliance & Monitoring that provides continuous identification of SoD risks; automation of the SoD risk identification process; and compliance with government industry regulations and internal company policies.

### PROSPECTS

ICT Division will continue to keep pace with the latest innovations in the ICT industry to remain relevant as the preferred ICT provider and enabler supporting TNB's core businesses. By driving process improvements, it will maximise value from the Company's IT investments and expenditure.



### Value Creation

As TNB continues to strive for excellence and create a sustainable business that is environmentally-friendly, the focus of Green IT initiatives will be to:

- Reduce energy consumption and increase energy efficiency
- Reduce paper consumption
- Reduce the consumption of resources, thereby reducing waste materials
- Reduce the movement of people or goods
- Reduce the storage of goods, thereby increasing office space efficiency

Towards this end, the Division has to date implemented an Electronic Document Management System (EDMS), Desktop & Video Conferencing as well as Server Consolidation & Virtualisation, while proposed quick win initiatives include virtual meeting workspaces, green printing, desktop power management, a green awareness campaign and a recycling campaign.

### **World-Class Standard**

In keeping with the latest utilities technology trends, TNB will embark on a smart grid to ensure operational efficiency and sustainability as well as improved customer service. ICT Division is taking the lead in transforming the existing grid into an intelligent, efficient, reliable and green network. Data integration, business processes and telecommunications infrastructure are key to the implementation of a smart grid, which should provide two-way communication, smart meters, billing information and trends, and information on energy consumption as well as supply demand. Through the smart grid, TNB will be able to sustain world-class power reliability and security.





### **Customer Focus**

ICT Division has been working to either enhance or replace TNB's current Customer Relationship Management (CRM) and Billing capabilities to have a complete, integrated platform solution. The new system will offer personalised customer service, and will allow TNB to respond more quickly to changes in business and regulatory requirements, while supporting deregulated market requirements (if necessary). The transformation will result in a utility-specific, industrial best practice solution.

### **Occupational Safety & Health Report**

IN LINE WITH TNB'S DIRECTION IN THE NEXT PHASE OF ITS 20-YEAR STRATEGIC PLAN, "GEMILANG 2015 – GROWTH, GLOBAL, GREEN", THE COMPANY IS CURRENTLY UNDERTAKING AND IMPLEMENTING VARIOUS INITIATIVES TO ENSURE OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT PRACTICES ARE MOVING TOWARDS INTERNATIONAL STANDARDS IN COMPLIANCE.

New technology in occupational safety and health (OSH) are being sourced and implemented encompassing the core business and subsidiaries.

### **OSH** Awareness Programs

During the period under review, a number of OSH awareness and training programs with the theme "Energising Occupational Safety, Health & Environment through Effective Leadership" were organized specifically targeted to management personnel and safety practitioners to achieve the following objectives:

- Enhance knowledge and experience on OSH and environment practices among management personnel and safety practitioners
- Ensuring current OSH and environment practices are meeting the necessary requirements and in compliance to relevant laws and regulatory standards
- Knowledge sharing on the latest development and new technologies adopted in the field of OSH and environment
- Nurturing OSH and environment culture among management personnel who act as the policy makers of the company to mitigate the risk of accident rates and environmental damage



The 3<sup>rd</sup> TNB OSH Seminar for Top Management was held on 3 March 2011, graced by YB Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources and Chairman for the National Council of Occupational Safety and Health, Malaysia who delivered the Keynote Address reminding our management personnel on the responsibility and importance of safety in all aspects of management. Papers were presented by top officials from enforcement agencies such as Department of Occupational Safety and Health, Department of Environment and the Energy Commission.

The 5<sup>th</sup> TNB OSH Conference which was designed specifically for middle management and safety practitioners was held over two days on 30-31 May 2011. Papers on various topics of OSH and environment were presented by specialists from their respective fields. Approximately 400 participants who attended the conference benefited from enhancing their knowledge and networking with fellow safety practitioners.

The 5<sup>th</sup> TNB National OSH Symposium which was held from 29 – 30 March 2011 organised by OSHE Department in collaboration with Universiti Tenaga Nasional (UNITEN) received very encouraging response from the participants. Subsequently, state level symposiums were also held in Jasin, Johor Bahru, Kota Bharu and Kuantan respectively.

### Safety Excellence Management System, SEMS

Safety Excellence Management System (SEMS), the OSH management system used throughout TNB and its subsidiary companies were reviewed and improved in line with the changing needs of today's technology and specific requirements of the divisions. SEMS audits were conducted annually to continuously assess the company's overall level of OSH performance.

The increase in OSH performance coincides with the increase of STAR rating achieved by the divisions during SEMS audits which were carried out. Subsidiary companies are working hard to achieve the same performance as achieved by the core divisions.

The STAR rating achievement is in line with the decline in overall TNB accident rate which is at 1.38 per 1000 employees. However, more effort is still required to curb the detrimental effect of accident to ensure TNB's OSH practices are comparable with global standards. Programs such as Safety Quality Audit (SQA), Permit to Work Cross Audit (PCA) and periodic inspections were carried out to help improve this performance.

#### **Performance and Recognition**

TNB appreciates and recognises the hard work done by the stations which achieve excellent OSH performance through the annually held TNB's Safety Excellence Management Awards. Top three stations from each division which achieve the highest scores based on SEMS audit results were awarded accompanying trophy and cash prizes. SJ Cenderoh from Generation Division, Asset Maintenance (Pahang) from Transmission Division, Branch Manager (Muar) and State General Manager (Negeri Sembilan)'s office from Distribution Division led their respective divisions. TNB's Safety Excellence Management Awards 2010 presentation ceremony was held in conjunction with TNB's 5<sup>th</sup> OSH Conference on 30 May 2011.



At the prestigious OSH Awards 2010 presentation ceremony organised by Malaysian Society of Occupational Safety and Health (MSOSH) on 22 July 2011, TNB bagged 40 awards placing the company on par with industry OSH performance. Highlights from the awards presentation ceremony for TNB are SJ Cenderoh which received the highest 'Gold Merit Award', two years in a row along with SJ Putrajaya. Other awards received were 26 Gold Class I, 11 Gold Class II and a Silver Award.

All Generation Stations are now OHSAS 18001:2007 certified while Transmission Asset Maintenance (Negeri Sembilan), Transmission Asset Development (North) and TNB Distribution (Kuala Lumpur) have also successfully obtained their certification.

In-line with the OHSAS 18001:2007 certification, all Generation Stations and Transmission Asset Maintenance (Pulau Pinang) have obtained the EMS-ISO 14001 certification. SJ Cameron Highlands has also been certified with Integrated Management System by SIRIM with the integration of ISO 9001, ISO 14001, OHSAS 18001 and MS 1722, paving the way for other stations towards world class achievement.

### **Occupational Health**

Occupational health risks in the workplace are also of concern. Awareness programs on occupational diseases were carried out in all divisions including those who are working in offices who may have unknowingly been affected by diseases. Places of high risk were identified and precautionary and preventive measures were taken to protect the employees. In Transmission Division, linesmen aged 35 years and above are advised to go for medical examinations. In Generation and Transmission Division, mandatory medical examinations were conducted on personnel exposed to mineral dust.

Health checks and talks are included as programs for OSH campaign held annually by each station in all divisions. Programs such as "Morning Walk for Health", friendly games, and trees planting are part of the activities held to promote health and thus support the Gemilang 2015 initiative.

### **Public and Contractors**

Seminar Kesedaran Keselamatan Elektrik (SKKE), electrical safety awareness seminar for school, jointly organised by various departments continues to be held in various states. TNB safety officers are also invited to give electrical safety talks in schools and hold dialogue sessions with paddy farmers and rice harvesters on various aspects of avoiding electrical hazards.

NIOSH TNB Safety Passport (NTSP) is enforced for all contractors working in TNB premises. The drop in the number of accident cases involving contractors proved the effectiveness of this program. The module was reviewed and pre and post tests were conducted.

Contractors handling TNB projects are also subjected to the Safety Compliance Audit (SAFCA) periodically through the projects in the Transmission Division. Grades are allocated and warning letters are issued for those not meeting the performance requirements.

The competency requirements by Energy Commission are also enforced to the contractors. Periodic inspections were conducted by TNB OSH officers to ensure that all legal requirements are implemented as required by the Occupational Safety and Health Act, 1994 and the Electricity Supply Act, 1990.

# SWITCH (D) TO HELP

University Tenaga Nasional (UNITEN) is our commitment towards providing the younger generation with the necessary tools for a brighter future. We believe our corporate responsibility initiatives should focus on programmes that allow us to give back to the community in a noble manner, which in return enables us to build longer lasting ties with them.

THE BOARD AND MANAGEMENT OF TNB ARE COMMITTED TO ENSURING GOOD CORPORATE GOVERNANCE THROUGHOUT THE COMPANY. ON 26 JULY 2011, THIS COMMITMENT WAS REINFORCED WITH THE LAUNCHED OF THE CORPORATE INTEGRITY PLEDGE WITH THE MALAYSIAN ANTI-CORRUPTION COMMISSION BY WHICH THE COMPANY REAFFIRMS ITS PLEDGE TO TRANSPARENCY AND INTEGRITY, AND TO STRENGTHENING ITS INTERNAL CONTROL TO ELIMINATE, HINDER AND FIGHT CORRUPTION.

In its continuous pursuit to enhance its corporate governance, TNB regularly reviews its existing framework and governance practices to ensure they remain relevant and robust within the challenging and changing business environment.

A comprehensive Outsourcing Policy and Guidelines introduced includes sound and responsive risk management and corporate governance practices. The policy aims to ensure that TNB's available resources on core competencies are protected so as to maintain these core competencies. It also provides financial and non-financial benefits to ensure appropriate controls are established for all outsourced activities on factors such as costs, processes and service. The Outsourcing Policy and Guidelines comply with ISO 9001:2008.

TNB has also established a Quality Assurance Policy and Procedures to ensure its suppliers, contractors and manufacturers adopt good quality management in their operations and supply quality products at competitive prices and at the best service standard.

To strengthen TNB's commitment to the well-being of the environment, the Company has introduced a Green Energy Policy emphasising its support of the national green agenda. According to this policy, TNB will minimise its environmental impact by ensuring its operations are sustainable and efficient, and by delivering green energy through appropriate technologies and investments. The Company is well positioned to drive the nation's green energy agenda as it possesses the necessary experience and technology.

To ensure its policies and procedures are kept updated, the Procurement Policies and Procedures and the Limits of Authority that set out the framework of the Company's procurement activities and financial operations are also regularly reviewed. This is part of the continuous review and assessment of the Divisions' operational requirements, which are essential to driving a dynamic business environment and require a proper balance of operational expediency and effective management control. The review is also in line with Government Procurement policies and its aspiration to champion procurement best practices and fair competition in driving value creation and cost savings. The Revised Procurement Policy and Procedures set out clear guidelines and procedures for procurement personnel, including their roles and responsibilities in eliminating fraud and promoting sustainable practices.

The Board, to the best of its knowledge, confirms that the Group has applied the principles as set out in Part 1 and has complied with the best practices as set out in Part 2 of the Malaysian Code on Corporate Governance (Revised 2007). The Board remains firmly committed to the principles of Corporate Governance in realising stakeholders' value as evidenced by continuous efforts to ensure greater transparency and accountability throughout the Company.

TNB's commitment to maximising shareholders' value without compromising other stakeholders' interest amid the challenging operating environment is evidenced by the numerous awards and accolades received, as detailed on pages 17 to 21 in this Annual Report.

### THE BOARD OF DIRECTORS

TNB is headed by an effective and experienced Board comprising individuals with the highest level of integrity and a wealth of experience, skills and expertise, from diverse professional backgrounds.

The composition of the Board of Directors complies with the requirements of Paragraph 15.02 of the Main Market Listing Requirements of Bursa Malaysia Securities Berhad (MMLR) and the principles and best practices of the Malaysian Code of Corporate Governance (Revised 2007), as more than half of the members are Independent Directors. The Independent Directors of TNB fulfill the criteria of 'Independence' as prescribed under Paragraph 1.01 of the MMLR.

All Board members are mindful of their fiduciary duties and responsibilities affecting their conduct as Directors of the Company and as such are fully accountable for the performance of the Company.

### **Composition of the Board**

The Board of TNB comprises 11 members, of whom six (6) are Independent Non-Executive Directors, three (3) Non-Independent Non-Executive Directors and two (2) Non-Independent Executive Directors.

The higher proportion of Independent Directors on the Board demonstrates TNB's commitment to upholding the principles of Corporate Governance as well as to safeguarding the interest of the Company's minority shareholders. The Independent Non-Executive Directors of TNB are Dato' Zainal Abidin bin Putih, Tan Sri Dato' Hari Narayanan a/I Govindasamy, Dato' Fuad bin Jaafar, Tan Sri Dato' Seri Siti Norma binti Yaakob, Dato' Abd Manaf bin Hashim and Chung Hon Cheong.

The Board Nomination and Remuneration Committee conducts an annual review of the composition and the required mix of skills as well as experience and competencies of the Board and its Committees.

The Board is satisfied with the existing number and composition of its members and is of the view that, with the current mix of skills, knowledge, experience and strength, the Board is able to discharge its duties effectively and in the utmost competent manner.

The profiles of the Board of Directors are set out on pages 52 to 59 in this Annual Report.

#### Appointment to the Board

The appointment of Directors of TNB is made either by the Minister of Finance Incorporated (MOF Inc.), being 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 Nomination and Remuneration Committee is entrusted with the responsibility of assessing and considering the capabilities and qualities of candidates to be appointed as Board members as well as Board Committee members, taking into consideration the required mix of skills, competencies and experience relevant to the business of TNB prior to recommending to the Board.

During the Financial Year under review, there were two (2) new appointments to the Board.

### **Roles and Responsibilities**

The Board, in discharging its duties and responsibilities, is fully committed to ensuring that best practices in Corporate Governance are adhered to in order to enable the Company to achieve its strategic objective of becoming a leading corporation in the energy and related business globally. The Board continuously ensures that the interests of customers, investors, stakeholders and employees are safeguarded.

The Board has the responsibility to formulate, periodically review and approve the overall business and organisation strategies and key policies of the Company. The Board also sets the Company's core values and adopts proper standards to ensure that TNB operates with integrity and in compliance with the relevant rules and regulations.

The Board is primarily responsible, among others, for:

- formulating, reviewing and approving the Company's strategic business plans
- · identifying and managing principal risks affecting the Company
- reviewing the adequacy and integrity of the Company's internal control system
- overseeing the conduct and the performance of the Company's businesses
- · approving the appointment and compensation of senior management
- approving new policies pertaining to the remuneration and benefits of employees
- approving changes to the corporate organisation structure

The Board of Directors has a collective responsibility for the management of the Company. The Executive Directors are directly responsible for business operations while the Non-Executive Directors are responsible for bringing independent judgment and scrutiny to decisions taken by the Board and providing objective challenges to the Management.

The existing structure of the Board ensures that no single individual or group dominates the decision-making process. The roles of the Chairman and the President/Chief Executive Officer are separately held, and the division of their responsibilities clearly established, with each having distinct and clearly defined authority and responsibilities. This ensures an appropriate balance of roles, responsibilities and accountabilities at the Board level, allowing the Board to discharge its duties effectively.

TNB Board is helmed by Tan Sri Leo Moggie, an inspiring leader with in-depth knowledge of the energy industry. With his vast experience, Tan Sri Leo Moggie has led the Board in setting the Company's values and maintaining a relationship of trust with and between the Non-Executive and the Executive Directors. He solicits opinions and is always open to new ideas, thus encouraging healthy discussion at Board meetings. He continues to demonstrate the highest level of Corporate Governance.

Dato' Sri Che Khalib bin Mohamad Noh, the President/Chief Executive Officer, is primarily responsible for overseeing the day-today operations of TNB and ensuring the smooth and effective running of the Group. One of his primary tasks is to set up the overall strategic policies and chart the direction of the business operation. He is also responsible for reporting, communicating and recommending key strategic and operational matters and proposals to the Board for decision-making as well as to implement policies and decisions approved by the Board. Dato' Sri Che Khalib bin Mohamad Noh is supported by his Management team as well as by the Management Committees, namely the Group Executive Council Committee, Group Executive Management Committee, Group Management Tender Committee, Energy Supply Committee, Group Risk Management Committee, Fuel Procurement Executive Committee and Information and Communication Technology Governance Council.

The six (6) Independent Non-Executive Directors comprise individuals of high calibre and credibility from diverse backgrounds and experience, who together play a significant role in ensuring that all matters proposed by the Management are scrutinised and deliberated impartially while taking into account the interest of the shareholders and stakeholders. The Independent Non-Executive Directors are not involved in the day-to-day management of the Company and do not participate in any business dealings, so as to be able to provide independent and sound judgment. They also provide the relevant checks and balances in the proceedings of the Board and mitigate any possible conflict of interest.

Dato' Zainal Abidin bin Putih, Chairman of the Board Audit Committee, has been identified as the Company's Senior Independent Non-Executive Director to whom concerns of shareholders and stakeholders may be conveyed. A well-respected figure in the accounting fraternity with more than 30 years' experience, he brings to the Board a wealth of insight, knowledge and experience. Among the responsibilities of the Senior Independent Non-Executive Director are to ensure that the views of Independent Directors are given due consideration and act as a medium of communication between the Board and shareholders. The Company's Senior Independent Non-Executive Director is also expected to promote the highest level of Corporate Governance and to lead in all governance-related issues.

The Senior Independent Non-Executive Director may be contacted at the following email address: cosec@thb.com.my.

### **Board Committees**

The Board has established five (5) Committees, each delegated with specific authorities to assist the Board in executing its duties and responsibilities. The functions of the Committees are governed by clearly defined Terms of References (TORs), which are reviewed periodically to ensure they are relevant and up-to-date.

The Board Committees assist the Board in making informed decisions through in-depth deliberation on complex issues which would be impractical for the entire Board to handle. Although the Board has delegated specific responsibilities to several Board Committees, it takes ultimate responsibility for all matters concerning TNB. In this respect, each Committee has to submit to the Board of Directors reports of its deliberations and recommendations for notation and/or decisions.

The salient terms of reference of the five (5) established Board Committees are as follows:

### Board Audit Committee (BAC)

Principal Duties and Responsibilities

• The terms of reference of the Board Audit Committee are detailed on pages 183 to 187 in this Annual Report.

### Board Tender Committee (BTC)

Principal Duties and Responsibilities

- To establish the framework of TNB's Procurement Policy and Procedures.
- To advise the Board regarding the details and implementation of the framework of TNB's Procurement Policy and Procedures.
- To assist the Board in regulating the compliance of Senior Management and other Executive Directors to TNB's Procurement Policy and Procedures.
- To ensure TNB complies with the applicable laws, regulations, rules and guidelines to achieve best practices in its procurement of equipment, materials, work and services.

The Chief Procurement Officer or his representative attended all the BTC meetings upon invitation to brief the BTC on specific issues as and when required by virtue of his role as the advisor on Procurement Policy & Procedures in the Company.

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### Board Nomination and Remuneration Committee (BNRC)

Principal Duties and Responsibilities

- To identify and recommend new nominees to the Board, Board Committees and TNB's Group of Companies.
- To assist the Board in reviewing the Board's required mix of skills, experience and other qualities, including core competencies which Non-Executive Directors should bring to the Board.
- To implement the process formulated by the Board to assess the effectiveness of the Board as a whole, the Board Committees and the contribution of each individual Director.
- To determine and recommend to the Board the remuneration packages of Non-Executive Directors.

### Board Finance and Investment Committee (FIC)

Principal Duties and Responsibilities

• To establish a framework of policies to assist the Committee in making recommendations to the Board in relation to the management of the Company's financial and investment activities as well as evaluating corporate proposals.

### Board Disciplinary Committee (BDC)

Principal Duties and Responsibilities

- To manage disciplinary issues and actions with regard to employees' misconduct except for the hearing of appeal of
  executives of grade M15 and above or equivalent grade with regard to disciplinary cases, for which the power lies with the
  Board of Directors.
- To establish new disciplinary procedures or amend existing procedures whenever applicable subject to the Board's approval.

The composition of the Board Committees, the number of meetings held and the attendance of its members are as follows:-

### Board Audit Committee (BAC)

Committee Members	Attendance	%
Dato' Zainal Abidin bin Putih	15/15 (Chairman)	100
Tan Sri Dato' Hari Narayanan a/I Govindasamy	15/15	100
Dato' Abd Manaf bin Hashim	15/15	100
Chung Hon Cheong <sup>1</sup>	8/11	73
Dato' Mohammad Zainal bin Shaari <sup>2</sup>	8/11	73

### Board Tender Committee (BTC)

Committee Members	Attendance	%
Datuk Nozirah binti Bahari <sup>3</sup>	1/1 (Chairman)	100
Dato' Mohammad Zainal bin Shaari	11/11	100
Dato' Fuad bin Jaafar	10/11	91
Dato' Abd Manaf bin Hashim⁴	9/9	100
Datuk Puteh Rukiah binti Abd Majid⁵	7/7	100
Suria binti Ab Rahman (Alternate Director to Dato' Mohammad Zainal bin Shaari)	-	-

### Board Nomination and Remuneration Committee (BNRC)

Committee Members	Attendance	%
Tan Sri Leo Moggie	6/6 (Chairman)	100
Dato' Mohammad Zainal bin Shaari	4/6	67
Tan Sri Dato' Hari Narayanan a/I Govindasamy	5/6	83
Dato' Fuad bin Jaafar	6/6	100
Tan Sri Dato' Seri Siti Norma binti Yaakob	5/6	83
Suria binti Ab Rahman (Alternate Director to Dato' Mohammad Zainal bin Shaari)	-	-

### Board Finance and Investment Committee (FIC)

Committee Members	Attendance	%
Tan Sri Leo Moggie	4/4 (Chairman)	100
Dato' Mohammad Zainal bin Shaari	4/4	100
Dato' Zainal Abidin bin Putih	4/4	100
Tan Sri Dato' Seri Siti Norma binti Yaakob	4/4	100
Chung Hon Cheong <sup>1</sup>	4/4	100
Suria binti Ab Rahman (Alternate Director to Dato' Mohammad Zainal bin Shaari)	-	_

### Board Disciplinary Committee (BDC)

Committee Members	Attendance	%
Tan Sri Dato' Seri Siti Norma binti Yaakob	3/3 (Chairman)	100
Datuk Nozirah binti Bahari <sup>3</sup>	_*	-
Dato' Fuad bin Jaafar	3/3	100
Dato' Abd Manaf bin Hashim	3/3	100
Datuk Puteh Rukiah binti Abd Majid⁵	2/2	100

\* No meeting was held since the appointment date.

#### Note:-

1 Appointed as member of BAC and FIC w.e.f. 30 November 2010

- 2 Ceased as BAC member w.e.f. 24 May 2011
- 3 Appointed as Chairman of BTC and member of BDC w.e.f. 28 June 2011
- 4 Appointed as BTC member w.e.f. 14 October 2010
- 5 Resigned as Chairman of BTC and member of BDC w.e.f. 1 April 2011

### **Board Meetings**

The Board met 14 times during the Financial Year ended 31 August 2011, and all the Directors complied with the MMLR requirement to attend at least 50% of Board meetings held in the Financial Year under review. The Board meetings are scheduled well in advance, with dates for the year scheduled in the month of October of the preceding year. This is to facilitate the Directors to plan ahead and to ensure they are able to block the relevant dates in their respective schedules. Special Board meetings may be convened as and when the need arises to consider urgent matters that require the Board's consideration. In between Board meetings, approval of the Directors can be sought by way of Directors Circular Resolutions, which are duly ratified at subsequent Board meetings.

A pre-Board meeting is also held prior to any Board meeting to serve as a platform for the Management to brief the Chairman on matters to be deliberated at the Board meeting. Senior Management and external advisors may be invited to attend Board meetings where necessary to advise the Board and to furnish additional information or clarification on matters tabled for the Board's consideration. It has also been the practice of the Board to provide the views or comments of any member who is absent at any meeting.

Board meetings may be held at operating units or sites of new projects to allow the Board to better assess the operational progress, status of development or any other important issue.

Issues deliberated and decisions made during Board meetings are recorded by the Company Secretary. Minutes of each Board meeting are circulated to all Directors prior to the confirmation of the Minutes. The Minutes are taken as an accurate record of the Board proceedings once approved and agreed by the Board. Minutes and resolutions passed at each Board and Board Committee meeting are kept in the statutory register at the registered office of the Company.

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### **Statement of Corporate Governance**

Attendance details of each Board member during the Financial Year ended 31 August 2011 is as follows:

	Board of Directors (BOD) Meeting		
Name of Directors	Attendance	%	
Tan Sri Leo Moggie	13/14 (Chairman)	93	
Dato' Sri Che Khalib bin Mohamad Noh	14/14	100	
Datuk Nozirah binti Bahari <sup>1</sup>	3/4	75	
Dato' Mohammad Zainal bin Shaari	11/14	79	
Dato' Zainal Abidin bin Putih	14/14	100	
Tan Sri Dato' Hari Narayanan a/I Govindasamy	14/14	100	
Dato' Fuad bin Jaafar	14/14	100	
Tan Sri Dato' Seri Siti Norma binti Yaakob	14/14	100	
Dato' Abd Manaf bin Hashim	14/14	100	
Dato' Ir. Azman bin Mohd	11/14	79	
Chung Hon Cheong <sup>2</sup>	11/13	85	
Datuk Puteh Rukiah binti Abd Majid <sup>3</sup>	8/8	100	
Suria binti Ab Rahman (Alternate Director to Dato' Mohammad Zainal bin Shaari)	-	_	

#### Note:-

2 Appointed as Board member w.e.f. 1 October 2010

3 Resigned as Board member w.e.f. 1 April 2011

### **Directors' Code of Ethics**

The Board of Directors observes a code of ethics based on the code of conduct expected of Company Directors as set out in the Company Directors' Code of Ethics established by the Companies Commission of Malaysia.

### **Directors' Handbook**

Each Director of TNB is guided by the Directors' Handbook, which provides reference for the Directors in relation to their professional responsibilities as well as the terms and conditions of service. The Directors' Handbook is updated as and when the need arises so as to reflect any changes in the rules and procedures that govern the conduct of the Directors.

<sup>1</sup> Appointed as Board member w.e.f. 28 June 2011

### Indemnification of Directors and Officers

Directors and Officers are indemnified under a Directors' and Officers' Liability Insurance against any liability incurred by them in the discharge of their duties while holding office as Directors and Officers of the Company. The Directors and Officers shall not be indemnified where there is any negligence, fraud, breach of duty or breach of trust proven against them.

### Whistle-blowing Procedure

The Whistle-blowing procedure was established by the Company as a platform to channel complaints or grievances on any wrongdoing as well as weakness in the Company in order to enable the Company to take corrective and preventive action.

A whistle-blowing procedure strengthens good management and demonstrates accountability, providing good risk management and sound corporate governance practices. The whistle-blowing procedure allows complaints to be made by employees and the public against the Company while keeping the identity of the complainant confidential.

All complaints are investigated by an independent investigation team, and the outcome is communicated to the complainant.

Complaints can be chanelled online via http://wbis.tnb.com.my or by calling the toll-free line 1-800-888-862.

### Supply of Information and Access to Advice

The Board is supplied with full, adequate, quality and unrestricted information on a timely basis in order to enable it to discharge its duties and responsibilities effectively. The agenda of Board meetings is drawn up upon consultation with the Chairman at the pre-Board meetings after which the agenda and the Board papers are circulated to Board members at least three (3) working days prior to the Board meeting. This provides the Directors adequate time to peruse the Board papers and to review the issues to be deliberated in advance of the meeting as well as to obtain additional information and clarification if necessary.

The Board papers address the objectives, background, issues, implications, risks and other relevant information with regard to proposals in order to enable the Board to make informed and effective decisions.

The Board may also seek external and independent professional advice from experts on any matter in furtherance of its duties as is deemed necessary and appropriate, at the Company's expense.

To further strengthen the relationship between the Board and Management, an interactive session, internally known as the Board Breakout (BBO), is held to deliberate and exchange views and opinions in formulating strategic plans and to chart the direction of the Company. This session is also an avenue for the Management to highlight to the Board issues and challenges encountered by the Company for the Board's notation. This in turn will enable the Board to make an informed and sound decision as well as to provide opportunity for the newly appointed Directors to accustom themselves on the business and operational aspects of the Company. In the Financial Year under review, two (2) BBOs were held on 22 November 2010 and 23 May 2011.

### **Board Performance Evaluation**

An annual assessment is conducted of the Board's performance as a whole and the performance of its Committees. This is used as a tool to recognise the Board's strengths, and to identify gaps or areas for improvement for the Board as well as its Committees. The Board evaluates its overall performance against predetermined criteria, facilitated by the Company Secretary's office which circulates an evaluation questionnaire on the following key areas:

- Board Structure
- Board Operations & Interaction
- Board's Roles & Responsibilities
- Understanding the Committees' Roles
- Mix of Skills and Knowledge
- Commitment of Members
- Depth of Discussions

The findings of the evaluation are compiled into a report and deliberated, first, by the Board Nomination and Remuneration Committee and, subsequently, by the Board of Directors. For the Financial Year under review, the Directors concluded that the Board and its Committees as a whole had operated effectively and possessed all the necessary skills, experience and qualities required of them.

#### **Re-election of Directors**

Articles 135 (1) and (2) of the Company's Articles of Association provide that one third of the Board of Directors shall retire from office by rotation at each Annual General Meeting (AGM) and all Directors shall retire from office at least once in every three (3) years. The Directors to retire each year are those who have been longest in office since their appointment or their last reappointment.

Article 133 of the Company's Articles of Association stipulates that a Director appointed by the Board from time to time shall hold office only until the next AGM and shall then be eligible for re-election. Pursuant to Section 129 (2) and 129 (6) of the Companies Act, 1965, a Director who is over 70 years of age shall retire at every AGM and may offer himself for re-appointment to hold office until the next AGM of the Company.

Information on each Director standing for re-election and re-appointment at the forthcoming 21<sup>st</sup> AGM is contained in the Statement Accompanying the Notice of the 21<sup>st</sup> AGM.

### **Continuing Board Development**

All existing Directors of the Company have fulfilled the requirements prescribed by MMLR on the Mandatory Accreditation Programme (MAP). The newly appointed Directors, Chung Hon Cheong and Datuk Nozirah binti Bahari, completed the MAP within the stipulated time frame.

All newly appointed Directors undergo an induction session organised by the Management for an overview of the Group's operations, challenges and issues. During the Financial Year under review, an induction session to Stesen Janaelektrik Sultan Salahuddin Abdul Aziz, Kapar was organised by the Company for the newly appointed Directors to further enhance the understanding and knowledge on the operation of a power station.

The newly appointed Directors are also provided with a comprehensive information pack pertaining to the Company in order to facilitate them in discharging their duties.

The Company Secretary's Office, on an annual basis, organises an in-house Board Development Programme (BDP) as part of TNB's Continuing Board Development. The programme involves talks by distinguished guests. During the Financial Year under review, Professor Nabil N. El-Hage from ICLIF Leadership and Governance Centre spoke on Corporate Governance at the BDP held on 14 July 2011.

Apart from the in-house training programme, the Company Secretary assists the Board to fulfill the training needs of the Directors by sourcing for relevant courses/topics. The Board of Directors has attended training programmes in areas of regulatory development, leadership and corporate social responsibility organised by Bursa Malaysia Securities Berhad and the Malaysian Institute of Directors (MINDA).

In addition, the Company organises an annual Board Technical Visit as part of the Continuous Development Programme to enhance the Board's understanding and knowledge of the technical and operational aspects of the power sector as well as to keep abreast with the latest technology particularly for newly appointed Directors. A Board Technical Visit 2011 to Europe was held in June that toured the Run-of-River Hydro Power Station on the River Danube in Vienna; the Hydro Turbine Manufacturer in Weiz; 5,000MW Thermal Power Station in Belchatow, Poland; and a Co-Generation Power Plant in Moscow.

### **Directors' Remuneration Framework**

The Board Nomination and Remuneration Committee reviews the overall remuneration policy for the Non-Executive Directors, Executive Directors and Senior Management and thereafter submits its recommendations to the Board for approval.

The Board as a whole recommends the remuneration of the Non-Executive Directors to the shareholders for approval at the AGM. Non-Executive Directors are paid fixed monthly fees, meeting allowances and benefits-in-kind comprising reimbursement on electricity bills and business peripherals.

The policy for Directors' remuneration is to provide a package that is able to attract and retain Directors of calibre, thus acquire the leadership skills and experience required. The policy also ensures that the remuneration package commensurate with the Directors' responsibilities for the effective management and operations of the Company.

The remuneration package for Executive Directors is structured in such a way as to link rewards to corporate and individual performance. It comprises salary, allowances, bonuses and other customary benefits as accorded by comparable companies. A significant portion of an Excecutive Director's compensation package has been made variable, to be determined by performance during the year against individual Key Performance Indicators in a scorecard aligned with the corporate objectives as approved by the Board. The Executive Directors abstain from deliberation and voting on their remuneration at Board meetings.

The Board Nomination and Remuneration Committee reviews the performance of the Executive Directors annually and submits recommendations to the Board on adjustments in remuneration and/or rewards to reflect the Executive Directors' contributions towards the achievements of the Company for the year.

The details of the Directors' Remuneration (including benefits-in-kind) of each Director for the Financial Year ended 31 August 2011 are as follows:

		Director's Fee		Meeting Allowance			Benefits-in-Kind			
Name of Directors	(i) Salary & (ii) Contribution to EPF (RM)	Company (RM)	Subsidiaries (RM)	Company (RM)	Subsidiaries (RM)	(i) Bonus (ii) Variable Pay & (iii) Ex-Gratia (RM)	(i) Car Allowance & (ii) Special Allowance	Utilities (RM)	Others (RM)	Total (RM)
Executive Directors										
Dato' Sri Che Khalib bin Mohamad Noh	(i) 1,200,000.00 (ii) 207,744.00	-	-	-	-	(i) 4,000.00 (ii) 460,000.00 (iii) 240,000.00	(i) 60,000.00 (ii) 7,200.00	19,098.19	50,000.00	
	1,407,744.00					704,000.00	67,200.00	19,098.19	50,000.00	2,248,042.19
Dato' Ir. Azman bin Mohd	(i) 552,000.00 (ii) 96,115.00	-	-	-	-	(i) 4,000.00 (ii) 195,960.00	(i) 48,000.00	936.00	40,550.00	
	648,115.00					199,960.00	48,000.00	936.00	40,550.00	937,561.00
Non-Executive Directors										
Tan Sri Leo Moggie	-	220,000.00	340,000.00	49,000.00	32,000.00	-	-	4,793.75	2,000.00	647,793.75
Dato' Mohammad Zainal bin Shaari	-	*160,000.00	-	*52,700.00	-	-	-	26,422.65	12,328.10	251,450.75
Dato' Zainal Abidin bin Putih	-	160,000.00	-	54,600.00	-	-	-	15,572.40	1,500.00	231,672.40
Tan Sri Dato' Hari Narayanan a/I Govindasamy	-	160,000.00	22,000.00	48,250.00	2,550.00	-	-	8,296.80	11,500.00	252,596.80
Dato' Fuad bin Jaafar	-	160,000.00	44,000.00	46,150.00	6,800.00	-	-	9,396.65	15,187.45	281,534.10
Tan Sri Dato' Seri Siti Norma binti Yaakob	-	160,000.00	-	39,750.00	-	-	-	4,834.75	11,500.00	216,084.75
Dato' Abd Manaf bin Hashim	-	155,000.00	-	54,500.00	-	-	-	2,372.80	4,681.00	216,553.80
Chung Hon Cheong (Appointed w.e.f. 1 October 2010)	-	110,000.00	-	28,500.00	-	-	-	16,509.40	8,928.00	163,937.40
Datuk Nozirah binti Bahari (Appointed w.e.f. 28 June 2011)	-	21,000.00	-	6,000.00	-	-	-	-	-	27,000.00
Suria binti Ab Rahman – Alternate Director to Dato' Mohammad Zainal bin Shaari	-	-	-	*1,100.00	-	-	-	-	-	1,100.00
Datuk Puteh Rukiah binti Abd Majid (Resigned w.e.f 1 April 2011)	-	110,000.00	-	31,650.00	-	-	-	319.20	80,748.00	222,717.20
Tan Sri Dato' Lau Yin Pin @ Lau Yen Beng ( <i>Resigned w.e.f 15 September 2010</i> )	-	44,666.70	-	11,700.00	-	-	-	-	357,382.00	413,748.70
Total	2,055,859.00	#1,460,666.70	406,000.00	#423,900.00	41,350.00	903,960.00	115,200.00	108,552.59	596,304.55	6,111,792.84

\* Inclusive of RM160,000.00 and RM53,800.00 paid to Khazanah Nasional Berhad, in respect of Director's Fees and Meeting Allowances provided for Dato' Mohammad Zainal bin Shaari and Suria binti Ab Rahman.

# Inclusive of RM442,333.40 and RM67,650.00 paid to all Directors except for Datuk Nozirah binti Bahari in respect of arrears for Director's Fees and Meeting Allowances for the Financial Year 2010.

### **Company Secretary**

The Company Secretary's primary role is to advise the Board on issues relating to corporate compliance with the relevant laws, rules, procedures and regulations affecting the Board and the Group as well as best practices of good governance. In addition, the Company Secretary advises the Board on relevant affairs and ensures that the Directors' directorial and statutory obligations and responsibilities are adhered to.

The duties of the Company Secretary include, among others, the following:

- ensuring that all Board and Board Committee meetings are properly convened, conducted and constituted
- attending Board and Board Committee meetings and ensuring that their proceedings and decisions are accurately and sufficiently recorded
- ensuring that Minutes of meetings are properly kept for the purpose of meeting statutory obligations, as well as obligations arising from the MMLR and other regulatory requirements
- facilitating timely communication of key decisions and policies between the Board, Board Committees and Senior Management
- · ensuring all appointments and re-appointments of Directors are in accordance with the relevant legislations
- · handling company share transactions, such as the issuance of new shares and arranging for the payment of dividends
- advising Directors on regulatory compliance issues relevant to their duties such as the issuance of notice to Directors and Principal Officers on the closed period for trading in TNB's shares and disclosure of material information
- managing the necessary preparation and arrangements for general meetings to ensure smooth proceedings and adherence to regulations

All Directors have access to the advice and services of the Company Secretary at all times.

### EFFECTIVE COMMUNICATION WITH SHAREHOLDERS, INVESTORS AND STAKEHOLDERS

The Board of Directors of TNB acknowledges the importance of effective engagement with shareholders, investors and other stakeholders through clear, continuous and readily available communication channels. This is to ensure that the shareholders, stakeholders and investors are kept up-to-date and informed about the Company's business strategy, performance and operations so as to provide greater understanding of and confidence in the Company's success.

One important means of communication with shareholders, stakeholders and investors is the Annual Report, which contains comprehensive information on the financial statements, activities and operations of the Company. In support of green initiatives, TNB now produces its Annual Report in CD-ROM format together with a summarised version of the Financial Statements, Notice of AGM and Form of Proxy. However, shareholders may request for the hard copy of the Annual Report.

Another key forum of communication and dialogue with shareholders is the AGM. The Chairman and Senior Independent Director ensure that the Board is accessible to shareholders and that an open channel of communication is available. The President/Chief Executive Officer presents the financial performance of the Group and future prospects of the Company. At the meeting, the invited shareholders are at liberty to raise questions while the Directors and Senior Management will provide the answers and clarifications. A total of 4,131 registered shareholders and proxies at the 2010 AGM provides clear indication of the extensive engagement of shareholders.

In addition to engaging with stakeholders through the Annual Report and the AGM, announcements of material information to Bursa Malaysia as required by MMLR are made by the Company to enable stakeholders to make informed decisions and enhance the level of transparency.

The Annual Report, notices of general meeting, circulars to shareholders, quarterly financial results, notification of substantial shareholders and other information are made public and readily available on the Company's website at www.tnb.com.my, from which shareholders can access and download information on the Company.

The prompt and timely availability of information clearly enhances its value to shareholders and investors while reflecting the high standard of transparency that the Company seeks to achieve.

### **Investor Relations Activities**

The Board and Management of TNB recognise the importance of transparency and accountability to shareholders and investors, hence pursue the highest standards of corporate governance throughout the Company. In this regard, TNB has developed and maintains an Investor Relations Policy to ensure a high level of quality and service when information is provided to investors and stakeholders.

While various channels of communication are optimised to provide shareholders and investors with a balanced and comprehensive view of the Company's performance and issues faced in light of the challenging environment, the role of Investor Relations is entrenched as the communication platform between the Company and investors at large.

The Investor Relations & Management Reporting Department (IR & MR), a dedicated department 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 equal level of importance is placed on the need for investor relations to channel the views of the investment community back to the Management and the Board.

The Annual Investor Relations Programme serves to provide Management with opportunities and the platform to interact with investors, analysts as well as the media. Events and activities scheduled in the programme include:

- Quarterly results announcements
- Analyst briefings/conference calls
- Full-year results announcement
- Preparation and release of Annual Report
- AGM
- Site visits
- Domestic/International road shows
- Major international broker conferences

During the Financial Year under review, the Company, represented by its Senior Management, participated in various local and international events which included:

- Eleven conferences, forums and site visits organised by research houses and/or TNB:
  - (a) TA Securities Luncheon Kuala Lumpur
  - (b) CIMB Luncheon Kuala Lumpur
  - (c) Credit Suisse Luncheon Kuala Lumpur
  - (d) CLSA Asean Forum 2011 Bangkok
  - (e) Affin Investment/TNB Corporate Luncheon and Site Visit to Recycle Energy Sdn. Bhd. (RESB) Selangor

- (f) Credit Suisse Asian Investment Conference Hong Kong
- (g) Am Research/TNB Site Visit to TNB Janamanjung Sdn. Bhd. and Lekir Bulk Terminal Sdn. Bhd. Perak
- (h) Affin Investment/TNB Teach-in Session and Site Visit to National Load Despatch Centre (NLDC) Kuala Lumpur
- (i) Deutsche Bank Access Asia Conference Singapore
- (j) TNB Site Visit to Kapar Energy Ventures Sdn. Bhd. (KEV) Selangor
- (k) OSK Asean Corporate Day Kuala Lumpur
- Announcements of quarterly financial results to the financial community and the media. Teleconferencing facilities were arranged to enable the investment communities at major financial centres worldwide to participate in the briefings. On average, some 328 participants from the financial community and the media attended or took part in the quarterly presentations during the Financial Year.
- The quarterly financial results and analysts' presentation materials were subsequently made available on the Company's website to enable broader access to Company information by investors and other stakeholders.

In addition to the Company's website, investors can contact the Company at any time by email or other correspondence. Designated company officers at the Department are available to provide information to shareholders upon request.

- A special briefing on the tariff adjustment, attended by about 90 research analysts and members of the media, including via teleconferencing.
- Site visits organised by IR to update the financial community on the latest Company developments. This is spelled out in the IR Policy which states that "managing investors needs to have regular updates on the Company by arranging/organising investor meetings and field trips/site visits". IR organised visits to:
  - (a) RESB on 9 March 2011.

TNB, together with Afffin Investment Bank, organised this site visit to provide better understanding of the operations of a renewable energy plant.

(b) TNB Janamanjung Sdn. Bhd. (Sultan Azlan Shah Power Plant, Manjung) and Lekir Bulk Terminal Sdn. Bhd. on 4 May 2011 and KEV on 15 June 2011.

These visits were to help research analysts and fund managers understand the technical day-to-day operations of power plants.

- (c) TNB's NLDC on 11 May 2011.
- This visit was conducted to provide understanding of the functions of the NLDC in monitoring the National Grid and planning for the dispatch of electricity by all power stations in the peninsula.
- One-on-one and group meetings with equity and fixed income investors and analysts. The sessions allowed TNB to engage local and foreign fund managers on growing concerns over the impending Fuel Cost Pass-Through implementation and insufficient gas supply. This was done through regular meetings with the financial community, which help enhance investors' understanding and perception of the Company, as well as regain their confidence in the Company's commitment to its shareholders.
- In-house and external meetings. Management and IR officers frequently played host to local and international fund managers and investors who had requested for meetings. During the Financial Year under review, TNB held approximately 73 of such meetings (excluding announcements of quarterly financial results).

In the Financial Year under review, TNB had approximately 179 meetings (including conferences, road shows and site visits) with equity research analysts, fund managers and investors who had requested to meet up with company officials.

### **ACCOUNTABILITY AND AUDIT**

### **Financial Reporting**

The Board is committed to providing a balanced and accurate assessment of the Company's financial performance, its position and prospects via the Audited Financial Statements and quarterly financial reports as well as through material disclosure made in accordance with the MMLR.

The Board Audit Committee (BAC), with both internal and external auditors, reviews the Audited Financial Statements and the quarterly financial reports of the Company prior to deliberation by the Board for approval in order to ensure that the disclosures are accurate, adequate and comply with the requirements imposed by the authorities.

### **Relationship with the Auditors**

The Board has established a transparent relationship with both the internal and external auditors through the BAC. The BAC has the authority to communicate directly with external and internal auditors. The Executive Directors and Management are present at BAC meetings only as and when required, upon the invitation of the BAC. The role of the BAC in relation to the auditors is set out on pages 178 to 180 in the Board Audit Committee Report.

### **Internal Auditors**

The Group Internal Audit function is performed in-house by the Group Internal Audit Department (GIAD) which is independent from the operations and activities of the Group in order to maintain impartiality. The GIAD operates in compliance with the Group Internal Audit Charter which spells out its mission, roles and responsibilities as well as the authority approved by the BAC. Details of Group Internal Audit's functions and responsibilities are set out in the Statement of Internal Audit Function on pages 181 to 182 in this Annual Report.

### **External Auditors**

The external auditors are given the privilege to communicate directly with the Board and the BAC at meetings where the quarterly financial reports and Audited Financial Statements are to be deliberated. Apart from that, BAC meets with the external auditors without the presence of the Executive Directors and Management as part of the medium for greater exchange of views and opinions between both parties. During the Financial Year under review, BAC met with the external auditors on 28 October 2010 and 21 April 2011. The external auditors were also invited to the Company's AGM in order to attend to shareholders' queries. This forms part of their responsibility to provide adequate and transparent reports to shareholders.

### **Internal Control**

The Board recognises its responsibility to maintain internal control procedures of the Company in order to further strengthen a sound internal control system which covers not only financial control but also operational and compliance control as well as risk management. The Company's inherent system of internal control is designed to manage, rather than eliminate, the risk of failure to achieve the Group's corporate objectives, as well as to safeguard shareholders' investments and the Group's assets. Details of the Company's Internal Control system and framework are set out in the Statement of Internal Control on pages 174 to 177 in this Annual Report.

### RESPONSIBILITY STATEMENT IN RESPECT OF THE FINANCIAL YEAR UNDER REVIEW

(Pursuant to paragraph 15.26 (a) of the Main Market Listing Requirements of Bursa Malaysia Securities Berhad)

The Board is fully accountable to ensure that the Audited Financial Statements are prepared in accordance with the Companies Act, 1965 and the applicable approved accounting standards set out by the Malaysian Accounting Standards Board so as to present a true and fair view of the state of affairs of the Group and of the profit or loss and cash flow as at the end of the accounting period.

In preparing the Audited Financial Statements, the Directors are satisfied that the applicable approved Accounting Standards in Malaysia have been complied with and reasonable and prudent judgments and estimates have been made. The Audited Financial Statements is also prepared on a going concern basis as the Board has a reasonable expectation, after having made enquiries, that the Group has adequate resources to continue in operational existence for the foreseeable future.

### ADDITIONAL COMPLIANCE STATEMENT

Utilisation of Proceeds Raised from Any Corporate Proposal
 No proceeds were raised as the Company did not undertake any Corporate Proposal in the Financial Year ended 31 August
 2011.

### (2) Share Buy-Back for the Financial Year

The Company did not make any proposal for share buy-back during the Financial Year under review.

### (3) Options, Warrants or Convertible Securities Exercised

During the Financial Year under review, 13,804,154 new ordinary shares of RM1.00 each were issued by the Company pursuant to the Employees' Share Option Scheme II (ESOS II) at exercise prices of RM6.71, RM6.99, RM7.42, RM7.33, RM11.07, RM6.33, RM5.57, RM7.18, RM7.75, RM7.03, RM5.59, RM5.93, RM4.45, RM5.06, RM5.86, RM5.36 and RM5.45 per share.

The new ordinary shares issued during the Financial Year ranked pari passu in all respects with the existing ordinary shares of the Company.

The Company has been granted exemption by the Companies Commission of Malaysia via a letter dated 30 September 2011 from having to disclose in the Audited Financial Statements the name of the persons to whom options have been granted during the Financial 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 600,000 ordinary shares and above. The list of employees who were granted options representing 600,000 ordinary shares and above under ESOS II is set out on page 192 in this Annual Report.

### (4) American Depository Receipts (ADR)

In January 1994, TNB launched its Level 1 American Depository Receipts (ADR) in New York, the United States of America. Each ADR carries an equivalent of four (4) 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 2011, a total of 5,439,260 ordinary shares were held through these ADRs, which represented less than five per cent (5%) of the total issued and paid-up share capital of TNB's 5,456,657,640 shares.

### (5) Imposition of Sanctions and/or Penalties

Neither the Company nor any of its subsidiaries, Directors or Management was imposed with any sanction and/or penalty by the relevant regulatory bodies in the Financial Year ended 31 August 2011.

### (6) Non Audit Fees

During the Financial Year under review, the Group paid the following non-audit fees to the external auditors:

No.	Division/Subsidiary	Nature of Non-Audit Work	RM	
1.	Tenaga Nasional Berhad	<ul> <li>(i) Consultancy services for TNB's Management and Engineering Audit 2008</li> <li>(ii) Courses on tax computation</li> </ul>	330,952.83	
2.	TNB Liberty Power Ltd.	Tax computation	78,628.00	
	TOTAL			

### (7) Variation in Results

The Company did not issue any profit forecast for the Financial Year ended 31 August 2011.

### (8) Profit Guarantee

The Company did not issue any profit guarantee for the Financial Year under review.

### (9) Material Contracts

Save as disclosed below, the Company and/or its subsidiaries did not enter into any material contracts involving the interest of the Directors or major shareholders which are still subsisting as at 31 August 2011:

Lender	Lembaga Kumpulan Wang Simpanan Pekerja ("KWSP")		
Borrower Tenaga Nasional Berhad			
Borrower/Lender Relationship	KWSP is one of the major shareholders in TNB (approximately 13.17% as at 31 August 2011)		
Purpose of Loan	Refinancing		
Amount An aggregate of RM2,800.0 million			
Details of facility	Facility I – RM700.0 million Facility II – RM700.0 million Facility III – RM700.0 million Facility IV – RM300.0 million Facility V – RM350.0 million		
Interest Rate	Facility I - 5.45% Facility II - 5.50% Facility III - 5.60% Facility IV - 5.65% Facility V - 5.70%		

Payment terms	Interest Payment 30 June and 31 December 2011 each calendar year
	Principal repayment Facility I – 31 December 2019
	Facility II – 31 December 2020 Facility III – 31 December 2021
	Facility IV - 31 December 2024 Facility V - 31 December 2025

### (10) Revaluation Policy

The revaluation policy of the Company in relation to its landed properties is set out in Note 2 (g) of the Notes to the Financial Statements on pages 215 to 216 in this Annual Report.

### (11) Recurrent Related Party Transactions

All recurrent related party transactions are reviewed by the Group Internal Audit (GIA) and a report is submitted to the Board Audit Committee on a quarterly basis for monitoring purposes.

The Company did not enter into any recurrent related party transactions requiring shareholders' mandate during the Financial Year ended 31 August 2011.

### 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 15.25 of the Main Market Listing Requirements of Bursa Malaysia Securities Berhad)

The Board is pleased to report to the shareholders that the Company has complied and shall remain committed to attain the highest possible standard through the continuous adoption of the principles and best practices of the Malaysian Code of Corporate Governance (Revised 2007) and all other applicable laws.

Signed on behalf of the Board of Directors in accordance with their resolution dated 20 October 2011.

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DATO' ZAINAL ABIDIN BIN PUTIH Senior Independent Non-Executive Director

### Enterprise-Wide Risk Management (EWRM)

Financial year 2011 marked the beginning of TNB's Gemilang 2015 initiative, the success of which hinges on effective and consistent enterprise-wide risk management (EWRM) practices. The EWRM framework, in place since 2003, prioritises strategic and operational risks throughout the Group while enabling the development of an effective internal compliance and review plan. This framework provides for a complete risk management cycle incorporating the assessment, reporting, treatment, monitoring and review of business risks within the Group.



### **RISK REPORTING & MONITORING**

EWRM Department has conducted 24 risk awareness and review sessions for TNB's operating divisions and departments together with the appointed Risk Managers and Risk Coordinators. The exercise identified and reviewed risk management implementation issues (if any), changes made to operating risks, as well as ensured all risk profiles continue to be aligned with TNB's business strategies and objectives.

Half-year assessment reports from all divisions were submitted to the EWRM Department for analysis before being forwarded to the relevant risk management committees for deliberation.

In addition, two Divisional Risk Manager Meetings were held in the year under review, with the primary objective of having the different divisions share the positive experiences and challenges faced in embedding a risk management culture in the Group.

### **RISK COMMUNICATION**

Risk communication focuses on the dissemination of risk information at all levels, and forms an integral part of TNB's risk management process.

Two Risk Management Forums were organised to communicate risk information to the appointed Risk Managers, Risk Coordinators and senior management across TNB Group. The forums discussed the risks and opportunities involved in TNB's strategic direction for 2011–2015, namely geographical expansion, as well as managing the fuel supply risk and how each division in the Group can contribute towards the overall management of risk. Forum participants were also updated with the current international insurance environment by an invited speaker from the insurance industry.

Risk communication is also channeled through the internal Group Finance Division website and publications such as TNB's *Tenagawan* newsletter, posters and pamphlets.

In addition, risk management training sessions were carried out regularly throughout the year by TNB's training subsidiary, TNB Integrated Learning Solutions Sdn. Bhd. (ILSAS), to improve the risk management skills of newly-appointed Risk Managers, Risk Coordinators and Risk Owners, or as a refresher course for existing members.

### TNB RISK INFORMATION SYSTEM

The on-line real-time TNB Risk Information System (TRIS) is an in-house system developed with ICT Division for the purpose of complementing the EWRM process. To ensure the smooth running of the system, TRIS Helpdesk services are managed by dedicated TRIS administrators.

In the year under review, regular training sessions were organised for Risk Managers, Risk Coordinators, Risk Owners and interested employees to ensure that the different sectors are able to use the enhanced TRIS effectively to manage and monitor their respective risks.

### RISK MANAGEMENT COMPLIANCE & REVIEW

This relatively new risk management compliance and review function was operationalised in FY2011 with the review of four divisions as well as a follow-up of four other divisions that were reviewed in the previous year. The objective of these compliance reviews is to assure TNB operating divisions of the effectiveness of the internal control systems in managing risks across the Group. The reviews also challenge the divisions to ensure that the principles and requirements of managing risks are consistently adopted. These compliance and review exercises represent an ongoing Group-wide risk management exercise.

### CORPORATE EMERGENCY RESPONSE PLAN (CERP)

TNB in 2007 implemented a Corporate Emergency Response Plan (CERP) to mobilise a coordinated and prompt response to any emergency affecting the Group. A CERP Steering Committee, chaired by the appointed TNB Crisis Commander and consisting of representatives from all operating divisions, provides direction and guidance for the successful formulation and implementation of emergency response across TNB Group.

Major CERP activities/initiatives for the year under review include:

- Training and drills to embed the principles of emergency response and business continuity in TNB.
- Implementation of the first stage of planned activities to obtain ISO/IEC 27001:2005 Information Security Management System (ISMS) certification in response to the Government's mandate to ensure that the country's critical national information infrastructure is resilient and able to respond effectively to any cyber or information security threat. A working committee made up of representatives from related divisions in TNB was formed to ensure TNB attains the certification of the ISO/IEC standard within the deadline set by the Government.



### WAY FORWARD

As the Group continues to strive towards geographical expansion, EWRM Department will benchmark TNB's EWRM system and processes against that of other established national and multinational corporations in an effort to continuously improve the risk management framework and ensure a strong footing in the international arena.

### **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 safeguard shareholders' investments, the interest of customers, regulators and employees and the Group's assets.

The system of internal control covers risk management, finance, operations, management information systems and compliance with the relevant laws, regulations, policies and procedures. The system is designed to manage rather than eliminate risk that may impede the attainment of the Group's business objectives. Thus, the system only provides reasonable but not absolute assurance against material misstatement, loss or fraud.

The Board has in place a framework for identifying, evaluating and managing significant risks faced by the Group except for associated companies and joint ventures which are not under the control of the Group. The framework and risk management processes are reviewed regularly by the Board, and is in accordance with the Statement on Internal Control: Guidance for Directors of Public Listed Companies.

The Board is assisted by Management to ensure that internal controls and risk management practices are implemented within the Group.

### **RISK MANAGEMENT**

The Board approved the set-up of the Enterprise Wide Risk Management (EWRM) function in 2003. An EWRM framework guides risk management processes and incorporates the assessment, reporting, treatment, monitoring and reviewing of the strategic and operational risks within the Group. The Board Audit Committee (BAC) reviews the effectiveness of the EWRM functions and deliberates on the risk reports issued and the risk management activities undertaken during the year. The BAC is assisted by the Group Risk Management Committee, Chief Risk Officer, Planning Division, EWRM Department and operations staff to effectively embed risk management in all processes.

EWRM Department works with Group Internal Audit to provide assurance on adequacy and effectiveness of the EWRM system in mitigating and managing risks faced by the Group. Policies and procedures are in place to enable the EWRM system to be refined and enhanced to meet the challenges and needs of the Group in view of the next phase of the Group's strategic direction, Gemilang 2015. In the Financial Year under review, the following initiatives were undertaken to enhance EWRM implementation in the Group:

- Reviewed Risk Management activities of all divisions, departments and subsidiaries under the President/Chief Executive Officer's Office.
- Held meetings with Division Risk Managers to discuss and implement improvements to the EWRM system in their divisions as well as improve risk management as a whole in the Group.
- Conducted eight (8) Risk Management & Compliance Reviews to establish the adequacy of the TNB Risk Information System (TRIS) and the effectiveness of identified mitigation controls.

### **CONTROL STRUCTURES**

The Board has established control structures and is committed to evaluating, enhancing and maintaining these to ensure effective strategic and operational controls over the Group's business operations. The following key 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 in accomplishing 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 in directing, monitoring and ensuring 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	Management Committees		
<ul> <li>Audit Committee</li> <li>Tender Committee</li> <li>Disciplinary Committee</li> <li>Nomination and Remuneration Committee</li> <li>Finance and Investment Committee</li> </ul>	<ul> <li>Group Executive Council Committee</li> <li>Group Executive Management Committee</li> <li>Energy Supply Committee</li> <li>Group Management Tender Committee</li> <li>Group Risk Management Committee</li> <li>Fuel Procurement Executive Committee</li> <li>Information and Communication Technology (ICT) Governance Council</li> </ul>		

### **Organisation Structure**

The Board has implemented a divisional structure for the Group. Clear lines of authority, responsibility and accountability have been established to support the Group in achieving its vision, mission, strategies and operational objectives. The divisional structure enhances the ability of each division to focus on its 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 its strategic and operational objectives and manage challenges in its operating environment.

#### Management Information Systems

The Board recognises the importance of leveraging on information and communication technology to promote effective and efficient business operations, timely and accurate communication with stakeholders, and enhance the Group's performance in the long term.

An ICT Governance Council was established in 2005. Chaired by the President/Chief Executive Officer, the Council acts as a platform to discuss the Group's corporate ICT principles, direction, security, resources, policies and standards.

The major systems used by the Group are:

- Enterprise Resource Management System (ERMS) eCustomer Information & Billing System (eCIBS)
- Enterprise Human Resources Management System (EHRMS)
  - Supervisory Control and Data Acquisition System (SCADA)
- Remote Meter System (RMR)
- Corporate Geospatial Information System (CGIS)
- Employee Self Service (ESS)
- TNB Outage Management Systems (TOMS)
- For the Corporate Geospatial Information System (CGIS), several functions have been rolled out as listed below:
- Project Development
- Technical Planning
- **Project Planning**
- **Construction Project**

- Land & Property Management
- Land & Wayleave Management
- Land Procurement & Construction Project Status
- Grid and Area Network Planning

#### **Group Policies and Procedures**

The Board has approved policies and procedures to govern the financial and operational functions, and ethics of the Group. The policies 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 relevance and effectiveness. Among others, the policies and procedures implemented are:

### **Statement of Internal Control**

Internal Control Guidelines	Disciplinary Policy and Procedures
<ul> <li>Group Financial Policies and Procedures</li> </ul>	<ul> <li>Information and Communication Policy and Codes of</li> </ul>
Treasury Policy	Practice
Safety and Health Policy	Enterprise Wide Risk Management Policy and Guidelines
Environmental Policy	Limits of Authority
Investment Policy	Code of Ethics
<ul> <li>Procurement Policy and Procedures</li> </ul>	Procurement Code of Conduct
Anti Fraud Policy	Whistle Blowing Procedures
Amiriduarolicy	

During the year, Procurement Division undertook several initiatives to improve internal control systems as follows:

- Revision of Procurement Policies and Procedures (PPP)
   PPP Dissemination Roadshow Programme
   Mandatory A
- Revision of circulars relating to Tenders and Contracts
- Implementation of Supply Chain Management Project Mandatory Annual Assessment of Vendors
- Procurement Risk Profile Review

### **Talent Management and Development**

The Board recognises the importance of having a competent, talented and productive workforce with diverse technical expertise in order to be a regional player by the year 2015. Operational strategies have been formulated to enhance Human Capital Development. A comprehensive Talent Management Framework has been developed to identify, groom and oversee new talents development. Structured programmes are conducted as part of the effort to develop leadership competencies of talent pool candidates.

### **Revenue Assurance Department**

The Board approved the set-up of a Revenue Assurance Department (RAD) on 7 August 2009, to help curb the theft of electricity (TOE) and curtail revenue leakages from billing, metering and administrative errors. RAD is also responsible for improving TOE internal control mechanisms.

### **MONITORING & REVIEW**

### **Board Interactions With Management via Breakout Sessions**

The Board interacts actively with Management during breakout sessions to discuss and review the Group's plans, strategies, performance and risks faced by the Group. During the year, two (2) Board Breakouts were held. These sessions provide a monitoring and review mechanism to enhance the Board's effectiveness and enable Management to seek mandates to address risks faced in its internal and external environment.

### **Business Planning & Budgeting**

The Board approved the implementation of a 20-Year Strategic Plan. Business plans, budgets and Key Performance Indicators (KPIs) are aligned to the Strategic Plan. These serve as guides towards achieving the Group's vision of becoming among the leading corporations in energy and related businesses globally.

The 20-Year Strategic Plan is divided into phases. Financial Year 2011–2015 (i.e. Gemilang 2015) is the second phase of this roadmap which outlines the Group's strategic objectives, key initiatives and action plans to achieve Geographical Expansion. The Board approved the Gemilang 2015 Business Plan in November 2010. The Five-Year Strategic Plan guides Management in preparing their Annual Operating Plans, KPIs and budgets.

The strategies identified in the 20-Year Strategic Plan, Five-Year Strategic Plan and Annual Operating Plans as well as KPIs are reviewed, approved and monitored by the Board and Management. Feedback from the Board during the Board Breakout Sessions with the Management is used during the formulation of Five-Year Strategic Plan and Annual Operating Plans. Wherever appropriate, revisions are made based on changes in the business and operating environments.

The Five-Year Strategic Plan and Annual Operating Plans also include the budget of the Group, to enable the Group to direct its resources towards the achievement of its strategic objectives. The budget is monitored at regular intervals by Management to ensure its effective utilisation.

#### Long-Term System Planning and Development

The Board is involved in reviewing and approving Long-Term System Planning and Development. The Planning Division has carried out long-term system planning and development of the electricity supply infrastructure for TNB to cater for load demand. The long-term forecasts take into consideration changes in the economic climate as well as ensure close monitoring and response to the load demand situation. The long-term forecasts went through a series of reviews by several committees before the final approved load forecast was submitted to the Energy Commission as part of the preparation and input for the Jawatankuasa Perancangan, Pembangunan dan Perlaksanaan Tarif (Planning, Development and Tariff Implementation Committee) and license condition requirement.

On the supply side, generation expansion plans are formulated for Peninsular Malaysia taking into account the long-term energy security vis-à-vis the diversification of fuel resources, generation plan type and global energy outlook scenarios. Additionally, transmission development plans are reviewed and assessed according to economic conditions.

#### **Financial and Operational Review**

The 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 to provide information on key financial results, operational performance indicators and budget variances to enable them to monitor and contribute towards improving performance.

### **Division Compliance Departments/Units**

The Board approved the set-up of Compliance departments/units at EWRM Department, Generation, Transmission, Distribution, Group Finance and ICT Divisions. These compliance departments/units ensure that operations adhere to approved policies and procedures, and enhance control consciousness.

### **Group Internal Audit**

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 activities are guided by the Internal Audit Charter approved by the BAC.

GIA carries out regular reviews of business processes to assess the adequacy and effectiveness of internal controls, compliance with regulations and the Group's policies and procedures, and highlight significant risks affecting the Group.

GIA also performs strategic reviews and consultancy services where relevant to assist entities to improve their operational performance. Ad hoc appraisals, investigations or reviews are also conducted as and when requested by the Board, BAC and Management.

BAC meetings are held regularly to deliberate audit findings, management responses, corrective actions, and to monitor actions taken by Management in areas with significant or high risks. Follow-up audits are conducted to review the adequacy and effectiveness of corrective actions taken by Management on all significant matters raised. A certain percentage of KPIs is allocated to each Division's Head for completion of agreed corrective actions taken by Management. The achievement of the corrective actions by each Division is deliberated during the BAC meeting.

GIA has an independent status in the Group and reports functionally to the Board through the BAC. GIA annual audit plans, budgets, competency and resources are reviewed and approved by the BAC. This is to enable reviews of the adequacy of coverage, resources available and coverage of significant and high risk areas. The reviews also help 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 controls were detected. However, after due and careful inquiry and based on the information and assurance provided, the Board is satisfied that all necessary actions and enhancements in control systems have been taken to address the weaknesses detected. Nevertheless, for areas requiring attention, measures have been and are being taken to ensure ongoing adequacy and effectiveness of internal controls and to safeguard shareholders' investments, stakeholders' interests and the Group's assets.

This statement is made in accordance with the resolution of the Board of Directors dated 20 October 2011.

### **Board Audit Committee Report**



Dato' Zainal Abidin bin Putih (Chairman)

THE BOARD AUDIT COMMITTEE (BAC) WAS ESTABLISHED ON 9 DECEMBER 1990 BY THE BOARD OF DIRECTORS TO ASSIST THE DIRECTORS TO CARRY OUT THEIR RESPONSIBILITIES. THE BAC IS GUIDED BY ITS TERMS OF REFERENCE WHICH ARE SET OUT ON PAGES 183 TO 187 OF THE ANNUAL REPORT.



Tan Sri Dato' Hari Narayanan a/I Govindasamy



**Chung Hon Cheong** 



Dato' Abd Manaf bin Hashim



Dato' Mohammad Zainal bin Shaari

### MEMBERSHIP AND MEETINGS

The BAC members and details of their attendance at the BAC meetings held during the Financial Year are as follows:

NO.	NAME	STATUS OF DIRECTORSHIP	INDEPENDENT	NO. OF MEETINGS ATTENDED
1.	Dato' Zainal Abidin bin Putih <i>Chairman</i>	Non-Executive Director	Yes (Senior Independent)	15/15
2.	Tan Sri Dato' Hari Narayanan a/I Govindasamy	Non-Executive Director	Yes	15/15
3.	Dato' Abd Manaf bin Hashim	Non-Executive Director	Yes	15/15
4.	Chung Hon Cheong (Appointed w.e.f. 30 November 2010)	Non-Executive Director	Yes	8/11
5.	Dato' Mohammad Zainal bin Shaari (Ceased as member w.e.f. 24 May 2011)	Non-Executive Director	No	8/11

The BAC Terms of Reference require the Committee to meet six (6) times a year. The BAC met 15 times during the Financial Year. 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 operating management were invited to the meetings to deliberate on matters within their purview.

Subsequent to each meeting, the BAC Chairman submits a report on matters deliberated to the Board of Directors for their information and attention. Action sheets are issued by the Company Secretary on the decisions made and actions required. These are circulated to Management for their action.

# SUMMARY OF ACTIVITIES OF THE BOARD AUDIT COMMITTEE

A summary of the activities carried out by the BAC during the Financial Year is set out below.

#### **Risk Management**

Reviewed the TNB Strategic Risks Report, TNB Biannual Risk Assessment Reports and the activities undertaken by the Enterprise Wide Risk Management Department to promote and improve risk management awareness and processes.

Internal Audit	<ul> <li>Reviewed and approved Group Internal Audit (GIA)'s revised structure, budget and Annual Audit Plan to ensure adequacy of resources, competencies and coverage of auditable entities with significant and high risks.</li> <li>Reviewed internal audit reports issued by GIA and external parties on the effectiveness and adequacy of governance, risk management, operational and compliance processes.</li> <li>Reviewed the adequacy and effectiveness of corrective actions taken by management on all significant matters raised.</li> <li>Deliberated the results of ad-hoc investigations performed and</li> </ul>	<ul> <li>confirmed that appropriate actions were taken to correct the weaknesses.</li> <li>Reviewed and approved the appointment of consultants to assist in the external review of the internal audit function and to provide expertise in technical areas.</li> <li>Assessed the performance of the Group Internal Audit Department.</li> <li>Reviewed the Key Performance Indicators achieved by Division Heads in completing corrective actions.</li> <li>Deliberated and approved the extension of the Chief Internal Auditor's contract of services.</li> </ul>
External Audit	<ul> <li>Reviewed and approved the External Auditor's Audit Plan and the scope for the annual audit.</li> <li>Deliberated and reported the results of the annual audit to the Board of Directors.</li> </ul>	<ul> <li>Assessed the performance of the External Auditors and recommended their appointment and remuneration to the Board of Directors.</li> <li>Met with the External Auditors without the presence of management to discuss matters that they wish to present.</li> </ul>

# **Financial Results**

Reviewed the Quarterly and Audited Financial Statements of the Company and Group including announcements, and recommended them to the Board for approval.

# **Board Audit Committee Report**

#### **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, Statement on Internal Audit Function, Report on Related Party Transactions and Recurrent Related Party Transactions and Corporate Social Responsibility Report, to the Board for approval.

#### Others

- Reviewed and verified that the allocation options granted under the Employees' Share Option Scheme (ESOS) during the Financial Year were in accordance with the required provisions set out under the Company's Scheme.
- Deliberated on Sabah Electricity Sdn. Bhd.'s Management & Engineering Audit 2008 findings and recommendations.

# **GROUP INTERNAL AUDIT**

The internal audit function is carried out in-house by the GIA Department. The department is independent and reports directly to the BAC. GIA's primary responsibility is to undertake regular and systematic reviews of internal controls in order to provide reasonable assurance that the Group's systems are operating satisfactorily and effectively. GIA prepares a risk based audit plan that is aligned with the strategies of the Group to ensure that risks are adequately reviewed.

GIA assignments encompass the review of strategies implementation and the adequacy and effectiveness of governance, risk management, financial, operational and compliance processes.

During the Financial Year, a total of 203 reports covering 358 assignments were issued. The areas reviewed included generation, transmission, distribution, procurement, engineering, projects, finance, corporate governance, human resources, 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 safeguard the Group's assets.
- Adequacy and effectiveness of the risk management, operations, governance, strategic management 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 on corrective and preventive actions as well as deadlines to complete the actions. The reports were tabled to the BAC for deliberation. Management were present during the deliberation of the reports to ensure that they carry out preventive and corrective actions on the weaknesses reported.

Dato' Zainal Abidin bin Putih

Chairman Board Audit Committee Tenaga Nasional Berhad (Senior Independent Non-Executive Director)



# **Statement on Internal Audit Function**

THE INTERNAL AUDIT FUNCTION OF THE COMPANY IS CARRIED OUT BY THE GROUP INTERNAL AUDIT DEPARTMENT (GIA). GIA WAS ESTABLISHED TO SUPPORT THE BOARD, THROUGH THE BOARD AUDIT COMMITTEE (BAC), TO DISCHARGE THEIR RESPONSIBILITIES IN MAINTAINING A SOUND SYSTEM OF INTERNAL CONTROL TO SAFEGUARD SHAREHOLDERS' INVESTMENT, THE INTEREST OF STAKEHOLDERS AND THE GROUP'S ASSETS.

GIA reports functionally to the BAC and administratively to the President/Chief Executive Officer. GIA's authority, scope and responsibilities are governed by an Internal Audit Charter.

# Mission/Objective

GIA's mission is to provide objective and independent assurance of the Group's system of internal controls, through the following:

- Preparing and implementing a risk-based strategic annual audit plan which covers the auditable entities within the organisation.
- Reviewing the adequacy and effectiveness of governance, risk management, strategic management and control processes established by the Group to manage its risks and operations.
- Reporting internal control weaknesses and recommending preventive/corrective actions to improve operations, enable accurate reporting, safeguard assets and promote the economic utilisation of resources.
- Monitoring the implementation of corrective actions to ascertain their adequacy and the ability of the auditable entities to strengthen internal controls in their areas of operation.

# Resources

The internal audit function is structured into core and non-core units. The audit covers the functions of governance, risk management, strategic implementation and review of controls in generation, transmission, distribution, procurement, projects, engineering, accounting & finance, human resources, information & communication technology and investment in subsidiaries.

During the Financial Year, GIA issued 203 reports arising from the performance of 122 planned jobs, 13 ad hoc jobs and 223 follow-up audits on corrective actions. One (1) ad hoc audit was performed in collaboration with the Energy Commission while two (2) ad hoc audits were out-sourced to external consultants. The rest were performed in-house by GIA. Additionally, GIA provided administrative assistance to subsidiaries for the Management & Engineering (M&E) Audits 2008 for Sabah Electricity Sdn. Bhd., TNB Janamanjung Sdn. Bhd. and Kapar Energy Ventures Sdn. Bhd.

GIA has a total of 97 auditors, comprising staff with backgrounds in engineering, finance, business, accounting, information and communication technology and quantity surveying. During the year, the GIA organisation structure was revised and approved by the BAC. One (1) General Manager position was upgraded and four (4) new positions were established for the Human Resources & Administration Unit (two (2) positions) and Project & Procurement Audit Unit (two (2) positions). Additionally, the BAC was informed of promotions and movements of GIA personnel.

In the Financial Year 2010/11, GIA spent a total of RM13.1 million, 70% of which went towards staff related costs, 26% for other operating costs and 4% for consultancy fees.

#### Commitment to Competence

Training courses are provided to GIA staff in the areas of auditing skills, technical skills, business acumen and personal development. The total training costs for the Financial Year 2010/11 was RM160,000.00.

# **Statement on Internal Audit Function**

Apart from training courses, staff are encouraged to become Certified Internal Auditors (CIA). They are provided with incentives such as allowances and reimbursement of examination and registration fees when they pass the CIA examinations. During the year, three (3) staff completed the examination, bringing the total number of Certified Internal Auditors in GIA to five (5). Meanwhile, 16 staff are pursuing the CIA qualification.

GIA won the 2010 Corporate Award – Tier 4, Category 1 for its strong commitment to Continuous Professional Development for the period of January 2010 to December 2010 from the Institute of Internal Auditors Malaysia. This is the 4th consecutive year that GIA has won this award.

#### Initiatives/Improvements

The initiatives/improvements carried out by GIA during the Financial Year include the following:

- Developed a website to share knowledge on internal controls, internal audit matters and disseminate the progress of assignments undertaken.
- Developed an Internal Audit Manual that serves as a guide to the operations of the internal audit function and to provide consistency, continuity and standards of acceptable performance.
- Performed strategic reviews of major initiatives and new technologies undertaken by Management to assess their effectiveness and achievements.
- Provided presentation slides to Management and the BAC before BAC meetings to enable effective participation and deliberation on matters discussed.
- Performed quarterly reviews of related party transactions (previously done once a year) to assess compliance with Main Market Listing Requirements of Bursa Malaysia Securities Berhad.
- Proposed an external Quality Assurance Review of the Internal Audit Function, which was approved by the BAC. The review assessed the ability of GIA to provide effective and adequate internal auditing services, and to apply the International Professional Practices Framework.
- Coordinated the flotation of a company-wide Project Management System Audit to assist the Group to improve its project management systems.
- Implemented an Audit Management System to automate and standardise the audit process. The Audit Management System contains a database of audit findings, corrective actions and implementation deadlines to enable the tracking of corrective actions.
- · Seconded and attached staff to other divisions to assist in the set-up of the Compliance Department/Unit.
- Mentored and trained high performers and staff from TNB's talent pool to enable them to understand and enhance their knowledge of systems, processes and controls.

GIA is committed to providing objective and independent assurance as well as value-added services to our customers in accordance with the International Professional Practices Framework on Internal Auditing.

Dato' Zainal Abidin bin Putih

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 BAC shall have no less than three (3) members, appointed by the Board of Directors of TNB, the majority of whom shall be independent in accordance with the definition in Main Market Listing Requirements of Bursa Malaysia Securities Berhad (MMLR).
- 2.2 If the number of members should for any reason drop to less than three (3), the Board shall within one (1) month 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 MMLR, i.e.:
  - i) must be a member of the Malaysian Institute of Accountants or
  - ii) if he is not a member of the Malaysian Institute of Accountants, must have at least three (3) years' working experience, and:
    - a) must have passed the examinations specified in Part 1 of the 1<sup>st</sup> Schedule of the Accountants Act 1967; or
    - b) must be a member of one (1) 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 MMLR.
- 2.5 The term of office and performance of the Committee shall be reviewed 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.

# 3. CHAIRMAN OF THE COMMITTEE

- 3.1 The following are the main duties and responsibilities of the Chairman of the Committee:
  - 3.1.1 steer the Committee to achieve its objectives;
  - 3.1.2 provide leadership to the Committee and ensure proper flow of information to the Committee, review the adequacy and timing of documentation;
  - 3.1.3 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 skepticism and independence;
  - 3.1.4 ensure that consensus is reached on every Committee resolution and where considered necessary, call for a vote so that a decision can be made by a simple majority. Dissenting opinions should be captured;
  - 3.1.5 manage the process and working of the Committee and ensure that the Committee discharges its responsibilities;
  - 3.1.6 ensure that all members participate in discussions to enable effective decisions to be made; and
  - 3.1.7 be available to answer questions about the Committee's work at the Annual General Meeting of the Company.

# Terms of Reference of The Board Audit Committee

# 4. COMMITTEE MEMBERS

- 4.1 Each Committee member is expected to:
  - 4.1.1 provide independent opinions on the fact-finding, analysis and decision-making process of the Committee, based on his/her experience and knowledge;
  - 4.1.2 consider viewpoints of the other Committee members; and make decisions and recommendations in 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 seek 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

- 5.1 The objectives of the Committee are to:
  - 5.1.1 ensure transparency, integrity and accountability in the Group's activities so as to safeguard the rights and interests of shareholders;
  - 5.1.2 provide assistance to the Board in fulfilling its fiduciary responsibilities relating to corporate accounting and reporting practices;
  - 5.1.3 improve the Group's business efficiency, the quality of the accounting and audit function and strengthen public confidence in the Group's reported financial results;
  - 5.1.4 maintain, through regularly scheduled meetings, a direct line of communication between the Board and the external and internal auditors;
  - 5.1.5 ensure the independence of the external and internal audit functions; and
  - 5.1.6 create a climate of discipline and control which will reduce the opportunity for fraud.

# 6. AUTHORITY OF THE COMMITTEE

- 6.1 The Committee is authorised by the Board to:
  - 6.1.1 investigate any activity within its Terms of Reference; or as directed by the Board of Directors;
  - 6.1.2 determine and obtain the resources required to perform its duties, including approving the budget for the external and internal audit functions;
  - 6.1.3 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;
  - 6.1.4 have direct communication channels with external auditors and person(s) carrying out the internal audit function or activity for the Group;
  - 6.1.5 direct the Internal Audit Function in the Group;
  - 6.1.6 approve the appointment of the Head of Internal Audit;
  - 6.1.7 engage independent advisers and secure the attendance of outsiders with relevant experience and expertise if it considers this necessary; and
  - 6.1.8 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 review and recommend acceptance or otherwise of accounting policies, principles and practices.
  - 7.1.2 review the quarterly results and Audited Financial Statements of the Company and Group before submission to the Board. The review should focus primarily on:
    - i) any changes in existing accounting policies or implementation of new accounting policies;
    - ii) major judgment areas, significant and unusual events;
    - iii) significant adjustments resulting from audit;
    - iv) the going concern assumptions;
    - v) compliance with accounting standards; and
    - vi) compliance with MMLR and other legal and statutory requirements.
  - 7.1.3 review with management and the external auditors the results of the audit, including any difficulties encountered.

# 7.2 Enterprise-wide Risk Management

- 7.2.1 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 ensure that the principles and requirements of managing risk are consistently adopted throughout the TNB Group.
- 7.2.3 deliberate on the key risk issues highlighted by Group Risk Management Committee in their reports to BAC.

#### 7.3 Internal Control

- 7.3.1 assess the quality and effectiveness of the systems of internal control and the efficiency of the Group's operations.
- 7.3.2 review the findings on internal control in the Group by the internal and external auditors.
- 7.3.3 review and approve the Statement on Internal Control for the Annual Report as required under MMLR.

# 7.4 Internal Audit

- 7.4.1 approve the Corporate Audit Charter of internal audit function in the Group.
- 7.4.2 ensure that the internal audit functions have appropriate standing in the Group and have the necessary authority and resources 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 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 review the adequacy of internal audit plans and the scope of audits, and ensure that the internal audit functions are carried out without any hindrance.
- 7.4.5 appraise the performance of the Head of Internal Audit.
- 7.4.6 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 direct any special investigation to be carried out by internal audit.
- 7.4.8 review and approve the Statement on Internal Audit Function for the Annual Report as required under the MMLR.

# Terms of Reference of The Board Audit Committee

# 7.5 External Audit

- 7.5.1 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 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 review external audit plans and scope of work.
- 7.5.4 The BAC shall meet the external auditors at least twice a year to discuss problems and reservations arising out of external audits and any other matter 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 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 non-compliance.
  - 7.6.2 review the findings of any examination by regulatory authorities.
  - 7.6.3 review any related party transaction or conflict of interest that may arise within the Group including any transaction, procedure or course of conduct that raises questions of integrity.
  - 7.6.4 review and approve the Statement of Corporate Governance for the Annual Report as required under MMLR.
  - 7.6.5 review the investor relations programme and shareholder communications policy of the Company.
  - 7.6.6 examine instances and matters that may have compromised the principles of corporate governance and report back to the Board.
  - 7.6.7 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 the MMLR, the BAC must promptly report such matters to Bursa Malaysia.

# 8. 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 who is at the time absent from Malaysia.
- 8.4 No business shall be transacted at any meeting of the Committee unless a quorum of three (3) members is present.
- 8.5 The Chairman of the Committee shall chair the Committee meetings and in his absence, the members present shall elect one (1) among 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 excuse himself/herself from the meeting during discussions or deliberations of any matter which gives rise to an actual or perceived conflict of interest for the member. Where this causes insufficient Directors to make up a quorum, the Committee has the right to appoint another Director(s), who 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 the Terms of Reference and Memorandum and Articles of Association of TNB, 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 following meeting.
- 9.4 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 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.

# Financial Statements





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# **Directors' Report**

The Directors have pleasure in submitting their Report with the audited financial statements of the Group and Company for the financial year ended 31 August 2011.

# **PRINCIPAL ACTIVITIES**

The Group and Company are primarily involved in the business of the generation, transmission, distribution and sale of electricity and those tabulated in Note 14 to the financial statements.

There have been no significant changes in these activities during the financial year under review.

# **FINANCIAL RESULTS**

	Group RM'million	Company RM'million
Profit for the financial year attributable to		
- Owners of the Company	499.5	418.6
- Non-controlling interests	7.0	0
Profit for the financial year	506.5	418.6

# DIVIDENDS

The dividends paid or declared since 31 August 2010 were as follows:

	RM'million
In respect of the financial year ended 31 August 2010 as shown in the Directors' Report for that financial year:	
Final dividend of 20.0 sen gross per ordinary share, less income tax at 25% paid on 30 December 2010	654.0
In respect of the financial year ended 31 August 2011:	
Interim dividend of 4.5 sen gross per ordinary share, less income tax at 25%, paid on 27 May 2011	184.0

The Directors do not recommend the payment of any final dividend in respect of the financial year ended 31 August 2011.

# **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, 1,103,937,344 new ordinary shares of RM1.00 each were issued by the Company comprising:-

- (a) 13,804,154 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, RM6.33, RM5.57, RM7.18, RM7.62, RM7.75, RM7.03, RM5.59, RM5.93, RM4.45, RM5.06, RM5.86, RM5.74, RM5.36 and RM5.45 per share, and
- (b) 1,090,133,190 ordinary shares of RM1.00 each in TNB pursuant to the bonus issue on the basis of one (1) bonus share for every four (4) existing shares held by shareholders on 5 January 2011.

The new ordinary shares issued during the financial year ranked pari 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 36 to the financial statements.

The Company has been granted an exemption by the Companies Commission of Malaysia via a letter dated 30 September 2011 from having to disclose in this Report the name of the persons to whom options have been granted under the ESOS II 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 600,000 ordinary shares and above.

# Directors' Report (Cont'd.)

# EMPLOYEES' SHARE OPTION SCHEME ('ESOS') (CONT'D.)

The list of employees of the Company who were granted options representing 600,000 ordinary shares and above under ESOS II are as follows:

Name	Designation	No. of ordinary shares granted under the options	No. of ordinary shares exercised under the options	No. of ordinary shares available under the options
Dato' Sri Che Khalib bin bin Mohamad Noh	President/Chief Executive Officer	1,593,745	0	1,593,745
Dato' Ir. Azman bin Mohd	Chief Operating Officer/ Executive Director	818,427	20,000	798,427
Dato' Razali bin Awang	Chief Information Officer	756,244	150,000	606,244

None of the subsidiaries' employees were granted options representing 600,000 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' Mohammad Zainal bin Shaari Tan Sri Dato' Hari Narayanan a/I Govindasamy Dato' Zainal Abidin bin Putih Dato' Fuad bin Jaafar Tan Sri Dato' Seri Siti Norma binti Yaakob Dato' Abd Manaf bin Hashim Dato' Ir. Azman bin Mohd Chung Hon Cheong Suria binti Ab Rahman Datuk Nozirah binti Bahari Dato' Puteh Rukiah binti Abd Majid

(Alternate Director to Dato' Mohammad Zainal bin Shaari) (Appointed w.e.f. 28 June 2011) (Resigned w.e.f. 1 April 2011)

# **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 of ordino	ary shares of RM	
	As at 1.9.2010	Bonus issue	Disposed	As at 31.8.2011
Dato' Zainal Abidin bin Putih	1,250	312	0	1,562
Dato' Fuad bin Jaafar	62,500	15,625	0	78,125
Tan Sri Dato' Seri Siti Norma binti Yaakob	1,250	312	0	1,562
Dato' Ir. Azman bin Mohd	3,500	875	0	4,375
	C	Options over ordir	nary shares of RN	11.00 each
	As at	Options		As at
	1.9.2010	granted	Exercised	31.8.2011
Dato' Sri Che Khalib bin Mohamad Noh	1,275,000	318,745	0	1,593,745
Dato' Ir. Azman bin Mohd	475,000	323,427	0	798,427

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.

# Directors' Report (Cont'd.)

#### STATUTORY INFORMATION ON THE FINANCIAL STATEMENTS

Before the consolidated income statements, statements of comprehensive income and statements of financial position of the Group and Company were prepared, 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 Company had been written down to an amount which they might be expected to be realised.

At the date of this Report, the Directors are not aware of any circumstances:

- (a) which would render the amount written off for bad debts or the amount of the allowance for doubtful debts in the financial statements of the Group and 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 Company misleading; or
- (c) which have arisen which render adherence to the existing method of valuation of assets or liabilities of the Group and 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 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 Company which has arisen since the end of the financial year.

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.

# STATUTORY INFORMATION ON THE FINANCIAL STATEMENTS (CONT'D.)

In the opinion of the Directors:

- (a) the results of the Group's and Company's operations during the financial year were not substantially affected by any item, transaction or event of a material and unusual nature other than as disclosed in the financial statements; and
- (b) 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 Company for the financial year in which this Report is prepared.

# **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 28 October 2011.

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TAN SRI LEO MOGGIE CHAIRMAN

DATO' SRI CHE KHALIB BIN MOHAMAD NOH PRESIDENT/CHIEF EXECUTIVE OFFICER

# Consolidated Income Statements for the financial year ended 31 August 2011

		G	roup	Company		
	Note	2011 RM'million	2010 (Restated) RM'million	2011 RM'million	2010 (Restated) RM'million	
Revenue	4	32,206.9	30,317.4	30,157.1	28,362.3	
Operating expenses Other operating income	5 7	(31,582.8) 532.0	(26,519.7) 382.3	(30,109.6) 752.9	(25,416.7) 350.5	
Operating profit Foreign exchange (loss)/gain Share of results of jointly controlled entity Share of results of associates	8	1,156.1 (194.1) 0.6 92.8	4,180.0 656.0 0 44.6	800.4 (208.7) 0 0	3,296.1 606.9 0 0	
Profit before finance cost Finance income Finance cost	9 9	1,055.4 319.1 (827.8)	4,880.6 209.7 (1,070.9)	591.7 404.6 (594.2)	3,903.0 356.6 (757.6)	
Profit before taxation and zakat Taxation and zakat	10	546.7 (40.2)	4,019.4 (823.2)	402.1 16.5	3,502.0 (798.4)	
Profit for the financial year		506.5	3,196.2	418.6	2,703.6	
Profit attributable to: - Owners of the Company - Non-controlling interests		499.5 7.0	3,200.8 (4.6)	418.6 0	2,703.6 0	
Profit for the financial year		506.5	3,196.2	418.6	2,703.6	
Earnings per share - basic	11(a)	Sen 9.16	<b>Sen</b> 58.92			
- diluted Dividends per share:	11(b)	9.14	58.71	Sen	Sen	
Interim dividend (gross) Final dividend (gross)	12 12			4.5 0	6.0 20.0	

# Consolidated Statements of Comprehensive Income for the financial year ended 31 August 2011

		G	roup	Company		
		2011	2010	2011	2010	
			(Restated)		(Restated)	
	Note	<b>RM'million</b>	<b>RM</b> ′million	<b>RM</b> 'million	RM'million	
Profit for the financial year		506.5	3,196.2	418.6	2,703.6	
Other comprehensive income:						
Foreign currency translation differences		(8.1)	59.9	0	0	
Total comprehensive income for the financial year		498.4	3,256.1	418.6	2,703.6	
Total comprehensive income attributable to:						
- Owners of the Company		491.4	3,260.7	418.6	2,703.6	
- Non-controlling interests		7.0	(4.6)	0	0	
Total comprehensive income for the financial year		498.4	3,256.1	418.6	2,703.6	

# Consolidated Statements of Financial Position as at 31 August 2011

		2011	Group 2010	2009	2011	Company 2010	2009
		2011	(Restated)	(Restated)	2011	(Restated)	(Restated)
	Note	<b>RM'million</b>	RM'million	RM'million	<b>RM'million</b>	RM'million	RM'million
NON-CURRENT ASSETS							
Property, plant and equipment	13	60,569.5	58,895.3	59,061.0	50,501.2	49,489.2	49,377.7
Subsidiaries	14	0	0	0	4,451.8	3,978.9	3,978.9
Jointly controlled entities	15	0.6	0	7.9	0	0	7.9
Associates	16	407.8	245.7	246.6	218.2	110.6	115.6
Investment in unquoted debt securities	17	164.0	50.7	50.7	164.0	50.7	50.7
Available-for-sale financial assets/							
Investments	18	38.0	38.0	38.0	38.0	38.0	38.0
Deferred tax assets	33	30.2	55.9	0	0	0	0
Derivative financial instruments	19	89.9	0	0	0	0	0
Long term receivables	20	388.6	480.5	533.0	821.2	886.3	1,058.0
		61,688.6	59,766.1	59,937.2	56,194.4	54,553.7	54,626.8
CURRENT ASSETS							
Non-current assets held for sale	21	11.4	18.0	19.6	11.4	18.0	19.2
Inventories	22	2,645.9	2,450.4	1,955.7	1,356.7	1,265.0	1,043.3
Receivables, deposits and							
prepayments	23	6,022.1	5,200.4	5,043.3	3,724.9	3,453.6	3,702.9
Current tax assets		264.5	15.2	15.4	236.5	0	0
Amounts due from subsidiaries	24	0	0	0	2,178.8	2,573.0	2,075.9
Amounts due from associates		14.6	5.7	9.2	14.6	5.3	4.2
Financial assets at fair value through							
profit or loss/Short term investments	25	0	72.5	12.6	0	72.5	12.6
Financial assets at fair value through							
profit or loss/Marketable securities	26	8.6	8.6	8.3	8.6	8.6	8.3
Derivative financial instruments	19	1.5	0	0	1.5	0	0
Deposits, bank and cash balances	27	3,954.2	8,343.7	6,163.9	2,703.9	6,456.6	5,189.8
		12,922.8	16,114.5	13,228.0	10,236.9	13,852.6	12,056.2

	Note	2011 RM'million	Group 2010 (Restated) RM'million	2009 (Restated) RM'million	2011 RM'million	Company 2010 (Restated) RM'million	2009 (Restated) RM'million
CURRENT LIABILITIES							
Payables	28	5,585.6	5,276.9	5,173.8	3,549.8	3,439.6	3,522.4
Amounts due to subsidiaries	20	0,000.0	0,270.7	0,170.0	1,608.6	1,105.1	1,126.5
Amounts due to associates	24	707.9	623.6	294.0	707.9	623.6	294.0
Current tax liabilities		5.7	317.6	206.9	0	306.6	193.9
Deferred Income	34	523.9	331.3	326.9	487.4	331.3	326.9
Short term borrowings	29	1,727.3	3,162.7	1,157.9	954.5	2,531.8	401.8
		8,550.4	9,712.1	7,159.5	7,308.2	8,338.0	5,865.5
NET CURRENT ASSETS		4,372.4	6,402.4	6,068.5	2,928.7	5,514.6	6,190.7
TOTAL ASSETS LESS CURRENT LIABILITIES	;	66,061.0	66,168.5	66,005.7	59,123.1	60,068.3	60,817.5
NON-CURRENT LIABILITIES							
Borrowings	30	(17,326.8)	(18,100.9)	(21,458.1)	(11,219.7)	(11,922.6)	(14,772.4)
Amounts due to subsidiaries	24	0		Û Û	(2,467.8)	(2,796.7)	(3,525.8)
Consumer deposits	31	(3,084.9)	(2,903.9)	(2,717.3)	(2,901.7)	(2,731.3)	(2,558.0)
Derivative financial instruments	19	(44.1)	0	0	(44.1)	0	0
Employee benefits	32	(4,220.5)	(3,866.3)	(3,470.6)	(4,043.7)	(3,704.8)	(3,321.7)
Other liabilities		(481.1)	(536.4)	(665.7)	(354.8)	(368.0)	(482.9)
Deferred tax liabilities	33	(7,155.1)	(7,270.8)	(7,075.7)	(6,175.5)	(6,302.6)	(6,180.4)
Deferred income	34	(2,849.6)	(2,710.9)	(2,625.3)	(2,454.8)	(2,345.1)	(2,290.2)
Government development grants	35	(627.2)	(599.0)	(579.8)	0	0	0
		(35,789.3)	(35,988.2)	(38,592.5)	(29,662.1)	(30,171.1)	(33,131.4)
TOTAL NET ASSETS		30,271.7	30,180.3	27,413.2	29,461.0	29,897.2	27,686.1

# Consolidated Statements of Financial Position as at 31 August 2011 (Cont'd.)

			Group		Company			
		2011	2010	2009	2011	2010	2009	
	Note	<b>RM'million</b>	(Restated) RM'million	(Restated) RM'million	<b>RM'million</b>	(Restated) RM'million	(Restated) RM'million	
EQUITY								
Share capital	36	5,456.6	4,352.7	4,337.0	5,456.6	4,352.7	4,337.0	
Share premium	37	4,332.6	5,354.2	5,271.5	4,332.6	5,354.2	5,271.5	
Revaluation and other reserves	38	689.4	682.8	593.0	1,041.3	1,015.5	989.1	
Retained profits	39	19,701.5	19,755.0	17,171.5	18,630.5	19,174.8	17,088.5	
CAPITAL AND RESERVES ATTRIBUTABLE TO OWNERS OF								
THE COMPANY		30,180.1	30,144.7	27,373.0	29,461.0	29,897.2	27,686.1	
NON-CONTROLLING INTERESTS		91.6	35.6	40.2	0	0	0	
TOTAL EQUITY		30,271.7	30,180.3	27,413.2	29,461.0	29,897.2	27,686.1	
		Sen	Sen	Sen				
NET ASSETS PER SHARE		oon	0011	0011				
ATTRIBUTABLE TO OWNERS OF THE COMPANY		553.1	692.6	631.2				



# Consolidated Statements of Changes in Equity for the financial year ended 31 August 2011

		A	ttributable to	equity holders o	of the Company			
Group	Note	Ordinary shares of RM1.00 each RM'million	Share premium RM'million	Employees' Share Option Scheme reserve RM'million	Revaluation and other reserves RM'million	Retained profits RM'million	Non controlling interests RM'million	Total equity RM'million
At 1 September 2010								
(as previously reported)		4,352.7	5,354.2	122.5	560.3	18,389.2	35.6	28,814.5
Effects of adoption of FRS 139	47(a)	0	0	0	0	265.6	7.3	272.9
Prior year adjustment	47(i)	0	0	0	0	1,365.8	0	1,365.8
As at 1 September 2010 (restated)		4,352.7	5,354.2	122.5	560.3	20,020.6	42.9	30,453.2
Profit for the year Total other comprehensive		0	0	0	0	499.5	7.0	506.5
income		0	0	0	(8.1)	0	0	(8.1)
Total comprehensive income		0	0	0	(8.1)	499.5	7.0	498.4
Realisation of revaluation								
reserve	38	0	0	0	(19.4)	19.4	0	0
Transaction with owners: Dividend paid for the financial year ended								
- 31.08.2010	12	0	0	0	0	(654.0)	0	(654.0)
- 31.08.2011 Redesignation of liability to	12	0	0	0	0	(184.0)	0	(184.0)
non-controlling interest Employees' Share Option Scheme		0	0	0	0	0	41.7	41.7
- options granted Issuance of share capital		0	0	34.1	0	0	0	34.1
	36, 37	13.8	68.5	0	0	0	0	82.3
- bonus share		1,090.1	(1,090.1)		0	0	0	0
Total transaction with owners		1,103.9	(1,021.6)	34.1	0	(838.0)	41.7	(679.9)
At 31 August 2011		5,456.6	4,332.6	156.6	532.8	19,701.5	91.6	30,271.7

# **Consolidated Statements of Changes in Equity** for the financial year ended 31 August 2011 (Cont'd.)

		A	ttributable to					
N Group	lote	Ordinary shares of RM1.00 each RM'million	Share premium RM'million	Employees' Share Option Scheme reserve RM'million	Revaluation and other reserves RM'million	Retained profits RM'million	Non controlling interests RM'million	Total equity RM'million
At 1 September 2009		4,337.0	5,271.5	89.1	503.9	15,804.6	40.2	26,046.3
Prior year adjustment	47(i)	0	0	0	0	1,366.9	0	1,366.9
As at 1 September 2009 (restated)		4,337.0	5,271.5	89.1	503.9	17,171.5	40.2	27,413.2
Profit for the year Total other comprehensive		0	0	0	0	3,200.8	(4.6)	3,196.2
income		0	0	0	59.9	0	0	59.9
Total comprehensive income		0	0	0	59.9	3,200.8	(4.6)	3,256.1
Realisation of revaluation reserve	38	0	0	0	(3.5)	3.5	0	0
Transaction with owners: Dividend paid for the financial year ended								
- 31.08.2009		0	0	0	0	(425.3)	0	(425.3)
- 31.08.2010	12	0	0	0	0	(195.5)	0	(195.5)
Provision for share option Issuance of share capital		0	0	33.4	0	0	0	33.4
- share options 36	, 37	15.7	82.7	0	0	0	0	98.4
Total transaction with owners		15.7	82.7	33.4	0	(620.8)	0	(489.0)
At 31 August 2010 (restated)		4,352.7	5,354.2	122.5	560.3	19,755.0	35.6	30,180.3

The notes set out on pages 208 to 323 form an integral part of these financial statements.

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			Non-dist		Distributable		
Company		Ordinary shares of RM1.00 each RM'million	Share premium RM'million	Employees' Share Option Scheme reserve RM'million	Revaluation and other reserves RM'million	Retained profits RM'million	Total equity RM'million
At 1 September 2010							
(as previously reported)		4,352.7	5,354.2	111.3	904.2	17,873.7	28,596.1
Effect of adoption of FRS 139	47(a)	0	0	0	0	(144.3)	(144.3)
Prior year adjustment	47(i)	0	0	0	0	1,301.1	1,301.1
At 1 September 2010 (as restated)		4,352.7	5,354.2	111.3	904.2	19,030.5	29,752.9
Profit for the financial year		0	0	0	0	418.6	418.6
Total comprehensive income		0	0	0	0	418.6	418.6
Realisation of revaluation reserve	38	0	0	0	(19.4)	19.4	0
Transaction with owners:							
Dividend paid for the financial year ended							
- 31.08.2010	12	0	0	0	0	(654.0)	(654.0)
- 31.08.2011	12	0	0	0	0	(184.0)	(184.0)
Employees' Share Option Scheme							
- options granted		0	0	45.2	0	0	45.2
Issuance of share capital						_	
- share options	36, 37	13.8	68.5	0	0	0	82.3
- bonus shares		1,090.1	(1,090.1)	0	0	0	0
Total transaction with owners		1,103.9	(1,021.6)	45.2	0	(838.0)	(710.5)
At 31 August 2011		5,456.6	4,332.6	156.5	884.8	18,630.5	29,461.0

# **Consolidated Statements of Changes in Equity** for the financial year ended 31 August 2011 (Cont'd.)

			Non-dist	ributable		Distributable	
				<b>Employees</b> '			
		Ordinary		Share Option	Revaluation		
		shares of	Share	Scheme	and other	Retained	Total
	Note	RM1.00 each	premium	reserve	reserves	profits	equity
Company		<b>RM</b> ′million					
At 1 September 2009		4,337.0	5,271.5	81.4	907.7	15,782.5	26,380.1
Prior year adjustments	47(i)	0	0	0	0	1,306.0	1,306.0
At 1 September 2009 (restated)		4,337.0	5,271.5	81.4	907.7	17,088.5	27,686.1
Profit for the financial year		0	0	0	0	2,703.6	2,703.6
Total comprehensive income		0	0	0	0	2,703.6	2,703.6
Realisation of revaluation reserve	38	0	0	0	(3.5)	3.5	0
Transaction with owners:							
Dividend paid for the financial year ended							
- 31.08.2009		0	0	0	0	(425.3)	(425.3)
- 31.08.2010	12	0	0	0	0	(195.5)	(195.5)
Employees' Shares Options Scheme							
- options granted		0	0	29.9	0	0	29.9
Issuance of share capital							
- share options	36, 37	15.7	82.7	0	0	0	98.4
Total transaction with owners		15.7	82.7	29.9	0	(620.8)	(492.5)
At 31 August 2010 (restated)		4,352.7	5,354.2	111.3	904.2	19,174.8	29,897.2



# Consolidated Statements of Cash Flows for the financial year ended 31 August 2011

	Group		Company		
	2011	2010 (Restated)	2011	2010 (Restated)	
	<b>RM'million</b>	<b>RM'million</b>	<b>RM'million</b>	<b>RM</b> ′million	
CASH FLOWS FROM OPERATING ACTIVITIES					
Profit for the financial year	506.5	3,196.2	418.6	2,703.6	
Adjustments for:					
Taxation and zakat	40.2	823.2	(16.5)	798.4	
Property, plant and equipment:					
- Depreciation	4,041.0	3,950.2	3,395.0	3,303.1	
- Written off	35.5	86.6	34.8	86.4	
- Gain on disposals	(1.4)	(3.0)	(1.4)	(3.0)	
Provision for retirement benefits	859.6	765.4	818.4	751.6	
Provision for share options	34.1	33.4	29.8	29.9	
Translation loss/(gain)	227.1	(632.6)	244.1	(584.1)	
Gain on disposals of:					
- Non-current assets held for sale	(43.3)	(2.3)	(43.3)	(2.3)	
- Redemption of redeemable preference shares					
in a subsidiary	0	0	(259.7)	0	
- Short term investment	(5.0)	0	(5.0)	0	
Loss on winding up/disposal of subsidiaries	Û Û	112.7	Ó	0.1	
Share of results in jointly controlled entity	(0.6)	0	0	0	
Share of results in associates	(62.9)	(44.6)	0	0	
Negative goodwill on acquisition of an associate	(29.9)	Ó	0	0	
Dividend income	(5.4)	(6.6)	(88.2)	(62.7)	
Interest income	(319.1)	(209.7)	(434.8)	(356.6)	
Interest on borrowings	865.3	920.4	582.7	627.8	
Release of deferred income	(652.8)	(368.5)	(595.2)	(326.9)	
Release of Government development grants	(64.6)	(42.9)	Ó	Ó	
(Net reversal)/Allowance for impairment losses:					
- Trade and other receivables	(12.3)	103.3	(19.2)	93.1	
- Amounts due from subsidiaries	) 0	0	187.7	323.5	
- Amounts due from jointly controlled entities	(3.2)	14.6	(3.2)	14.6	
Impairment losses of investments in:					
- Jointly controlled entities	0	7.9	0	7.9	
Write back of diminution in value of	•				
<ul> <li>Marketable securities</li> </ul>	0	(0.3)	0	(0.3)	
(Write-back of)/Allowance for inventory obsolescence	(8.6)	3.5	(8.5)	3.5	
Inventories written off	22.9	23.7	21.4	23.4	
Changes in fair value of derivatives and amortisation	(78.1)	0	5.1	0	
				7 421 0	
	5,345.0	8,730.6	4,262.6	7,431.0	

# **Consolidated Statements of Cash Flows**

for the financial year ended 31 August 2011 (Cont'd.)

	Group		Company		
	2011	2010 (Restated)	2011	2010 (Restated)	
	<b>RM</b> ′million	RM'million	<b>RM'million</b>	RM'million	
CASH FLOWS FROM OPERATING ACTIVITIES (CONT'D.)					
Inventories	(209.8)	(518.4)	(104.5)	(248.5)	
Receivables	(598.0)	89.8	(204.9)	317.7	
Payables	554.2	(361.1)	285.3	(125.5)	
Amounts due from subsidiaries	0	0	(505.2)	(1,323.7)	
Amounts due to associates	75.4	333.1	75.0	328.5	
Amounts due to/(from) jointly controlled entities	3.1	0	3.1	(14.6)	
Cash generated from operations	5,169.9	8,274.0	3,811.4	6,364.9	
Employee benefits paid	(505.4)	(369.7)	(479.5)	(368.5)	
Consumer contributions received	949.3	458.5	861.0	386.2	
Consumer deposits received	181.0	186.6	170.5	173.3	
Taxation and zakat paid	(696.8)	(578.7)	(653.7)	(563.4)	
Net cash flow from operating activities	5,098.0	7,970.7	3,709.7	5,992.5	
CASH FLOWS FROM INVESTING ACTIVITIES					
Additional investments in:		0	(407.0)	0	
- Subsidiary	0	0	(437.2)	0	
- Associates	(113.3)	(0.3)	(112.9)	(0.3)	
Proceeds from redemption	•	0	050.0	0	
- Redeemable preference shares in a subsidiary	0	0	850.0	0	
- Unsecured loan notes in an associate	5.2	5.3	5.2	5.3	
Purchase of short term investments	0	(59.9)	0	(59.9)	
Dividend income received	56.4	46.7	76.5	58.4	
Interest income received	308.0	189.4	274.0	156.7	
Property, plant and equipment		(2 720 0)	(4 057 7)	(2 04E 4)	
- Additions	(5,655.9)	(3,730.8) 5.2	(4,257.7)	(3,265.6)	
- Proceeds from disposals	2.0		2.0	5.2	
Proceeds from disposal of non-current assets held for sale	67.0	4.8	67.0	4.8	
Proceeds from disposal of short term investments	118.3	0	118.3	0	
Net cash flow from investing activities	(5,212.3)	(3,539.6)	(3,414.8)	(3,095.4)	

	G	Group		Company		
	2011	2011 2010 (Restated)		2010 (Restated)		
Note	<b>RM'million</b>	<b>RM</b> 'million	<b>RM'million</b>	<b>RM</b> 'million		
CASH FLOWS FROM FINANCING ACTIVITIES						
Government development grants received	92.8	66.5	0	0		
Proceeds from issuance of shares	82.3	98.4	82.3	98.4		
Long term borrowings						
- Proceeds	438.6	417.4	0	166.1		
- Repayments	(3,100.1)	(1,103.3)	(2,531.2)	(492.5)		
Short term borrowings						
- Proceeds	332.7	109.5	0	0		
- Repayments	(284.5)	(127.0)	0	0		
Interest paid	(995.8)	(1,089.8)	(760.7)	(781.5)		
Dividends paid to shareholders	(838.0)	(620.8)	(838.0)	(620.8)		
Net cash flow from financing activities	(4,272.0)	(2,249.1)	(4,047.6)	(1,630.3)		
NET INCREASE IN DEPOSIT, BANK AND CASH BALANCES	(4,386.3)	2,182.0	(3,752.7)	1,266.8		
EFFECT OF CHANGES IN FOREIGN CURRENCY	(3.2)	(2.2)	0	0		
DEPOSIT, BANK AND CASH BALANCES AT THE BEGINNING OF THE FINANCIAL YEAR	8,343.7	6,163.9	6,456.6	5,189.8		
		0,10017		0,10,10		
DEPOSIT, BANK AND CASH BALANCES AT THE END		0.040.7				
OF THE FINANCIAL YEAR 27	3,954.2	8,343.7	2,703.9	6,456.6		
Cash at bank, held in trust*	(267.0)	(83.4)	0	0		
Debt reserve account**	(225.2)	(237.3)	0	0		
Funds from MOF***	(223.2)	(7.4)	0	0		
	(0.2)	(7.4)		0		
CASH AND CASH EQUIVALENTS AT THE END						
OF THE FINANCIAL YEAR	3,456.8	8,015.6	2,703.9	6,456.6		

\* The cash at bank held in trust is in respect of a grant given to a subsidiary by the Government of Malaysia for a designated capital project.

\*\* Debt reserve account relates to deposits placed with licensed financial institution as part of security obligations for bond financing.

\*\*\* Ministry of Finance (MOF) fund given to a subsidiary under stimulus package for training programmes.

# Notes to the Financial Statements

- 31 August 2011

# 1. GENERAL INFORMATION

The Group and Company are primarily involved in the business of the generation, transmission, distribution and sale of electricity and those tabulated in Note 14 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 Malaysia and listed 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 Company have been prepared in accordance with the provisions of the Companies Act 1965 and Financial Reporting Standards (`FRS'), the MASB 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 financial statements have been approved for issue in accordance with a resolution of the Board of Directors on 28 October 2011.

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.

# 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (a) Basis of preparation (Cont'd.)

(i) Standards, amendments to published standards, Interpretation Committee ("IC") Interpretations and improvements that are effective

The new accounting standards, amendments to published standards, IC Interpretations and improvement to existing standards effective for the Group and Company's financial year beginning 1 September 2010 are as follows:

- FRS 3 "Business Combinations"
- FRS 4 "Insurance Contract"
- FRS 7 "Financial Instruments: Disclosures" and the related Amendments
- FRS 101 (revised) "Presentation of Financial Statements"
- FRS 123 (revised) "Borrowing Costs"
- FRS 127 (revised) "Consolidated and Separate Financial Statements"
- FRS 139 "Financial Instruments: Recognition and Measurement" and the related Amendments
- Amendment to FRS 1 "First-time Adoption of Financial Reporting Standards" and FRS 127 "Consolidated and Separate Financial Statements: Cost of an Investment in a Subsidiary, Jointly Controlled Entity or Associate"
- Amendment to FRS 2 "Share-based Payment: Vesting Conditions and Cancellations"
- Amendments to FRS 132 "Financial Instruments: Presentation" and FRS 101 (revised) "Presentation of Financial Statements" – Puttable financial instruments and obligations arising on liquidation
- Amendment to FRS 132 "Financial Instruments: Presentation" on classification of rights issues
- IC Interpretation 9 "Reassessment of Embedded Derivatives" and the related Amendments
- IC Interpretation 10 "Interim Financial Reporting and Impairment"
- IC Interpretation 11 "FRS 2 Group and Treasury Share Transactions"
- IC Interpretation 12 "Service Concession Arrangements"
- IC Interpretation 13 "Customer Loyalty Programmes"
- IC Interpretation 14 "FRS 119 The Limit on a Defined Benefit Asset, Minimum Funding Requirements and Their Interaction"
- IC Interpretation 16 "Hedges of a Net Investment in a Foreign Operation"
- IC Interpretation 17 "Distribution of non-cash assets to owners"
- IC Interpretation 18 "Transfers of assets from customers"
- Improvements to FRSs (2009 & 2010)

A summary of the material impact of the new accounting standards, amendments and improvements to published and existing standards and IC Interpretations on the financial statements of the Group and Company is set out in Note 47 to the financial statements.

The Notes to the balances as at 31 August 2009 that were restated due to a change in accounting policy have been disclosed in the financial statements whilst the Notes to the unaffected balances have not been included.

(ii) Standards early adopted by the Group and Company

The Group and Company did not early adopt any new accounting standards, amendments and improvements to published and existing standards and IC Interpretations.

# Notes to the Financial Statements

- 31 August 2011 (Cont'd.)

# 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

# (a) Basis of preparation (Cont'd.)

(iii) Standards, amendments to published standards, IC Interpretations and improvements to existing standards that are applicable to the Group and Company but not yet effective

The Group and Company will apply the following new standards, amendments and improvements to published and existing standards and IC Interpretations from the effective dates stated:

The revised FRS 124 "Related party disclosures" (effective from 1 January 2012) removes the exemption to disclose transactions between government-related entities and the government, and all other government-related entities. The following new disclosures are now required for government related entities:

- The name of the government and the nature of their relationship;
- The nature and amount of each individually significant transactions; and
- The extent of any collectively significant transactions, qualitatively or quantitatively.

Amendment to FRS 2 "Share-based payment: Group cash-settled share-based payment transactions" (effective from 1 January 2011) clarifies that an entity that receives goods or services in a share-based payment arrangement must account for those goods or services no matter which entity in the Group settles the transaction, and no matter whether the transaction is settled in shares or cash. The amendments also incorporate guidance previously included in IC Interpretation 8 "Scope of FRS 2" and IC Interpretation 11 "FRS 2 – group and treasury share transactions", which shall be withdrawn upon application of this amendment.

Amendments to FRS 7 "Financial instruments: Disclosures" and FRS 1 "First-time adoption of financial reporting standards" (effective from 1 January 2011) requires enhanced disclosures about fair value measurement and liquidity risk. In particular, the amendments require disclosure of fair value measurements by level of a fair value measurement hierarchy.

IC Interpretation 4 "Determining whether an arrangement contains a lease" (effective from 1 January 2011) requires the Group to identify any arrangement that does not take the legal form of a lease, but conveys a right to use an asset in return for a payment or series of payments. This interpretation provides guidance for determining whether such arrangements are, or contain, leases. The assessment is based on the substance of the arrangement and requires assessment of whether the fulfilment of the arrangement is dependent on the use of a specific asset and the arrangement conveys a right to use the asset. If the arrangement contains a lease, the requirements of FRS 117 "Leases" should be applied to the lease element of the arrangement.

IC Interpretation 19 "Extinguishing financial liabilities with equity instruments" (effective from 1 July 2011) provides clarification when an entity renegotiates the terms of a financial liability with its creditor and the creditor agrees to accept the entity's shares or other equity instruments to settle the financial liability fully or partially. A gain or loss, being the difference between the carrying value of the financial liability and the fair value of the equity instruments issued, shall be recognised in profit or loss. Entities are no longer permitted to reclassify the carrying value of the existing financial liability into equity with no gain or loss recognised in profit or loss.

Amendments to IC Interpretation 14 "Prepayments of a minimum funding requirements" (effective from 1 July 2011) permits an entity to recognise the prepayments of contributions as an asset, rather than an expense in circumstances when the entity is subject to a minimum funding requirement and makes an early payment of contributions to meet those requirements.

# 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (a) Basis of preparation (Cont'd.)

(iii) Standards, amendments to published standards, IC Interpretations and improvements to existing standards that are applicable to the Group and Company but not yet effective (Cont'd.)

Improvements to FRSs: (effective from 1 January 2011)

FRS 3 (revised) "Business Combinations"

- Clarifies that the choice of measuring non-controlling interest at fair value or at the proportionate share of the acquiree's net assets applies only to instruments that represent present ownership interests and entitle their holders to a proportionate share of the net assets in the event of liquidation. All other components of non-controlling interest are measured at fair value unless another measurement basis is required by FRS.
- Clarifies that the amendments to FRS 7, FRS 132 and FRS 139 that eliminate the exemption for contingent consideration, do not apply to contingent consideration that arose from business combinations whose acquisition dates precede the application of FRS 3 (2010). Those contingent consideration arrangements are to be accounted for in accordance with the guidance in FRS 3 (2005).

FRS 101 "Presentation of financial statements" removes the requirement for each item of other comprehensive income to be presented separately in the statement of changes in equity.

The Group and Company is currently finalising the assessment of the impact of IC Interpretation 4.

The impact of the other new accounting standards, amendments and improvements to published standards and interpretations on the financial statements of the Group and Company is not anticipated to be material except for increased disclosures in the financial statements.

(iv) Amendments to published standards and IC interpretation that are not relevant and not yet effective for the Group's and Company's operations

The amendment to FRS 1 "First-time adoption of financial reporting standards" (effective from 1 January 2011) provides exemption for first-time adopters in the oil and gas industries and those with leasing contracts. Oil and gas entities using the full cost method for its oil and gas assets are exempted from retrospective application. Entities with existing leasing contracts are exempted from reassessing the classification of those contracts in accordance with IC Interpretation for "Determining whether an arrangement contains a lease" when application of the previous accounting practice produce the same result.

IC Interpretation 15 "Agreements for the construction of real estate" (effective from 1 January 2012) supersedes FRS 201 "Property development activities" and clarifies that property development activities are sale of goods, instead of construction contracts.

#### (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.

# Notes to the Financial Statements

- 31 August 2011 (Cont'd.)

# 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

### (b) Subsidiaries and basis of consolidation (Cont'd.)

(i) Subsidiaries (Cont'd.)

In the Company's separate financial statements, investments in subsidiaries are stated at cost less accumulated impairment losses. On disposal of such investments, the difference between net disposal proceeds and their carrying amounts is included in the income statement.

(ii) Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries. The financial statements of the subsidiaries are prepared for the same reporting date as the Company.

Subsidiaries are consolidated from the date on which the Group obtains control, and continue to be consolidated until the date 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.

The consideration transferred for acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date.

In a business combination achieved in stages, the previously held equity interest in the acquiree is re-measured at its acquisition date fair value and the resulting gain or loss is recognised in profit or loss.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the Group's share of the identifiable net assets acquired is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the gain is recognised in profit or loss. Refer to accounting policy Note 2(f) on goodwill.

Non-controlling interest is the equity in a subsidiary not attributable, directly or indirectly, to a parent. On an acquisition-by-acquisition basis, the Group measures any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets. At the end of reporting period, non-controlling interest consists of amount calculated on the date of combinations and its share of changes in the subsidiary's equity since the date of combination.

All earnings and losses of the subsidiary are attributed to the parent and the non-controlling interest, even if the attribution of losses to the non-controlling interest results in a debit balance in the shareholders' equity. Profit or loss attribution to non-controlling interests for prior years is not restated.

### Change in accounting policy

The Group has changed its accounting policy on business combinations and accounting for non-controlling interest when it early adopted the revised FRS 3 "Business combinations" and FRS 127 "Consolidated and separate financial statements".

# 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

### (b) Subsidiaries and basis of consolidation (Cont'd.)

(ii) Basis of consolidation (Cont'd.)

Change in accounting policy (Cont'd.)

Previously, contingent consideration in a business combination was recognised when it is probable that payment will be made. Acquisition-related costs were included as part of the cost of business combination. Any non-controlling interest in the acquiree was measured at the non-controlling interest's proportionate share of the acquiree's identifiable net assets. Any adjustment to the fair values of the subsidiary's identifiable assets, liabilities and contingent liabilities relating to previously held interests of the Group was accounted for as a revaluation.

The Group has applied the new policies prospectively to transactions occurring on or after 1 January 2010. As a consequence, no adjustments were necessary to any of the amounts previously recognised in the financial statements.

Previously, the Group had stopped attributing losses to the non-controlling interest because the losses exceeded the carrying amount of the non controlling interest. The Group has applied this policy prospectively. On the date of adoption of the new policy, the non-controlling interest reflects its previous carrying amount (that is, zero).

(iii) Changes in ownership interest

When the Group ceases to have control, joint control or significant influence, any retained interest in the entity is re-measured to its fair value with the change in carrying amount recognised in the income statement. This fair value is its fair value on initial recognition as a financial asset in accordance with FRS 139. Any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. Subsequently, it is accounted for as an equity accounted investee or as an available-for-sale financial asset depending on the level of influence retained.

# (c) Transactions with non-controlling interests

The Group applies a policy of treating transactions with non-controlling interests as transactions with equity owners of the Group. For purchases from non-controlling 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. For disposals to non-controlling interests, where there is no change in controls, differences between any proceeds received and the relevant share of non-controlling interests are also recorded in equity.

# (d) Jointly controlled entities

Jointly controlled entities are corporations, partnerships or other entities over which there is contractually agreed sharing of control by the Group with one or more parties where the strategic financial and operating decisions relating to the entities requires unanimous consent of the parties sharing control. The Group's interest in jointly controlled entities is accounted for in the consolidated financial statements using the equity method of accounting.

Equity accounting involves recognising in the consolidated income statement and consolidated statement of changes in equity, the Group's share of profits less losses of jointly controlled entities based on the latest audited financial statements or management accounts of the jointly controlled entities, made up to the financial year end of the Group. Where necessary, adjustments are made to the results and net assets of jointly controlled entities to ensure consistency of accounting policies with those of the Group. The Group's investment in jointly controlled entities is recorded at cost inclusive of goodwill and adjusted thereafter for accumulated impairment loss and the post acquisition change in the Group's share of net assets of the jointly controlled entities.

# Notes to the Financial Statements

- 31 August 2011 (Cont'd.)

# 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (d) Jointly controlled entities (Cont'd.)

Unrealised gains on transactions between the Group and its jointly controlled entities are eliminated to the extent of the Group's interest in the jointly controlled entities. Unrealised losses are also eliminated on the same basis but only to the extent of the costs that can be recovered, and the balance that provides evidence of reduction in net realisable value or an impairment of the asset transferred are recognised in the consolidated income statement.

# (e) 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 equity method is applied based on the latest financial statements or management accounts of the associates, made up to the financial year end of the Group. The Group's investment in associates includes goodwill identified on acquisition, net of any accumulated impairment losses (see Note 2(l)).

The Group's share of its associates' post-acquisition profits or losses is recognised in the income statement, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. 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 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 income statement.

For incremental interest in an associate, the date of acquisition is the 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.

# (f) Goodwill

Goodwill represents the excess of the cost of the acquisition over the Group's share of the fair value of the identifiable net assets including contingent liabilities of subsidiaries, jointly controlled entities and associates at the date of the acquisition. Goodwill is tested for impairment at least annually, or if events or circumstances occur indicating that impairment may exist. Impairment of goodwill is charged to the income statement as and when it arises. Impairment losses on goodwill (inclusive of impairment losses recognised in a previous interim period) are not reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity disposed.

Goodwill on acquisition of jointly controlled entities and associates is included in the investments in jointly controlled entities and associates respectively. Such goodwill is tested for impairment as part of the overall carrying amount.

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (g) Property, plant and equipment and depreciation

Property, plant and equipment are stated at cost or valuation less accumulated depreciation and accumulated 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 accumulated depreciation.

When an asset's carrying amount is increased as a result of a revaluation, the increase is recognised in other comprehensive income as a revaluation surplus reserve.

When the asset's carrying amount is decreased as a result of a revaluation, the decrease is recognised in the income statement. However, the decrease is recognised in other comprehensive income to the extent of any credit balance existing in the revaluation surplus reserve of that asset.

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. Leasehold land classified as finance lease (refer to accounting policy Note 2(n)(i) on finance leases) is amortised over the remaining period of the respective leases ranging from 5 to 99 years on a straight line basis.

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, summarised as follows:

Buildings and civil works	10 to 60 years
Plant and machinery	5 to 40 years
Lines and distribution mains	15 to 40 years
Distribution services	20 years
Meters	15 years
Public lighting	15 to 20 years
Furniture, fittings and office equipment	3 to 15 years
Motor vehicles	5 to 15 years

- 31 August 2011 (Cont'd.)

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (g) Property, plant and equipment and depreciation (Cont'd.)

Residual values and useful lives of assets are reviewed, and adjusted if appropriate, at the end of the reporting period.

At the end of the reporting period, the Group assesses whether there is any indication of impairment. If such indications exist, an analysis is performed to assess whether the carrying amount of the asset is fully recoverable. A write down is made if the carrying amount exceeds the recoverable amount (see Note 2(I)).

#### (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

Expenditure 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 borrowing costs

Borrowing costs incurred to finance the construction of any qualifying assets are capitalised as part of the cost of the assets during the period of time that is required to complete and prepare the asset for its intended use. All other borrowing costs are expensed off.

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (I) Impairment of non-financial 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 statement of comprehensive income 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 statement of comprehensive income unless it reverses an impairment loss on a revalued asset in which case it is taken to revaluation surplus.

#### (m) Customers' contributions

Contributions (assets in the form of PPE or cash to acquire such assets) received from customers consist mainly of upfront capital contributions for the construction of assets, used to connect the customers to a network or to provide them with the service, are credited to the deferred income account upon recognition of the assets.

Contributions received prior to 1 January 2011 are amortised over 15 years, being the average useful life of the asset.

Effective 1 January 2011, in compliance with IC Interpretation 18, all contributions received from customers, when that amount of contributions must be used only to construct or acquire an item of property, plant and equipment, and the item of property, plant and equipment is used to either connect the customer to a network or to provide the customer with ongoing access to supply of goods or services, or to do both, the contributions received are recognised as revenue. Revenue arising from assets received from customers are recognised in the income statement when the performance obligations associated with receiving those customer contributions are met.

#### (n) Leases

(i) Finance leases

Leases of property, plant and equipment where the Group has substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalised at the lease's commencement at the lower of the fair value of the leased property and the present value of the minimum lease payments.

Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate of interest on the remaining balance of the liability. The corresponding rental obligations, net of finance charges, are included in other long-term payables. The interest element of the finance cost is charged to the income statement over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under finance leases is depreciated over the shorter of the useful life of the asset and the lease term.

Initial direct costs incurred by the Group in negotiating and arranging finance leases are added to the carrying amount of the leased assets and recognised as an expense in the income statement over the lease term on the same basis as the lease expense.

(ii) Operating leases

Leases of assets where a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the income statement on the straight line basis over the lease period.

- 31 August 2011 (Cont'd.)

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (o) 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 basis.

Net realisable value is the estimated selling price in the ordinary course of business, less the costs of completion and selling expenses.

#### (p) Trade and other receivables

Trade and other receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If collection is expected in one year or less (or in the normal operating cycle of the business if longer), they are classified as current assets. If not, they are presented as non-current assets.

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less accumulated impairment losses.

#### (q) Trade and other payables

Trade and other payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Accounts payable are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as non-current liabilities.

Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost, which is the fair value of the consideration to be paid in the future for the goods and services received.

#### (r) Cash and cash equivalents

For the purpose of the consolidated statement of cash flows, 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.

#### (s) 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.

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 redeemable 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 approved.

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (†) Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. In subsequent periods, borrowings are stated at amortised cost using the effective interest method, any difference between proceeds (net of transaction costs) and the redemption value is recognised in the income statement over the period of the borrowings.

Interest, dividends, losses and gains relating to a financial instrument, or a component part, classified as a liability is reported within finance cost in the income statement.

Borrowings are classified as current liabilities unless the Group and Company have an unconditional right to defer settlement of the liability for at least twelve (12) months after the statement of financial position date.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs.

#### (u) Income tax

Current tax expense is determined according to the tax laws of which the Group and Company operates and include all taxes based upon the taxable profits.

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. However, deferred tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

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 utilised.

Deferred tax is recognised on temporary differences arising on investments in subsidiaries and associates 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.

Deferred and income tax assets and liabilities are offset when there is a legally and enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to taxes levied by the same taxation authority on either the taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

Tax rates enacted or substantively enacted at the end of the reporting date are used to determine deferred tax.

#### (v) Employee benefits

(i) Short term employee benefits

Wages, salaries, paid annual leave, bonuses, and non-monetary benefits are accrued in the financial year in which the services are rendered by employees of the Group.

#### (ii) Post-employment benefits

The Group has various post-employment benefit schemes which are either defined contribution or defined benefit plans.

- 31 August 2011 (Cont'd.)

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (v) Employee benefits (Cont'd.)

(ii) Post-employment benefits (Cont'd.)

#### Defined contribution plans

The Group's contributions to defined contribution plans are charged to the statement of comprehensive income in the financial year to which they relate. Once the contributions have been paid, the Group has no further payment obligations.

#### Defined 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 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 statement of financial position 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 end of reporting 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 statement of financial position date of Government securities which have currency and terms to maturity approximating the terms of the related liability. The last revaluation was done in December 2009.

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 2006, the effective date the Group adopted this FRS.

The Group operates an equity-settled, share-based compensation plan for the employees of the Group. Employee 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 the end of each reporting 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.

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (w) Government development grants

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants relating to costs are deferred and recognised in the income statement over the period necessary to match them with the costs they are intended to compensate.

Government grants relating to construction of property, plant and equipment are included in non-current liabilities as deferred income and are credited to the income statement on the straight line basis over the expected lives of the related assets.

#### (x) 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.

#### (y) Revenue recognition

Revenue comprises the fair value of the consideration received or receivable for the sale of goods and services in the ordinary course of the Group's activities.

Electricity revenue is recognised when electricity is consumed by customers. Electricity revenue includes an estimated value of the electricity consumed by customers from the date of their last meter reading and period end. Accrued unbilled revenues are reversed the following month when actual billings occur.

Sale of goods is recognised when significant risks and rewards of ownership have passed and the collectability of the related receivable is reasonably assured.

Other operating income earned by the Group and Company comprises interest and leasing income as well as dividend income. Leasing income is accrued, unless collectability is in doubt. Dividend income is recognised when the shareholders' rights to receive payment is established.

Interest income is recognised using the effective interest method. When a loan and receivable is impaired, the Group reduces the carrying amount to its recoverable amount, being the estimated future cash flow discounted at the original effective interest rate of the instrument, and continues unwinding the discount as interest income. Interest income on impaired loan and receivables are recognised using the original effective interest rate.

#### (z) 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.

- 31 August 2011 (Cont'd.)

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (z) Foreign currencies (Cont'd.)

(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 statement of financial position date. All exchange differences are dealt with through the statement of comprehensive income.

(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 statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
- income and expenses for each statement of comprehensive income 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.

The principal closing rates used in translation of foreign currency amounts were as follows:

Foreign currency	2011 RM	2010 RM
1 US Dollar	2.9770	3.1390
100 Japanese Yen	3.8801	3.6919
1 Sterling Pound	4.8778	4.8860
100 Pakistani Rupee	3.3410	3.6800
1 EURO	4.3283	3.9958

#### (aa) Financial instruments

#### Classification

The Group and Company has changed its accounting policy for recognition and measurement of financial assets upon adoption of FRS 139 "Financial Instruments: Recognition and Measurement" on 1 September 2010.

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (aa) Financial instruments (Cont'd.)

#### Classification (Cont'd.)

Previously, investments in non-current investments and borrowings are shown at cost; marketable securities (within current assets) are carried at the lower of cost and market value; and trade and other receivables and trade and other payables are carried at invoice amount. The Group and Company have applied the new policy according to the transitional provision of FRS 139 by re-measuring all financial assets and financial liabilities, as appropriate, and recording any adjustments to the previous carrying amounts to opening retained earnings or, if appropriate, another category of equity, of the financial year. Comparatives for financial instruments have not been adjusted and therefore the corresponding are not comparable. Refer to Note 47(a) to the financial statements for the impact of this change in accounting policy.

#### Financial assets

(i) Classification

The Group and Company classify its financial assets in the following categories: at fair value through profit or loss ("FVTPL"), loans and receivables, available-for-sale ("AFS") and held-to-maturity ("HTM"). The classification depends on the purpose for which the financial assets were acquired. Management determines the classification at initial recognition.

#### (a) Financial assets at FVTPL

Financial assets at FVTPL are financial assets held for trading. A financial asset is classified in this category if it is acquired or incurred principally for the purpose of selling or repurchasing it in the near term. Derivatives are also categorised as held for trading unless they are designated as hedges.

(b) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for maturities greater than twelve (12) months after the end of the reporting period. These are classified as non-current assets.

(c) AFS financial assets

AFS financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless the investment matures or management intends to dispose of it within twelve (12) months from the end of the reporting period.

(d) HTM financial assets

HTM financial assets are non-derivative financial assets with fixed or determinable payments and fixed maturities that the Group's and Company's management have the positive intention and ability to hold to maturity. If the Group and Company were to sell other than an insignificant amount of HTM financial assets, the whole category would be tainted and reclassified as AFS. HTM financial assets are included in non-current assets, except for those with maturities less than twelve (12) months from the end of the reporting period, which are classified as current assets.

(ii) Recognition and initial measurement

Regular purchases and sales of financial assets are recognised on the trade-date, the date on which the Group and Company commit to purchase or sell the asset.

- 31 August 2011 (Cont'd.)

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (aa) Financial instruments (Cont'd.)

Financial assets (Cont'd.)

(ii) Recognition and initial measurement (Cont'd.)

Financial assets are initially recognised at fair value plus transaction costs for all financial assets not carried at FVTPL. Financial assets carried at FVTPL are initially recognised at fair value and transaction costs are expensed in the income statement.

(iii) Subsequent measurement - gains and losses

AFS financial assets and financial assets at FVTPL are subsequently carried at fair value. Loans and receivables and HTM financial assets are subsequently carried at amortised cost using the effective interest method.

Changes in the fair values of financial assets at FVTPL, including the effects of currency translation are recognised in the income statement in the period in which the changes arise.

- (iv) Subsequent measurement Impairment of financial assets
  - (a) Assets carried at amortised cost

The Group and Company assess at the end of the reporting period whether there is objective evidence that a financial asset or group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

The criteria that the Group and Company use to determine that there is objective evidence of an impairment loss include:

- · Significant financial difficulty of the issuer or obligor;
- A breach of contract, such as a default or delinquency in interest or principal payments;
- The Group, for economic or legal reasons relating to the borrower's financial difficulty, granting to the borrower a concession that the lender would not otherwise consider;
- · It becomes probable that the borrower will enter bankruptcy or other financial reorganisation;
- Disappearance of an active market for that financial asset because of financial difficulties; or
- Observable data indicating that there is a measurable decrease in the estimated future cash flows from a portfolio of financial assets since the initial recognition of those assets, although the decrease cannot yet be identified with the individual financial assets in the portfolio, including:
  - (i) adverse changes in the payment status of borrowers in the portfolio; and
  - (ii) national or local economic conditions that correlate with defaults on the assets in the portfolio.

The amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The asset's carrying amount of the asset is reduced and the amount of the loss is recognised in profit or loss. If 'loans and receivables' or a 'HTM investment' has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract. As a practical expedient, the Group and Company may measure impairment on the basis of an instrument's fair value using an observable market price.

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (aa) Financial instruments (Cont'd.)

- (iv) Subsequent measurement Impairment of financial assets (Cont'd.)
  - (a) Assets carried at amortised cost (Cont'd.)

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised (such as an improvement in the debtor's credit rating), the reversal of the previously recognised impairment loss is recognised in profit or loss.

When an asset is uncollectible, it is written off against the related accumulated impairment losses account. Such assets are written off after all the necessary procedures have been completed and the amount of the loss has been determined.

(b) Assets classified as AFS

The Group and Company assess at the end of the reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired.

For debt securities, the Group and Company uses criteria and measurement of impairment loss applicable for 'assets carried at amortised cost' above. If, in a subsequent period, the fair value of a debt instrument classified as AFS increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in profit or loss, the impairment loss is reversed through profit or loss.

In the case of equity securities classified as AFS, in addition to the criteria for 'assets carried at amortised cost' above, a significant or prolonged decline in the fair value of the security below its cost is also considered as an indicator that the assets are impaired. If any such evidence exists for AFS financial assets, the cumulative loss that had been recognised directly in equity is removed from equity and recognised in profit or loss. The amount of cumulative loss that is reclassified to profit or loss is the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in profit or loss. Impairment losses recognised in profit or loss on equity instruments classified as AFS are not reversed through profit or loss.

(v) De-recognition

Financial assets are de-recognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group and Company have transferred substantially all risks and rewards of ownership to related party.

#### Financial liabilities

The Group classifies its financial liabilities in the following categories: at fair value through profit or loss or other financial liabilities. Management determines the classification of its financial liabilities at initial recognition.

Other financial liabilities are non-derivatives financial liabilities. Other financial liabilities are initial recognised at fair value plus transaction cost and subsequently carried at amortised cost using the effective interest method. Changes in the carrying value of these liabilities are recognised in the income statement.

The Group's other financial liabilities comprise trade and other payables and borrowings in the statements of financial position. Financial liabilities are classified as current liabilities; except for maturities more than 12 months after the reporting date, in which case they are classified as non-current liabilities.

- 31 August 2011 (Cont'd.)

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (bb) Offsetting financial instruments

Financial assets and liabilities are offset and the net amount presented in the statement of financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously.

#### (cc) Derivative financial instruments and hedging activities

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Group and Company designate certain derivatives as either:

- Hedges of the fair value of recognised assets or liabilities or a firm commitment (fair value hedge);
- Hedges of a particular risk associated with a recognised asset or liability or a highly probable forecast transaction (cash flow hedge); or
- Hedges of a net investment in a foreign operation (net investment hedge).

Fair value changes on derivatives that are not designated or do not qualify for hedge accounting are recognised in the income statement when the changes arises.

#### Change in accounting policy

The Group and Company have changed its accounting policy for derivatives upon adoption of FRS 139 "Financial instruments: Recognition and Measurement" on 1 September 2010. Previously, derivative gains and losses were not recognised in the financial statements on inception. Instead, they were recognised when settled, at which time they were included in the measurement of the transaction hedged.

The Group and Company have applied the new policy according to the transitional provisions by recognising and measuring derivatives, as appropriate, and recording any adjustments to the previous carrying amounts to the opening retained earnings or, if appropriate, another category of equity, of the financial year. Refer to Note 47(a) to the financial statements for the impact of this change in accounting policy.

#### (dd) Financial guarantee contracts

Financial guarantee contracts are contracts that require the Group or Company to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due, in accordance with the terms of a debt instrument.

Financial guarantee contracts are recognised as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value and subsequently at the higher of the amount determined in accordance with FRS 137 "Provisions, contingent liabilities and contingent assets" and the amount initially recognised less cumulative amortisation, where appropriate.

The fair value of financial guarantees is determined as the present value of the difference in net cash flows between the contractual payments under the debt instrument and the payments that would be required without the guarantee, or the estimated amount that would be payable to a third party for assuming the obligations.

Where financial guarantees in relation to loans or payables of subsidiaries are provided by the Company for no compensation, the fair values are accounted for as contributions and recognised as part of the cost of investment in subsidiaries.

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D.)

#### (ee) 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 economic 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.

#### (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.

- 31 August 2011 (Cont'd.)

#### 3. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONT'D.)

#### (b) Critical accounting estimates and assumptions (Cont'd.)

(iii) Contingent liabilities

Determination of the treatment of contingent liabilities is based on management's view of the expected outcome 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.

(iv) Impairment of trade receivables

Management reviews its loans and receivables for objective evidence of impairment at least quarterly. Significant financial difficulties of the debtor, the probability that the debtor will enter bankruptcy, and default or significant delay in payments are considered objective evidence that a receivable is impaired. In determining this, management makes judgement as to whether there is observable data indicating that there has been a significant change in the payment ability of the debtor, or whether there have been significant changes with adverse effect in the technological, market, economic or legal environment in which the debtor operates in.

Where there is objective evidence of impairment, management makes judgements as to whether an impairment loss should be recorded as an expense. The methodology and assumptions used for estimating both the amount and timing of future cash flows are reviewed regularly to reduce any differences between the estimated loss and actual loss experience.

(v) Estimation of income taxes

Income taxes are estimated based on the rules governed under the Income Tax Act 1967.

Differences in determining the capital allowances and deductibility of certain expenses may arise during the estimation of the provision for income taxes between tax calculated at the statement of financial position date, and the final submission to the tax authorities as a result of obtaining further detailed information that may become available subsequent to the statement of financial position date.

Where the final tax outcome of these matters is different from the amounts that were initially recognised, such differences will impact the income tax provisions and deferred tax balance in the period in which such determination is made.

(vi) Revenue recognition

Electricity revenue for energy supply activities includes an assessment of energy supplied to customers between the date of the last meter reading and the financial year end of the Group and Company (unread and unbilled). An assessment is also made of any factors that all likely to materially affect the ultimate economic benefits which will flow to the Group and Company, including bill cancellation and adjustments. To the extent that the economic benefits are not expected to flow to the Group and Company, the value of that revenue is not recognised.

(vii) Fair value of derivatives and other financial instruments

Certain financial instruments such as investments and derivative financial instruments are carried on the statement of financial position at fair value, with changes in fair value reflected in the profit or loss.

Fair values are estimated by reference in part to published price quotations and in part by using valuation techniques. The fair value of financial instruments that are not traded in an active market (for example, over-thecounter derivatives) is determined by using valuation techniques.

#### 3. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONT'D.)

#### (b) Critical accounting estimates and assumptions (Cont'd.)

(vii) Fair value of derivatives and other financial instruments (Cont'd.)

The Group and Company use its judgement to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each financial reporting period.

#### 4. **REVENUE**

	Group		Company				
	2011	2011	2011	2011	2010 (Restated)	2011	2010 (Restated)
	<b>RM'million</b>	RM'million	<b>RM'million</b>	RM'million			
Sales - electricity	31,165.3	29,591.5	29,561.9	28,035.4			
- goods and services	379.4	357.4	0	0			
<ul> <li>recognition of customers' contribution</li> </ul>	268.7	0	263.9	0			
Release of deferred income	393.5	368.5	331.3	326.9			
	32,206.9	30,317.4	30,157.1	28,362.3			

#### 5. OPERATING EXPENSES

	Group		Company	
	2011 RM'million	2010 RM'million	2011 RM'million	2010 RM'million
Cost of Sales:				
– Energy cost	23,120.7	19,089.0	23,151.4	18,889.5
- Transmission cost	1,276.5	1,236.5	1,276.5	1,233.8
- Distribution cost	3,998.3	3,583.8	3,998.3	3,578.5
	28,395.5	23,909.3	28,426.2	23,701.8
Administrative expenses	1,945.8	1,784.0	1,181.5	1,067.0
Other operating expenses	1,241.5	826.4	501.9	647.9
	31,582.8	26,519.7	30,109.6	25,416.7

- 31 August 2011 (Cont'd.)

#### 5. OPERATING EXPENSES (CONT'D.)

Operating expenses include the following items:

	Group 2011 2010 (Restated)		Co 2011	ompany 2010 (Restated)
	<b>RM</b> 'million	RM'million	<b>RM' million</b>	RM'million
Purchases from Independent Power Producers (IPPs)	13,557.6	12,528.0	19,174.8	15,904.4
Directors' remuneration				
- fees and allowances	2.3	1.0	1.9	0.8
- other emoluments	3.2	2.6	3.2	2.6
Auditors remuneration				
- statutory audit fees				
<ul> <li>PricewaterhouseCoopers, Malaysia</li> </ul>	1.6	1.5	0.7	0.7
<ul> <li>Member firm of PricewaterhouseCoopers</li> </ul>				
International Limited***	0	0	0	0
- assurance related fees	0.3	0.3	0.3	0.3
- non-audit fees				
<ul> <li>PricewaterhouseCoopers, Malaysia **</li> </ul>	0.2	2.1	0	1.1
Staff cost (Note 6)	3,220.8	2,932.3	2,831.8	2,565.4
Property, plant and equipment:				
- Depreciation	4,041.0	3,950.2	3,395.0	3,301.1
- Written off	35.5	86.6	34.8	86.5
Loss on winding up/disposal of subsidiaries	0	112.7	0	0.1
(Net reversal)/Allowance for impairment losses:				
- Trade and other receivables	(12.3)	103.3	(19.2)	93.1
- Amounts due from subsidiaries	0	0	187.7	323.5
- Amounts due from a jointly controlled entity	(3.2)	14.6	(3.2)	14.6
Impairment losses of investments in:				
- Jointly controlled entity	0	7.9	0	7.9
Write back of diminution in value of				
- Marketable securities	0	(0.3)	0	(0.3)
(Write-back of)/Allowance for inventory obsolescence	(8.6)	3.5	(8.5)	3.5
Inventories written off	22.9	23.7	21.4	23.4
Rental of land and buildings	52.9	53.4	31.7	34.5
Rental of plant and machinery	11.5	20.0	11.5	20.0
Research and development expenses	54.1	46.9	53.3	44.8
Receipt of Government subsidies*	(547.5)	(521.4)	0	0

\* 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 RM547.5 million (2010: RM521.4 million) and it has been offset against energy cost.

\*\* This represents the audit fees for Liberty Power Ltd amounting to RM34,479 (2010: RM34,729) and TNB Remaco Pakistan Pvt Ltd amounting to RM44,255 (2010: Nil).

- # PricewaterhouseCoopers Malaysia and other member firms of PricewaterhouseCoopers International Limited are separate and independent legal entities.
- ## Previous year amount primarily relates to work commissioned by the Energy Commission on the management and engineering audit, jointly undertaken by PwC Malaysia and an international engineering and consulting firm.

#### 5. OPERATING EXPENSES (CONT'D.)

The estimated monetary value of benefits-in-kind received by the Directors was RM344,826 (2010: RM309,821) for the Group and Company.

There was no amount paid and payable to any firm, of which a Director is a partner, for professional services rendered to the Group and Company (2010: Nil).

#### 6. STAFF COST

	Group		Company	
	2011 RM'million	2010 RM'million	2011 RM'million	2010 RM'million
Wages, salaries and bonuses	1,912.9	1,765.6	1,656.7	1,477.9
Defined contribution retirement plan	216.2	189.6	161.4	150.9
Retirement benefit plan (Note 32)	308.7	251.6	297.2	249.2
Retirement medical plan (Note 32)	550.9	513.8	521.2	502.4
Employees' Share Option Scheme II	34.1	33.4	29.8	29.9
Other employee benefits	198.0	178.3	165.5	155.1
	3,220.8	2,932.3	2,831.8	2,565.4

Details of the retirement benefit and retirement medical plans of the Group and Company are set out in Note 32 to these financial statements.

### 7. OTHER OPERATING INCOME

	Group		Company	
	2011 RM'million	2010 RM'million	2011 RM'million	2010 RM'million
Dividend income from investments in:				
- quoted shares	3.3	4.1	13.9	4.1
- unquoted shares	2.1	2.5	74.3	58.6
Leasing income	9.2	4.7	11.5	7.0
Rental income	12.9	12.2	32.9	33.9
Release of Government development grants (Note 35)	64.6	42.9	0	0
Government grants relating to income	0	50.0	0	0
Gain on disposals				
- Property, plant and equipment	1.4	3.0	1.4	3.0
- Non-current assets held for sale	43.3	2.3	43.3	2.3
<ul> <li>Short term investment</li> </ul>	5.0	0	5.0	0
Interest on late payments	132.4	81.8	132.4	81.8
Minimum charges	32.7	33.2	32.7	33.2
Gain on redemption of redeemable preference				
shares in a subsidiary	0	0	259.7	0
Other income	225.1	145.6	145.8	126.6
	532.0	382.3	752.9	350.5

Other income comprise primarily of income from rechargeable jobs and recovery from insurance claims.

# Notes to the Financial Statements - 31 August 2011 (Cont'd.)

## 8. FOREIGN EXCHANGE (LOSS)/GAIN

	Group		Company	
	2011	2010	2011	2010
	<b>RM</b> 'million	<b>RM</b> 'million	<b>RM'million</b>	<b>RM'million</b>
Foreign exchange (loss)/gain comprises:				
Translation (loss)/gain - foreign currency				
denominated term loans	(105.6)	638.7	(100.5)	647.3
Translation loss – others	(121.5)	(6.1)	(143.6)	(63.2)
Transaction gain – foreign term loans	34.8	27.7	35.4	27.7
Transaction loss – others	(1.8)	(4.3)	0	(4.9)
	(194.1)	656.0	(208.7)	606.9

### 9. FINANCE INCOME/COST

	Group		Company	
	2011 RM'million	2010 RM′million	2011 RM'million	2010 RM′million
Finance income				
Interest from subsidiaries	0	0	155.3	176.9
Interest from deposits, staff loans and associates	283.5	209.7	249.3	179.7
Waiver of Ioan interest	35.6	0	0	0
	319.1	209.7	404.6	356.6
Finance cost Interest on borrowings Less: Amount capitalised into property,	1,071.7	1,161.8	789.1	869.2
plant and equipment	(206.4)	(241.4)	(206.4)	(241.4)
	865.3	920.4	582.7	627.8
Interest on consumer deposits	40.6	150.5	37.8	129.8
Changes in fair value of derivatives and amortisation	(78.1)	0	(26.3)	0

### **10. TAXATION AND ZAKAT**

	Group		Company	
	2011	2010 (Restated)	2011	2010 (Restated)
	<b>RM'million</b>	<b>RM</b> 'million	<b>RM'million</b>	<b>RM</b> ′million
Current tax:				
Malaysian corporate income tax	113.5	666.8	93.9	659.0
Deferred tax (Note 33)	(90.0)	139.2	(127.1)	122.2
Tax expense	23.5	806.0	(33.2)	781.2
Zakat	16.7	17.2	16.7	17.2
	40.2	823.2	(16.5)	798.4
The analysis of the tax expense is as follows:				
Current tax:				
Current year	99.9	669.6	83.2	661.7
Under/(Over) accrual in prior years	13.6	(2.8)	10.7	(2.7)
	113.5	666.8	93.9	659.0
Deferred tax:		120.0	(107.1)	100.0
Origination of temporary differences	(90.0)	139.2	(127.1)	122.2
	23.5	806.0	(33.2)	781.2

The explanation of the relationship between tax expense and profit before taxation is as follows:

	2011	Group 2010	Cc 2011	ompany 2010
	RM'million	(Restated) RM'million	<b>RM'million</b>	(Restated) RM'million
Profit before taxation and zakat	546.7	4,019.4	402.1	3,502.0
Tax calculated at the Malaysian corporate income tax				
rate of 25.0% (2010: 25.0%)	136.6	1,004.9	100.5	875.5
Tax effects of:				
<ul> <li>Share of results of associates</li> </ul>	(23.3)	4.8	0	0
<ul> <li>Income not subject to tax</li> </ul>	(128.9)	(304.6)	(186.6)	(248.1)
<ul> <li>Expenses not deductible for tax purposes</li> </ul>	92.3	142.1	145.6	195.4
<ul> <li>Expenses qualifying for double deduction</li> </ul>	(7.3)	(9.4)	(6.0)	(9.4)
Under/(Over) provision of current tax in prior years	13.6	(2.8)	10.7	(2.7)
Over provision of deferred tax in prior years	(89.2)	(29.6)	(97.4)	(29.5)
Benefits from previously unrecognised tax losses	(0.2)	(9.2)	0	0
Current year unrecognised temporary differences				
and unused tax losses	29.9	9.8	0	0
Zakat	16.7	17.2	16.7	17.2
Tax and zakat charge	40.2	823.2	(16.5)	798.4
Average effective tax rate (%)	7.4	20.5	(4.1)	22.8

- 31 August 2011 (Cont'd.)

#### 11. EARNINGS PER SHARE (EPS)

#### (a) Basic earnings per share

Basic earnings per share is calculated by dividing the profit attributable to owners of the Company for the financial year by the weighted average number of ordinary shares in issue during the financial year. The weighted average number of ordinary shares in issue has been adjusted to include 1,090,133,190 bonus shares issued on 6 January 2011.

	Group	
	2011	2010 (Restated)
Profit attributable to owners of the Company (RM'million)	499.5	3,200.8
Weighted average number of ordinary shares in issue ('000)	5,450,741	5,432,543
Basic earnings per share (sen)	9.16	58.92

The comparative basic EPS has been restated to reflect the bonus issue during the financial year, as analysed below:

	2010 As previously reported	Group 2010 (Restated)
Weighted average number of ordinary shares in issue, prior to adjustment for bonus issue ('000)	4,342,410	4,342,410
Adjustment for bonus issue ('000)	0	1,090,133
	4,342,410	5,432,543
Basic earnings per share (sen)	73.74	58.92

#### 11. EARNINGS PER SHARE (EPS) (CONT'D.)

#### (b) Diluted earnings per share

For the purpose of calculating diluted earnings per share, the profit attributable to owners of the Company for the financial year and the weighted average number of ordinary shares in issue during the financial year has been adjusted for the dilutive effects of all potential ordinary shares such as share options granted to employees and to include 1,090,133,190 bonus shares issued on 6 January 2011.

	2011	Group 2010 (Restated)
Profit used to determine diluted earnings per share (RM'million)	499.5	3,200.8
Weighted average number of ordinary shares in issue ('000) Adjustment for share options ('000)	5,450,741 11,706	5,432,543 19,650
Weighted average number of ordinary shares for diluted earnings per share ('000)	5,462,447	5,452,193
Diluted earnings per share (sen)	9.14	58.71

The comparative diluted EPS has been restated to reflect the bonus issue during the financial year, as analysed below:

	Group		
	2010	2010	
	As previously reported	(Restated)	
Weighted average number of ordinary shares for diluted		10/00/0	
earnings per share, prior to adjustment for bonus issue ('000)	4,362,060	4,362,060	
Adjustment for bonus issue ('000)	0	1,090,133	
	4,362,060	5,452,193	
Basic earnings per share (sen)	73.40	58.71	

- 31 August 2011 (Cont'd.)

#### 12. DIVIDENDS

	Company	
	2011 RM'million	2010 RM'million
Interim dividend of 4.5 sen gross per ordinary share, less income tax at 25.0%, (2010: Interim dividend of 6.0 sen gross per ordinary share, less income tax at 25.0%)	184.0	195.5
Proposed: Proposed final dividend of Nil (2010: final dividend of 20.0 sen gross per ordinary share, less income tax at 25.0%)	0	654.0
	184.0	849.5

Interim dividends are paid and accounted for in shareholders' equity as an appropriation of retained profits in the financial year.

The Directors do not recommend the payment of any final dividend in respect of the financial year ended 31 August 2011.

#### 13. PROPERTY, PLANT AND EQUIPMENT

	As at 1.9.2010	Exchange rate adjustment	Additions	Disposals	Transfers/ Adjustments/ Reclassi- fication Write off	As at 31.8.2011
Group	(Restated) RM'million	<b>RM</b> ′million	RM' million	RM' million	<b>RM</b> ′ million	RM'million
2011						
Cost/valuation						
At 1984 and earlier valuations:						
Long leasehold land	8.4	0	0	0	0	8.4
Buildings and civil works	0	0	0	0	0	0
At 1994 valuation:						
Freehold land	562.4	0	0	(0.5)	(18.0)	543.9
Long leasehold land	602.8	0	0	(0.5)	(0.8)	601.5
Short leasehold land	2.4	0	0	0	0	2.4
Buildings and civil works	446.5	0	0	(3.7)	0	442.8
	1,622.5	0	0	(4.7)	(18.8)	1,599.0
At cost:						
Freehold land	361.4	(0.1)	6.1	0	(106.8)	260.6
Long leasehold land	330.7	0	3.2	(0.1)	19.7	353.5
Short leasehold land	181.9	0	0	0	0	181.9
Buildings and civil works	12,352.3	(0.2)	203.8	(10.6)	13.6	12,558.9
	14,848.8	(0.3)	213.1	(15.4)	(92.3)	14,953.9
Plant and machinery	43,490.4	(47.8)	2,032.9	(234.6)	377.9	45,618.8
Lines and distribution mains	28,521.6	0	1,678.5	(0.1)	128.4	30,328.4
Distribution services	2,899.7	0	213.3	0	(12.4)	3,100.6
Meters	1,649.9	0	131.9	0	1.9	1,783.7
Public lighting	327.4	0	23.2	0	0	350.6
Furniture, fittings and						
office equipment	1,252.6	(0.3)	66.6	(1.8)	(4.8)	1,312.3
Motor vehicles	310.4	(0.1)	126.7	(5.9)	6.8	437.9
	93,300.8	(48.5)	4,486.2	(257.8)	405.5	97,886.2
Capital project-in-progress	4,499.1	(0.2)	6,007.6	0	(4,860.2)	5,646.3
	97,799.9	(48.7)	10,493.8	(257.8)	(4,454.7)	103,532.5

# Notes to the Financial Statements - 31 August 2011 (Cont'd.)

	As at 1.9.2010 (Restated)	Charged for the financial year	Released on disposals/ Transfers/ Write off	As at 31.8.2011
Group	RM'million	<b>RM</b> 'million	<b>RM</b> ' million	<b>RM</b> 'million
2011				
Accumulated depreciation				
At 1984 and earlier valuations:				
Long leasehold land	2.4	0.1	0	2.5
Buildings and civil works	0	0	0	0
At 1994 valuation:				
Freehold land	0	0	0	0
Long leasehold land	151.0	11.2	(0.7)	161.5
Short leasehold land	1.6	0.1	0	1.7
Buildings and civil works	238.3	13.5	(3.3)	248.5
At cost:	393.3	24.9	(4.0)	414.2
Freehold land	0	0	0	0
Long leasehold land Short leasehold land	45.1 62.6	6.6 7.2	0	51.7 69.8
Buildings and civil works	3,550.8	334.9	0.6	3,886.3
	4,051.8	373.6	(3.4)	4,422.0
	10.070.7	0.105.0	00 5	00 510 0
Plant and machinery Lines and distribution mains	18,378.7 12,106.7	2,105.0 1,202.5	28.5 4.6	20,512.2 13,313.8
Distribution services	1,529.2	1,202.5	4.0	1,660.0
Meters	876.2	95.0	0	971.2
Public lighting	192.1	16.0	0	208.1
Furniture, fittings and office equipment	1,083.1	76.3	(6.0)	1,153.4
Motor vehicles	246.6	41.8	(6.3)	282.1
	38,464.4	4,041.0	17.4	42,522.8
Accumulated impairment losses				
Plant and machinery	440.2	0	0	440.2

Oreun	As at 1.9.2009 (Restated) RM'million	Exchange rate adjustment (Restated) RM'million	Additions (Restated) RM'million	Disposals (Restated) RM'million	Transfers/ Adjustments/ Reclassi- fication Write off (Restated) RM'million	As at 31.8.2010 (Restated) RM'million
Group	RIVI MIIION	RIVI MIIIION	RIVI MIIIION	RIVI MIIIION	RIVI MIIIION	RIVI MIIIION
<b>2010</b> <u>Cost/valuation</u> At 1984 and earlier valuations:						
Long leasehold land	8.4	0	0	0	0	8.4
Buildings and civil works	5.6	0	0	0	(5.6)	0
At 1994 valuation:						
Freehold land	557.1	0	0.1	(0.7)	5.9	562.4
Long leasehold land	608.9	0	0	(0.3)	(5.8)	602.8
Short leasehold land	2.4	0	0	0	0	2.4
Buildings and civil works	442.4	0	0	(1.5)	5.6	446.5
	1,624.8	0	0.1	(2.5)	0.1	1,622.5
At cost:						
Freehold land	376.3	(0.3)	20.0	(0.4)	(34.2)	361.4
Long leasehold land	268.3	0	22.7	(0.6)	40.3	330.7
Short leasehold land	185.0	0	0	(3.1)	0	181.9
Buildings and civil works	11,986.2	(0.5)	356.6	(1.8)	11.8	12,352.3
	14,440.6	(0.8)	399.4	(8.4)	18.0	14,848.8
Plant and machinery	41,496.5	(92.9)	2,446.2	(467.9)	108.5	43,490.4
Lines and distribution mains	26,526.7	0	1,946.4	0	48.5	28,521.6
Distribution services	2,646.4	0	248.7	0	4.6	2,899.7
Meters	1,535.6	0	110.2	0	4.1	1,649.9
Public lighting	309.7	0	17.7	0	0	327.4
Furniture, fittings and						
office equipment	1,204.2	(0.6)	48.3	(2.0)	2.7	1,252.6
Motor vehicles	285.7	(0.2)	22.8	(2.5)	4.6	310.4
	88,445.4	(94.5)	5,239.7	(480.8)	191.0	93,300.8
Capital project-in-progress	5,906.9	(3.3)	3,984.1	0	(5,388.6)	4,499.1
	94,352.3	(97.8)	9,223.8	(480.8)	(5,197.6)	97,799.9

# Notes to the Financial Statements - 31 August 2011 (Cont'd.)

Group	As at 1.9.2009 (Restated) RM'million	Charged for the financial year (Restated) RM'million	Released on disposals/ Transfers/ Write off (Restated) RM'million	As at 31.8.2010 (Restated) RM'million
2010				
Accumulated depreciation At 1984 and earlier valuations:				
Long leasehold land	2.3	0.1	0	2.4
Buildings and civil works	3.9	0	(3.9)	0
At 1994 valuation:				
Freehold land	0	0	0	0
Long leasehold land	141.3	9.9	(0.2)	151.0
Short leasehold land	1.6	0	0	1.6
Buildings and civil works	217.2	18.1	3.0	238.3
At cost:	366.3	28.1	(1.1)	393.3
	0	0	0	0
Freehold land Long leasehold land	0 35.5	0 9.9	0 (0.3)	0 45.1
Short leasehold land	58.7	7.1	(3.2)	62.6
Buildings and civil works	3,225.4	327.4	(2.0)	3,550.8
	3,685.9	372.5	(6.6)	4,051.8
Plant and machinery	16,638.2	2,073.4	(332.9)	18,378.7
Lines and distribution mains	10,940.2	1,162.7	3.8	12,106.7
Distribution services	1,405.6	123.6	0	1,529.2
Meters	781.8	90.4	4.0	876.2
Public lighting	177.0	15.1	0	192.1
Furniture, fittings and office equipment	999.0	86.5	(2.4)	1,083.1
Motor vehicles	223.4	26.0	(2.8)	246.6
	34,851.1	3,950.2	(336.9)	38,464.4
Accumulated impairment losses				
Plant and machinery	440.2	0	0	440.2

Group	As at 1.9.2008 (Restated) RM′million	Exchange rate adjustment (Restated) RM'million	Additions (Restated) RM'million	Disposals (Restated) RM'million	Transfers/ Adjustments/ Reclassi- fication Write off (Restated) RM'million	As at 31.8.2009 (Restated) RM'million
2009						
Cost/valuation						
At 1984 and earlier valuations:						
Long leasehold land	8.4	0	0	0	0	8.4
Buildings and civil works	5.6	0	0	0	0	5.6
At 1994 valuation:						
Freehold land	572.5	0	0	(1.7)	(13.7)	557.1
Long leasehold land	609.1	0	0	(0.1)	(0.1)	608.9
Short leasehold land	2.4	0	0	Û Û	Û Û	2.4
Buildings and civil works	445.2	0	0	(0.3)	(2.5)	442.4
	1,643.2	0	0	(2.1)	(16.3)	1,624.8
At cost:						
Freehold land	368.8	(1.7)	19.5	0	(10.3)	376.3
Long leasehold land	255.9	0	0	(2.0)	14.4	268.3
Short leasehold land	184.1	0	0	0	0.9	185.0
Buildings and civil works	11,931.6	(0.6)	480.4	(1.4)	(423.8)	11,986.2
	14,383.6	(2.3)	499.9	(5.5)	(435.1)	14,440.6
Plant and machinery	38,335.3	(34.7)	2,716.6	(71.5)	550.8	41,496.5
Lines and distribution mains	25,117.2	0	1,365.7	0	43.8	26,526.7
Distribution services	2,510.3	0	123.5	0	12.6	2,646.4
Meters	1,412.8	0	125.5	0	(2.7)	1,535.6
Public lighting	294.4	0	15.5	0	(0.2)	309.7
Furniture, fittings and						
office equipment	1,135.4	(0.4)	97.2	(3.4)	(24.6)	1,204.2
Motor vehicles	279.3	(1.7)	15.8	(8.9)	1.2	285.7
	83,468.3	(39.1)	4,959.7	(89.3)	145.8	88,445.4
Capital project-in-progress	6,668.4	(0.2)	4,425.7	0	(5,187.0)	5,906.9
	90,136.7	(39.3)	9,385.4	(89.3)	(5,041.2)	94,352.3

# Notes to the Financial Statements - 31 August 2011 (Cont'd.)

Group	As at 1.9.2008 (Restated) RM'million	Charged for the financial year (Restated) RM'million	Released on disposals/ Transfers/ Write off (Restated) RM'million	As at 31.8.2009 (Restated) RM'million
2009				
Accumulated depreciation At 1984 and earlier valuations:				
Long leasehold land	2.3	0	0	2.3
Buildings and civil works	3.9	0	0	3.9
At 1994 valuation:				
Freehold land	0	0	0	0
Long leasehold land	129.9	11.4	0	141.3
Short leasehold land	1.4	0.2	0	1.6
Buildings and civil works	203.6	14.8	(1.2)	217.2
At cost:	341.1	26.4	(1.2)	366.3
Freehold land	0	0	0	0
Long leasehold land	30.8	4.9	(0.2)	35.5
Short leasehold land	51.4	7.3	Û Û	58.7
Buildings and civil works	3,144.7	84.3	(3.6)	3,225.4
	3,568.0	122.9	(5.0)	3,685.9
Plant and machinery	14,671.6	2,027.4	(60.8)	16,638.2
Lines and distribution mains	9,869.9	1,070.3	Û Û	10,940.2
Distribution services	1,293.1	112.5	0	1,405.6
Meters	696.2	85.6	0	781.8
Public lighting	162.6	14.4	0	177.0
Furniture, fittings and office equipment Motor vehicles	908.6 207.2	103.1 25.3	(12.7)	999.0 223.4
	207.2	23.3	(9.1)	223.4
	31,377.2	3,561.5	(87.6)	34,851.1
Accumulated impairment losses				
Plant and machinery	440.2	0	0	440.2

	As at 1.9.2010	Additions	Disposals	Transfers/ Adjustments/ Reclassi- fication Write off	As at 31.8.2011
Company	(Restated) RM'million	RM'million	RM'million	RM'million	RM'million
2011 Cost/valuation At 1994 valuation:					
Freehold land	562.4	0	(0.5)	(18.0)	543.9
Long leasehold land	602.7	0	(0.5)	(0.7)	601.5
Short leasehold land	2.4	0	0	0	2.4
Buildings and civil works	440.8	0	(3.7)	0	437.1
	1,608.3	0	(4.7)	(18.7)	1,584.9
At cost:					
Freehold land	297.9	6.1	0	(106.8)	197.2
Long leasehold land	310.9	3.2	(0.1)	24.2	338.2
Short leasehold land	1.3	0	0	0	1.3
Buildings and civil works	10,737.4	189.4	(8.4)	(1.1)	10,917.3
	12,955.8	198.7	(13.2)	(102.4)	13,038.9
Plant and machinery	32,680.4	1,875.3	(201.0)	249.2	34,603.9
Lines and distribution mains	27,295.4	1,655.2	(0.1)	109.1	29,059.6
Distribution services	2,763.7	208.6	0	(24.5)	2,947.8
Meters	1,607.4	124.5	0	1.6	1,733.5
Public lighting	327.5	23.2	0	(0.1)	350.6
Furniture, fittings and	1 000 0		(1.0)		1 100 0
office equipment	1,092.3	51.5	(1.0)	(19.9)	1,122.9
Motor vehicles	246.2	119.0	(5.7)	7.1	366.6
	78,968.7	4,256.0	(221.0)	220.1	83,223.8
Capital project-in-progress	4,102.7	4,464.3	0	(4,256.0)	4,311.0
	83,071.4	8,720.3	(221.0)	(4,035.9)	87,534.8

# Notes to the Financial Statements - 31 August 2011 (Cont'd.)

	As at 1.9.2010 (Restated)	Charged for the financial year	Released on disposals/ Transfers/ Write off	As at 31.8.2011
Company	RM'million	<b>RM</b> ′ million	<b>RM</b> 'million	<b>RM</b> ′million
2011				
Accumulated depreciation At 1994 valuation:				
Long leasehold land	150.9	11.3	(0.7)	161.5
Short leasehold land	1.7	0	0	1.7
Buildings and civil works	234.1	13.4	(3.2)	244.3
	386.7	24.7	(3.9)	407.5
At cost:				
Freehold land	0	0	0	0
Long leasehold land	42.5	6.7	0.1	49.3
Short leasehold land	0.3	0	0	0.3
Buildings and civil works	3,104.5	271.4	(0.9)	3,375.0
	3,534.0	302.8	(4.7)	3,832.1
Plant and machinery	14,696.2	1,611.6	86.7	16,394.5
Lines and distribution mains	11,706.0	1,152.4	0	12,858.4
Distribution services	1,438.7	124.8	0	1,563.5
Meters	853.1	91.6	0	944.7
Public lighting	191.7	16.4	0	208.1
Furniture, fittings and office equipment	961.4	59.1	(19.9)	1,000.6
Motor vehicles	201.1	36.3	(5.7)	231.7
	33,582.2	3,395.0	56.4	37,033.6

Company	As at 1.9.2009 (Restated) RM'million	Additions (Restated) RM'million	Disposals (Restated) RM'million	Transfers/ Adjustments/ Reclassi- fication Write off (Restated) RM'million	As at 31.8.2010 (Restated) RM'million
2010					
<u>Cost/valuation</u> At 1994 valuation:					
Freehold land	557.0	0.2	(0.7)	5.9	562.4
Long leasehold land	608.8	0	(0.3)	(5.8)	602.7
Short leasehold land	2.4	0	0	0	2.4
Buildings and civil works	442.3	0	(1.5)	0	440.8
	1,610.5	0.2	(2.5)	0.1	1,608.3
At cost:					
Freehold land	316.5	20.0	(0.4)	(38.2)	297.9
Long leasehold land	253.0	22.7	(0.6)	35.8	310.9
Short leasehold land	4.4	0	(3.1)	0	1.3
Buildings and civil works	10,392.9	343.4	(1.8)	2.9	10,737.4
	12,577.3	386.3	(8.4)	0.6	12,955.8
Plant and machinery	30,911.4	2,196.4	(412.2)	(15.2)	32,680.4
Lines and distribution mains	25,347.4	1,942.4	0	5.6	27,295.4
Distribution services	2,515.3	248.4	0	0	2,763.7
Meters	1,501.5	105.9	0	0	1,607.4
Public lighting	309.8	17.7	0	0	327.5
Furniture, fittings and	1 057 4		(1.0)	0.0	1 000 0
office equipment	1,057.4	35.7	(1.0)	0.2	1,092.3
Motor vehicles	235.4	11.3	(2.5)	2.0	246.2
	74,455.5	4,944.1	(424.1)	(6.8)	78,968.7
Capital project-in-progress	5,539.8	3,507.0	0	(4,944.1)	4,102.7
	79,995.3	8,451.1	(424.1)	(4,950.9)	83,071.4

# Notes to the Financial Statements - 31 August 2011 (Cont'd.)

Company	As at 1.9.2009 (Restated) RM'million	Charged for the financial year (Restated) RM'million	Released on disposals/ Transfers/ Write off (Restated) RM'million	As at 31.8.2010 (Restated) RM'million
2010				
Accumulated depreciation At 1994 valuation:				
Freehold land	0	0	0	0
Long leasehold land	141.3	9.9	(0.3)	150.9
Short leasehold land	1.6	0.1	0	1.7
Buildings and civil works	217.2	18.0	(1.1)	234.1
	360.1	28.0	(1.4)	386.7
At cost:				
Freehold land	0	0	0	0
Long leasehold land	33.3	9.6	(0.4)	42.5
Short leasehold land	3.4	0	(3.1)	0.3
Buildings and civil works	2,840.9	265.1	(1.5)	3,104.5
	3,237.7	302.7	(6.4)	3,534.0
Plant and machinery	13,451.2	1,572.3	(327.3)	14,696.2
Lines and distribution mains	10,591.1	1,114.9	0	11,706.0
Distribution services	1,320.5	118.2	0	1,438.7
Meters	765.8	87.3	0	853.1
Public lighting	176.6	15.1	0	191.7
Furniture, fittings and office equipment	890.8	71.6	(1.0)	961.4
Motor vehicles	183.9	21.0	(3.8)	201.1
	30,617.6	3,303.1	(338.5)	33,582.2

Company	As at 1.9.2008 (Restated) RM′million	Additions (Restated) RM'million	Disposals (Restated) RM'million	Transfers/ Adjustments/ Reclassi- fication Write off (Restated) RM'million	As at 31.8.2009 (Restated) RM'million
2009					
<u>Cost/valuation</u>					
At 1994 valuation:					
Freehold land	572.4	0	(1.7)	(13.7)	557.0
Long leasehold land	609.0	0	(0.1)	(0.1)	608.8
Short leasehold land	2.4	0	0	0	2.4
Buildings and civil works	445.1	0	(0.3)	(2.5)	442.3
	1,628.9	0	(2.1)	(16.3)	1,610.5
At cost:					
Freehold land	308.9	19.5	0	(11.9)	316.5
Long leasehold land	240.6	0	(2.0)	14.4	253.0
Short leasehold land	3.5	0	0	0.9	4.4
Buildings and civil works	10,356.1	465.2	(1.4)	(427.0)	10,392.9
	12,538.0	484.7	(5.5)	(439.9)	12,577.3
Plant and machinery	27,982.5	2,587.6	(30.9)	372.2	30,911.4
Lines and distribution mains	24,004.8	1,342.6	0	0	25,347.4
Distribution services	2,393.8	121.5	0	0	2,515.3
Meters	1,383.5	120.7	0	(2.7)	1,501.5
Public lighting	294.5	15.5	0	(0.2)	309.8
Furniture, fittings and office equipment	1,010.1	82.0	(0.1)	(34.6)	1,057.4
Motor vehicles	234.4	10.4	(7.6)	(1.8)	235.4
	69,841.6	4,765.0	(44.1)	(107.0)	74,455.5
Capital project-in-progress	6,461.7	3,843.1	0	(4,765.0)	5,539.8
	76,303.3	8,608.1	(44.1)	(4,872.0)	79,995.3

# Notes to the Financial Statements - 31 August 2011 (Cont'd.)

Company	As at 1.9.2008 (Restated) RM'million	Charged for the financial year (Restated) RM'million	Released on disposals/ Transfers/ Write off (Restated) RM'million	As at 31.8.2009 (Restated) RM'million
2009				
Accumulated depreciation At 1994 valuation:				
Freehold land	0	0	0	0
Long leasehold land	129.9	11.4	0	141.3
Short leasehold land	1.4	0.2	0	1.6
Buildings and civil works	203.6	14.8	(1.2)	217.2
	334.9	26.4	(1.2)	360.1
At cost:				
Freehold land	0	0	0	0
Long leasehold land	28.9	4.6	(0.2)	33.3
Short leasehold land	3.2	0.2	0	3.4
Buildings and civil works	2,821.9	22.4	(3.4)	2,840.9
	3,188.9	53.6	(4.8)	3,237.7
Plant and machinery	11,969.9	1,527.2	(45.9)	13,451.2
Lines and distribution mains	9,573.5	1,017.6	0	10,591.1
Distribution services	1,213.1	107.4	0	1,320.5
Meters	683.0	82.8	0	765.8
Public lighting	162.2	14.4	0	176.6
Furniture, fittings and office equipment	816.0	91.1	(16.3)	890.8
Motor vehicles	171.1	21.7	(8.9)	183.9
	27,777.7	2,915.8	(75.9)	30,617.6

	Group			Company			
	2011	<b>2011</b> 2010	2009	2011	2010	2009	
	<b>RM'million</b>	(Restated) RM'million	(Restated) RM'million	<b>RM</b> 'million	(Restated) RM'million	(Restated) RM'million	
<u>Net book value</u>							
At 1984 and earlier valuations:							
Long leasehold land	5.9	6.0	6.1	0	0	0	
Buildings and civil works	0	0	1.7	0	0	0	
At 1994 valuation:							
Freehold land	543.9	562.4	557.1	543.9	562.4	557.0	
Long leasehold land	440.0	451.8	467.6	440.0	451.8	467.5	
Short leasehold land	0.7	0.8	0.8	0.7	0.7	0.8	
Buildings and civil works	194.3	208.2	225.2	192.8	206.7	225.1	
	1,184.8	1,229.2	1,258.5	1,177.4	1,221.6	1,250.4	
At cost:							
Freehold land	260.6	361.4	376.3	197.2	297.9	316.5	
Long leasehold land	301.8	285.6	232.8	288.9	268.4	219.7	
Short leasehold land	112.1	119.3	126.3	1.0	1.0	1.0	
Buildings and civil works	8,672.6	8,801.5	8,760.8	7,542.3	7,632.9	7,552.0	
Total land and buildings	10,531.9	10,797.0	10,754.7	9,206.8	9,421.8	9,339.6	
Plant and machinery	24,666.4	24,671.5	24,418.1	18,209.4	17,984.2	17,460.2	
Lines and distribution mains	17,014.6	16,414.9	15,586.5	16,201.2	15,589.4	14,756.3	
Distribution services	1,440.6	1,370.5	1,240.8	1,384.3	1,325.0	1,194.8	
Meters	812.5	773.7	753.8	788.8	754.3	735.7	
Public lighting	142.5	135.3	132.7	142.5	135.8	133.2	
Furniture, fittings and							
office equipment	158.9	169.5	205.2	122.3	130.9	166.6	
Motor vehicles	155.8	63.8	62.3	134.9	45.1	51.5	
	54,923.2	54,396.2	53,154.1	46,190.2	45,386.5	43,837.9	
Capital project-in-progress	5,646.3	4,499.1	5,906.9	4,311.0	4,102.7	5,539.8	
	60,569.5	58,895.3	59,061.0	50,501.2	49,489.2	49,377.7	

- 31 August 2011 (Cont'd.)

#### 13. PROPERTY, PLANT AND EQUIPMENT (CONT'D.)

Had the revalued property, plant and equipment been included in the financial statements at cost less accumulated depreciation and accumulated impairment losses, the net book value of the revalued property, plant and equipment would have been as follows:

	Group			Company			
	2011	2010	2009	2011	2010	2009	
	<b>RM</b> 'million	<b>RM</b> 'million	<b>RM</b> ′million	<b>RM'million</b>	<b>RM</b> ′million	<b>RM</b> 'million	
Freehold land	54.9	55.1	50.5	48.0	48.2	43.6	
Leasehold land	50.9	52.8	56.1	50.9	52.8	56.1	
Buildings and civil works	81.8	88.6	95.5	81.8	88.6	95.5	
	187.6	196.5	202.1	180.7	189.6	195.2	

The valuations of freehold land, buildings and civil works of the Group and Company was based on an independent valuation by a professional firm of valuers on the open market value basis in 1994. The net surplus on revaluation was incorporated into the financial statements as 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.

Net book value of property, plant and equipment pledged as security for borrowings are disclosed in note 30.

Interest capitalised during the financial year in capital project-in-progress amounted to RM206.4 million (2010: RM241.4 million) for the Company.

The capitalisation rate used to determine the amount of borrowing cost eligible for capitalisation is 6.2% (2010: 6.3%) for the Group and Company.

#### Impairment test for property, plant and equipment

TNB Liberty Power Limited has recognised in prior years, a provision for impairment totalling RM440.2 million. Current year assessment showed that no further impairment loss is required for the carrying amount of property, plant and equipment assessed. The carrying value of the property, plant and equipment at statements of financial position date is RM372.1 million (2010: RM379.2 million). The recoverable amount of the property, plant and equipment is determined based on value in use.

#### 14. SUBSIDIARIES

		Co	ompany
		2011	2010
	Note	<b>RM'million</b>	<b>RM</b> 'million
Unquoted ordinary shares, at cost		296.6	296.6
Redeemable unsecured loan stocks, at amortised cost/cost	(a)	535.5	535.5
Redeemable preference shares, at cost		3,922.6	4,075.7
Options granted to employees of subsidiaries		15.4	0
Advance to subsidiaries treated as quasi-investment	(b)	610.6	0
		5,380.7	4,907.8
Less: Accumulated impairment losses		(928.9)	(928.9)
		4,451.8	3,978.9

- (a) Redeemable unsecured loan stocks bear interest at 15.0% (2010: 15.0%) per annum on the outstanding nominal value of the principal and a compounding interest will be charged at 5.0% (2010: 5.0%) per annum on the unpaid interest after the due date.
- (b) The advances are unsecured and are non-interest bearing with no fixed terms of repayment. The Company does not anticipate any repayment of the advances and will only recall the loans when the subsidiaries have surplus cash. These advances are treated as an extension of its investments in subsidiaries.

Name of subsidiary	Group's <b>2011</b>	interest 2010	Principal activities	Country of incorporation
TNB Janamanjung Sdn Bhd	100%	100%	Generate and deliver electricity and generating capacity to TNB	Malaysia
TNB Power Daharki Ltd#	100%	100%	Investment holding	Mauritius
TNB Fuel Services Sdn Bhd	100%	100%	Supplying fuel and coal for power generation	Malaysia
TNB Energy Services Sdn Bhd	100%	100%	Generating, distributing, supplying, dealing, selling of different kinds of energy sources and related technical services	Malaysia
TNB Research Sdn Bhd	100%	100%	Research and development, consultancy and other services	Malaysia
TNB Ventures Sdn Bhd	100%	100%	Dormant	Malaysia
				0

# Notes to the Financial Statements - 31 August 2011 (Cont'd.)

Name of subsidiary	Group's <b>2011</b>	interest 2010	Principal activities	Country of incorporation
TNB Engineering Corporation Sdn Bhd	100%	100%	Principally engaged as turnkey contractors, energy project development specialising in district cooling system and co-generation including operation and maintenance works	Malaysia
TNB Repair And Maintenance Sdn Bhd	100%	100%	Repair and maintenance services to heavy industries and other related services	Malaysia
TNB Engineers Sdn Bhd	100%	100%	Dormant	Malaysia
TNB Capital (L) Ltd	100%	100%	Investment holding	Malaysia
Universiti Tenaga Nasional Sdn Bhd	100%	100%	Providing higher education and training	Malaysia
Malaysia Transformer Manufacturing Sdn Bhd	100%	100%	Principally engaged in the manufacturing, selling and repairing distribution, power and earthing transformers	Malaysia
TNB Coal International Ltd*	100%	100%	Dormant	Mauritius
Power and Energy International (Mauritius) Ltd*	100%	100%	Investment holding	Mauritius
Orion Mission Sdn Bhd	100%	100%	Investment holding	Malaysia
Sabah Electricity Sdn Bhd	80%	80%	Business of generation, transmission, distribution, and sale of electricity and services in Sabah	Malaysia
Tenaga Switchgear Sdn Bhd	60%	60%	Principally engaged in the business of assembling and manufacturing of high voltage switchgears and contracting of turnkey transmission substations	Malaysia

Name of subsidiary	Group's <b>2011</b>	interest 2010	Principal activities	Country of incorporation
Kapar Energy Ventures Sdn Bhd	60%	60%	Generate and deliver electricity energy and generating capacity to TNB	Malaysia
TNB Integrated Learning Solution Sdn Bhd	100%	100%	Establish, maintain and carry out training center in Malaysia	Malaysia
TNB Generation Sdn Bhd	100%	100%	Dormant	Malaysia
TNB Transmission Network Sdn Bhd	100%	100%	Dormant	Malaysia
TNB Distribution Sdn Bhd	100%	100%	Dormant	Malaysia
TNB Risk Management Sdn Bhd	100%	100%	Dormant	Malaysia
TNB Logistics Sdn Bhd***	100%	100%	Dormant	Malaysia
TNB – IT Sdn Bhd	100%	100%	Dormant	Malaysia
TNB Workshop Services Sdn Bhd***	100%	100%	Dormant	Malaysia
TNB Metering Services Sdn Bhd***	100%	100%	Dormant	Malaysia
TNB Hidro Sdn Bhd	100%	100%	Dormant	Malaysia
Sumber Hidro Management Sdn Bhd**	0%	100%	Dormant	Malaysia
TNB Prai Sdn Bhd	100%	100%	Dormant	Malaysia
TNB Properties Sdn Bhd	100%	100%	Dormant	Malaysia
TNB Kulim Generation Sdn Bhd	100%	100%	Dormant	Malaysia
Sepang Power Sdn Bhd	<b>70</b> %	70%	Dormant	Malaysia

## Notes to the Financial Statements - 31 August 2011 (Cont'd.)

				Country of
Name of subsidiary	Group's <b>2011</b>	interest 2010	Principal activities	incorporation
Subsidiaries of TNB Engineering Corporation Sdn Bhd				
Bangsar Energy Systems Sdn Bhd	100%	100%	Operating an integrated district cooling system for air conditioning systems of office building	Malaysia
TNEC Construction Sdn Bhd	100%	100%	Dormant	Malaysia
TNEC Operations and Maintenance Sdn Bhd	100%	100%	Operations and maintenance of cooling and power plants	Malaysia
Airport Cooling Energy Supply Sdn Bhd	100%	0%	A special purpose vehicle (SPV) company to undertake the build, operate and transfer (BOT) project with MAHB for the supply of chilled water to the KLIA 2 building (LCCT) and other facility	Malaysia
Subsidiary of Power and Energy International (Mauritius) Ltd Independent Power International Ltd*	100%	100%	Investment holding	Mauritius
Subsidiary of Bangsar Energy Systems Sdn Bhd Selesa Energy Systems Sdn Bhd	70%	70%	Dormant	Malaysia
Subsidiary of TNEC Operations and Maintenance Sdn Bhd Tomest Energy Management Sdn Bhd	51%	51%	Dormant	Malaysia

Name of subsidiary	Group's <b>2011</b>	interest 2010	Principal activities	Country of incorporation
Subsidiary of TNB Power 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 University Tenaga Nasional Sdn Bhd UNITEN R & D Sdn Bhd	100%	100%	Providing research and development in areas related to engineering, information technology, business, accountancy, liberal studies and other services	Malaysia
Subsidiaries of TNB Repair And Maintenance Sdn Bhd Trichy Power Ltd	100%	100%	Dormant	India
Trichy Energy Ltd	100%	100%	Dormant	India
TNB Operations and Maintenance International Ltd	100%	100%	Investment holding	Mauritius
TNB Remaco Pakistan Private Limited <sup>#</sup>	100%	100%	Providing repair and maintenance services to heavy industries and other related services	Pakistan

- 31 August 2011 (Cont'd.)

#### 14. SUBSIDIARIES (CONT'D.)

Name of subsidiary	Group's <mark>2011</mark>	interest 2010	Principal activities	Country of incorporation
Subsidiary of TNB Operations and Maintenance International Ltd				
Oasis Parade Sdn Bhd	100%	100%	Investment Holding	Malaysia
Subsidiary of TNB Ventures Sdn Bhd				
Tenaga Cable Industries Sdn Bhd	<b>76</b> %	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%	Dormant	Malaysia
Subsidiary of Orion Mission Sdn Bhd Lahad Datu Holdings Sdn Bhd	100%	100%	Dormant	Malaysia
Subsidiary of Lahad Datu Holdings Sdn Bhd Lahad Datu Energy Sdn Bhd	100%	100%	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.

\*\* Sumber Hidro Management Sdn Bhd was dissolved on 25 March 2010.

\*\*\* The companies are in the process of being wound up.

#### **15. JOINTLY CONTROLLED ENTITIES**

2011 nillion	2010
mion	RM'million
0.6	0
	0.6

The Group's share of revenue, profit, assets and liabilities of jointly controlled entities are as follows:

Revenue Loss after tax	0.8 (25.0)	0 (0.2)
Non-current assets	0	26.1
Current assets	2.7	2.2
Current liabilities	(12.8)	(13.1)
Less: Accumulated impairment loss	(7.9)	(7.9)
Accumulated losses/(profit) not recognised	18.6	(7.3)
	0.6	0

	Cor	mpany
	2011 RM'million	2010 RM'million
Unquoted ordinary shares, at cost	7.9	7.9
Less: Accumulated impairment losses	(7.9)	(7.9)
	0	0

Details of the jointly controlled entities are as follows:

Name of jointly controlled entities	Group's <b>2011</b>	interest 2010	Principal activities	Country of incorporation
Seatrac Sdn Bhd	50%	50%	Dormant	Malaysia
TNB Energy Services Sdn Bhd & Eramaz Technology Sdn Bhd JV	51%	51%	As the turnkey contractor to undertake the design, building and commissioning of the system for the supply of electricity in Kalabakan, Sabah awarded by Kementerian Kemajuan Luar Bandar dan Wilayah ("KKLW")	Malaysia

## Notes to the Financial Statements - 31 August 2011 (Cont'd.)

#### 16. ASSOCIATES

	2011	Group 2010 (Restated)	2009 (Restated)
	<b>RM</b> 'million	RM'million	RM'million
Share of net assets of associates	407.8	245.7	246.6

	2011	Company 2010 (Restated)	2009 (Restated)
	RM'million	<b>RM'million</b>	RM'million
Unquoted shares, at cost	67.0	60.7	60.4
Quoted shares, at cost	106.5	0	0
Less: Accumulated impairment losses	(9.6)	(9.6)	(9.6)
	163.9	51.1	50.8
Redeemable preference shares, at cost	33.2	33.2	33.2
Unsecured loan notes	21.1	26.3	31.6
	218.2	110.6	115.6
Quoted shares, at fair value	77.2	0	0

The Group's share of revenue, profit, assets and liabilities of associates are as follows:

	2011	2010 (Restated)	2009 (Restated)
	<b>RM</b> 'million	RM'million	RM'million
Revenue	1,120.4	280.3	330.1
Profit after taxation	92.8	44.6	33.1
Non-current assets	1,595.4	549.2	563.7
Curent assets	548.9	277.9	261.1
Current liabilities	(356.8)	(146.5)	(89.4)
Non-current liabilities	(1,423.2)	(434.9)	(488.8)
Accumulated losses not recognised	43.5	0	0
Net assets	407.8	245.7	246.6

#### 16. ASSOCIATES (CONT'D.)

Details of the associates are as follows:

Name of associate	Group's <b>2011</b>	interest 2010	Principal activities	Country of incorporation
Teknologi Tenaga Perlis Consortium Sdn Bhd	20%	20%	Design, construction, divesting, operation and maintenance of electricity generating facility	Malaysia
Perusahaan Otomobil Elektrik (Malaysia) Sdn Bhd	<b>20</b> %	20%	Dormant	Malaysia
GB3 Sdn Bhd	<b>20</b> %	20%	Design, construction, operation and maintenance of electricity generating facility	Malaysia
Fibrecomm Network (M) Sdn Bhd	<b>49</b> %	49%	Provision of fibre optic transmission network services	Malaysia
Jimah Energy Ventures Holdings Sdn Bhd	<b>20</b> %	20%	Generate electric power and investment holdings	Malaysia
FTJ Biopower Sdn Bhd	24.5%	24.5%	Generation and distribution of electricity using palm empty fruit bunch as its main fuel source	Malaysia
Intergrax Berhad	<b>22</b> .1%	0%	Investment holding and coal handling services	Malaysia
Associates of TNB Properties Sdn Bhd				
INDERA-TNB Properties Sdn Bhd	<b>40</b> %	40%	Dormant	Malaysia
KM Metro-TNB Properties Sdn Bhd	40%	40%	Dormant	Malaysia
Associate of TNB Ventures Sdn Bhd				
Northern Utility Resources Sdn Bhd (Receivers and Managers appointed)	20%	20%	Development and management of an independent power utility for the generation and supply of electricity to tenants within the gazetted area of Kulim	Malaysia

Hi-Tech through its subsidiaries

## Notes to the Financial Statements - 31 August 2011 (Cont'd.)

#### 16. ASSOCIATES (CONT'D.)

Name of associate	Group's <b>2011</b>	interest 2010	Principal activities	Country of incorporation
Associate of Independent Power International Ltd				
Malaysian Shoaiba Consortium Sdn Bhd	<b>20</b> %	20%	Investment holding	Malaysia
Associate of Oasis Parade Sdn Bhd				
Saudi-Malaysia Operation and Maintenance Services Company Limited	30%	30%	Investment holding	Saudi Arabia
Associate of TNB Energy Services Sdn Bhd				
Jana Landfill Sdn Bhd	20%	20%	Generation and distribution of heat and electricity using methane gas from landfill sites	Malaysia
Associate of TNB Engineering Corporation Sdn Bhd				
Abraj Cooling LLC	<b>49</b> %	49%	Contracting works for the construction of District Cooling Plants	United Arab Emirates

#### 17. INVESTMENT IN UNQUOTED DEBT SECURITIES

		Group		Company	
	2011 RM'million	2010 RM'million	2011 RM'million	2010 RM'million	
Unsecured loan notes	164.0	50.7	164.0	50.7	

#### 18. AVAILABLE-FOR-SALE FINANCIAL ASSETS/INVESTMENTS

	Group		Co	Company	
	2011	2010	2011	2010	
	<b>RM</b> 'million	<b>RM</b> ′million	<b>RM'million</b>	<b>RM</b> 'million	
Available-for-sale financial assets: At 1 September/31 August	38.0	0	38.0	0	
Investments:					
- unquoted shares, at cost	0	39.7	0	39.7	
	0	39.7	0	39.7	
Allowance for diminution in value: - unquoted shares	0	(1.7)	0	(1.7)	
	0	38.0	0	38.0	

Investments have been designated as available-for-sale following the implementation of FRS 139 and are classified as available-for-sale financial assets.

Available-for-sale financial asset comprise unlisted securities and are denominated in Ringgit Malaysia. The fair value of the financial asset is determined based on market information.

#### **19. DERIVATIVE FINANCIAL INSTRUMENTS**

Group	Note	Notional amount RM'million	Assets RM'million	Liabilities RM'million
2011				
Current				
Non-hedge accounting qualified derivative financial instruments	:			
<ul> <li>forward foreign currency contracts</li> </ul>		87.8	1.5	0
Non-current Non-hedge accounting qualified derivative financial instruments - currency options contracts - interest rate swap contracts	(a) (b)	1,008.8 616.6	89.9 0	0 44.1
		1,625.4	89.9	44.1
Total		1,713.2	91.4	44.1

- 31 August 2011 (Cont'd.)

#### 19. DERIVATIVE FINANCIAL INSTRUMENTS (CONT'D.)

Company	Note	Notional amount RM'million	Assets RM'million	Liabilities RM'million
2011				
Current Non-hedge accounting qualified derivative financial instruments – forward foreign currency contracts	:	87.8	1.5	0
Non-hedge accounting qualified derivative financial instruments				
<ul> <li>interest rate swap contracts</li> </ul>	(b)	616.6	0	44.1
		616.6	0	44.1
Total		704.4	1.5	44.1

Details of derivative financial instruments are as follows:

#### (a) Forward Start JPY call spread

In April 2004, TNB Capital (L) Limited (TNBCL) entered into Currency Option Agreements with a notional amount of JPY26.0 billion as a hedge on its 30-year JPY26.0 billion term Ioan. This transaction enables TNBCL to reduce its exposure to losses that may arise from adverse fluctuation on USD/JPY exchange rates in relation to the above term Ioan.

#### (b) 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 3.8% on aggregate notional principal of USD384.6 million.

The effect of this transaction is to effectively fix the interest rate payable on the 9-year USD503.0 million term Ioan (ECA Loan).

#### 20. LONG TERM RECEIVABLES

	Note	2011 RM'million	2010 (Restated) RM'million	2009 (Restated) RM'million
Group				
Other debtors	(a)	388.6	480.5	533.0
		2011	2010 (Restated)	2009 (Restated)
	Note	<b>RM</b> 'million	RM'million	RM'million
Company				
Amounts due from subsidiaries	(b)	432.6	405.8	525.0
Other debtors	(a)	388.6	480.5	533.0
		821.2	886.3	1,058.0

(a) Other debtors comprise advances given to Yayasan Tenaga Nasional and staff loans which are not expected to be received within 12 months from the statement of financial position date.

(b) The amounts due from subsidiaries comprise advances and other receivables from TNB Liberty Power Limited ('TLPL') and TNB Power Daharki Ltd ('TPD') amounting to Nil (2010: RM48.8 million) and RM432.6 million (2010: RM357.0 million) respectively. The amount due from TPD was subject to interest at rates ranging from 1.9% to 3.4% (2010: 1.9% to 4.7%) per annum and is unsecured.

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#### 21. NON-CURRENT ASSETS HELD FOR SALE

	Group		Company	
	2011 RM'million	2010 RM'million	2011 RM'million	2010 RM'million
Cost/Valuation				
As at 1 September	19.9	21.2	19.9	20.8
Amount transferred from – property, plant and equipment (Note 13)	18.6	9.8	18.6	9.8
Amount transferred to				
– property, plant and equipment (Note 13) Disposals	(1.2) (25.0)	(7.5) (3.6)	(1.2) (25.0)	(7.5) (3.2)
	(23.0)	(3.0)	(23.0)	(3.2)
As at 31 August	12.3	19.9	12.3	19.9
As at 1 September Amount transferred from – property, plant and equipment (Note 13) Amount transferred to – property, plant and equipment (Note 13) Disposals	1.9 0.5 (0.2) (1.3)	1.6 1.6 (0.6) (0.7)	1.9 0.5 (0.2) (1.3)	1.6 1.6 (0.6) (0.7)
As at 31 August	0.9	1.9	0.9	1.9
Net book amount				
Property, plant and equipment	11.4	18.0	11.4	18.0
As at 31 August	11.4	18.0	11.4	18.0

During the financial year, the Company entered into several sale and purchase agreements with various parties, for which the disposals are still in progress.

#### 22. INVENTORIES

	Group		Company	
	2011	2010	2011	2010
	<b>RM</b> ′million	<b>RM</b> 'million	<b>RM</b> 'million	<b>RM</b> 'million
Raw materials, fuel and consumables	2,462.3	2,351.0	1,356.7	1,265.0
Work-in-progress	169.8	72.9	0	0
Finished goods	13.8	26.5	0	0
	2,645.9	2,450.4	1,356.7	1,265.0

#### 23. RECEIVABLES, DEPOSITS AND PREPAYMENTS

		2011	2010 (Restated)	2009 (Restated)
Group	Note	<b>RM' million</b>	RM'million	RM'million
Trade receivables		5,426.7	4,843.8	4,756.3
Less: Impairment losses	45 (c)(i)	(607.7)	(576.7)	(486.3)
		4,819.0	4,267.1	4,270.0
Rechargeable debtors		55.8	64.8	73.9
Less: Impairment losses		(55.8)	(64.8)	(73.9)
		0	0	0
Staff advances/loans		43.9	66.2	69.0
Partial payment to contractors		527.0	103.5	150.6
Deposits and prepayments		114.0	134.9	133.7
Other receivables		518.2	628.7	420.0
		1,203.1	933.3	773.3
		6,022.1	5,200.4	5,043.3

- 31 August 2011 (Cont'd.)

#### 23. RECEIVABLES, DEPOSITS AND PREPAYMENTS (CONT'D.)

Company		2011	2010 (Restated)	2009 (Restated)
	Note	<b>RM'million</b>	RM'million	RM'million
Trade receivables		4,088.1	3,811.1	3,873.1
Less: Impairment losses	45 (c)(i)	(530.3)	(500.3)	(397.1)
		3,557.8	3,310.8	3,476.0
Rechargeable debtors		45.7	64.8	73.9
Less: Impairment losses		(45.7)	(64.8)	(73.9)
		0	0	0
Staff advances/loans		39.5	63.0	67.3
Partial payment to contractors		50.7	7.6	55.6
Deposits and prepayments		26.1	24.9	25.1
Other receivables		50.8	47.3	78.9
		167.1	142.8	226.9
		3,724.9	3,453.6	3,702.9

The Group's and Company's credit policy provides trade receivables with a 30 days (2010: 30 days) credit period. The Group has no major significant concentration of credit risk other than business and residential trade receivables due to its diverse customer base. All credit and recovery risks associated with receivables have been provided for in the financial statements.

Credit risks relating to Receivables, Prepayments and Deposits is disclosed in Note 45 (c)(i) to the financial statements.

#### 24. AMOUNTS DUE FROM/(TO) SUBSIDIARIES

Amount due from SESB is subject to an interest rate of 6.0% (2010: 6.0%) per annum, is unsecured and has no fixed terms of repayment. Amount due from TNB Coal International Ltd is subject to interest rate of 7.0% (2010: 7.0%) per annum.

Amount due to TNB Capital (L) Ltd is subject to an interest rates ranging from 0.5% to 5.3% (2010: 0.5% to 5.3%) per annum, is unsecured and has no fixed term of repayment.

Amount due from/(to) all other subsidiaries are unsecured, interest free and have no fixed terms of repayment.

#### 25. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS/SHORT TERM INVESTMENTS

	Group		Company	
	2011 RM'million	2010 RM′million	2011 RM'million	2010 RM'million
Short term investments, at cost: - quoted shares	0	72.5	0	72.5

Short term investments have been designated as financial assets at fair value through profit or loss following the implementation of FRS 139 and are classified as financial assets at fair value through profit or loss.

#### 26. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS/MARKETABLE SECURITIES

	roup	Company	
2011 RM'million	2010 RM'million	2011 RM'million	2010 RM'million
8.6	0	8.6	0
0	27.1	0	27.1
0	(18.5)	0	(18.5)
0	8.6	0	8.6
	RM'million 8.6 0 0	RM'million         RM'million           8.6         0           0         27.1           0         (18.5)	RM'million         RM'million           8.6         0         8.6           0         27.1         0           0         (18.5)         0

Marketable securities have been designated as financial assets at fair value through profit or loss following the implementation of FRS 139 and are classified as financial assets at fair value through profit or loss.

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#### 27. DEPOSITS, BANK AND CASH BALANCES

	Group		Company	
	2011	2010	2011	2010
	RM'million	RM'million	RM'million	RM′million
Cash in hand and at bank	1,005.0	477.1	500.9	296.6
Deposits with licensed banks	2,949.2	7,866.6	2,203.0	6,160.0
	3,954.2	8,343.7	2,703.9	6,456.6

The interest rate per annum of deposits, bank and cash balances that were effective as at the end of the reporting date were as follows:

	Group		Company	
	2011	2010	2011	2010
	%	%	%	%
Deposits with licensed banks	1.50 - 7.50	1.50 - 7.75	2.92 - 3.56	2.55 - 3.50
Bank balances	0.11	0.07	0.11	0.07

Deposits with licensed banks are held in the short term money market. Deposits have maturity periods ranging from 4 to 29 days (2010: 1 to 365 days) for the Group and 4 to 25 days (2010: 8 to 365 days) for the Company.

Deposits of the Group and Company at the end of the financial year have an average maturity period of 16 days (2010: 92 days).

	Group		Company	
	2011 RM'million	2010 RM'million	2011 RM'million	2010 RM'million
Cash and cash equivalents at the end of the financial year comprise:				
Cash in hand and at bank	1,005.0	477.1	500.9	296.6
Deposits with licensed banks	2,949.2	7,866.6	2,203.0	6,160.0
Cash at bank held in trust*	(267.0)	(83.4)	0	0
Debt reserve account**	(225.2)	(237.3)	0	0
Funds from MOF***	(5.2)	(7.4)	0	0
	3,456.8	8,015.6	2,703.9	6,456.6

\* The cash at bank held in trust is in respect of a grant and deposit given to subsidiaries by the Government of Malaysia for designated capital projects.

\*\* Debt reserve account relates to deposits placed with licensed financial institution as part of security obligations for bond financing.

\*\*\* Ministry of Finance (MOF) fund given to a subsidiary under stimulus package for training programmes.

#### 28. PAYABLES

	Group		Company	
	2011	2010	2011	2010
		(Restated)		(Restated)
	RM'million	<b>RM'million</b>	<b>RM'million</b>	<b>RM</b> 'million
Trade payables	4,116.3	3,549.8	2,906.9	2,733.8
Accrued interest on borrowings	0	605.9	0	189.4
Payroll liabilities	473.1	307.5	437.3	292.6
Deposits	23.7	30.7	17.9	25.2
Other payables and accruals	972.5	783.0	187.7	198.6
	5,585.6	5,276.9	3,549.8	3,439.6

Credit terms of trade payables of the Group and Company vary from 30 to 60 days (2010: 30 to 60 days) depending on the terms of the contracts.

#### 29. SHORT TERM BORROWINGS

Group		Company	
2011 RM'million	2010 RM'million	2011 RM'million	2010 RM'million
294.5	274.0	0	0
1,164.0	2,668.3	954.5	2,531.8
1,458.5	2,942.3	954.5	2,531.8
225.8	200.0	0	0
0.4	0.4	0	0
42.6	20.0	0	0
1,727.3	3,162.7	954.5	2,531.8
-	2011 RM'million 294.5 1,164.0 1,458.5 225.8 0.4 42.6	2011 RM'million         2010 RM'million           294.5         274.0           1,164.0         2,668.3           1,458.5         2,942.3           225.8         200.0           0.4         0.4           42.6         20.0	2011 RM'million         2010 RM'million         2011 RM'million           294.5         274.0         0           1,164.0         2,668.3         954.5           1,458.5         2,942.3         954.5           225.8         200.0         0           0.4         0.4         0           42.6         20.0         0

The short term borrowings carry interest at rates ranging from 0.75% to 15.54% (2010: 0.52% to 7.63%) per annum for the Group and from 0.75% to 6.30% (2010: 0.65% to 7.63%) for the Company.

# Notes to the Financial Statements - 31 August 2011 (Cont'd.)

#### **30. BORROWINGS**

		G	roup	Co	mpany
		2011	2010	2011	2010
	Note	<b>RM'million</b>	<b>RM</b> 'million	<b>RM'million</b>	<b>RM</b> 'million
Secured					
– Term Ioans		1,312.5	1,013.9	0	0
- Bonds (a)	(a)	1,940.3	2,192.0	0	0
		3,252.8	3,205.9	0	0
Unsecured					
– Term Ioans		9,903.8	10,062.3	8,147.4	8,130.2
– Bonds		4,479.6	5,813.3	3,425.3	4,719.5
- Income securities	(b)	514.4	1,500.0	514.4	1,500.0
- Amount due to Cagamas Berhad	(C)	87.1	104.7	87.1	104.7
- Redeemable unsecured loan stocks	(d)	547.6	357.0	0	0
		15,532.5	17,837.3	12,174.2	14,454.4
		18,785.3	21,043.2	12,174.2	14,454.4

	Group		Company	
	2011 RM'million	2010 RM'million	2011 RM'million	2010 RM'million
Payable within one year included under short term borrowings (Note 29)	1,458.5	2,942.3	954.5	2,531.8
Repayable after one year:				
After one and up to two years After two and up to five years After five and up to ten years	1,075.9 3,840.4 3,713.9	1,315.6 4,291.9 3,625.5	637.4 1,462.2 2,213.2	812.3 1,577.7 1,831.6
After ten and up to twenty years After twenty and up to thirty years After thirty years	7,150.3 1,324.6 221.7	7,042.6 1,579.2 246.1	5,630.6 1,054.6 221.7	6,333.4 1,121.5 246.1
	17,326.8	18,100.9	11,219.7	11,922.6
	18,785.3	21,043.2	12,174.2	14,454.4

#### 30. BORROWINGS (CONT'D.)

	Group	
	2011 RM'million	2010 RM'million
Net book values of property, plant and equipment pledged as security for term loans:		
(i) Machinery and equipment	2,339.3	2,449.0
(ii) Building	347.1	744.1
(iii) Leasehold land	64.6	65.4
	2,751.0	3,258.5

#### (a) Bonds

ISLAMIC DEBT SECURITIES - BAI BITHAMIN AJIL ('BaIDS')

On 28 June 2004, Kapar Energy Ventures Sdn Bhd ('KEV'), a subsidiary of TNB obtained RM3,402.0 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 3.7% and 8.7% per annum.

The BalDS are secured by the following:

- (i) Charge over TNB's leased land. The charge of the leased land was not effected as at 31 August 2011.
- (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.

#### (b) 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 2010 and 19 September 2010 respectively, and;
- (ii) 1,000 Class A RPS of RM1.00 each, issued at a premium of RM999.00 per share and 500 Class B RPS of RM1.00 each, issued at a premium of RM999.00 per share. Both classes of RPS are redeemable at RM1,000 each at the Company's option at any time on or after 16 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 2010 and 19 September 2010 respectively, an additional sum of RM1.0 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.

- 31 August 2011 (Cont'd.)

#### 30. BORROWINGS (CONT'D.)

#### (b) Income securities (Cont'd.)

Fixed Income Securities ('FIS') (Cont'd.)

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 RM94.5 million per annum payable semi-annually.

The FIS are classified as debt instruments and hence are reported as liabilities. The FIS (Tranche I) amounting RM1 billion has since matured on 16 August 2011.

#### (c) Amount due to Cagamas Berhad

On 16 January 1995, TNB had entered into an Agreement with Cagamas Berhad whereby TNB can sell on a recourse basis its housing loans provided by the Company to its employees to Cagamas Berhad. The balance as at 31 August 2011 is RM87.1 million (2010: RM104.7 million).

#### (d) Redeemable unsecured loan stocks ('RULS')

On 29 June 2004, KEV issued RM957,574,000 of Redeemable Unsecured Loan Stocks (RULS) to the Company and Malakoff Berhad to finance the acquisition of Stesen Janaelektrik Sultan Salahuddin Abdul Aziz, Kapar.

The main features of the RULS are as follows:

- (i) The RULS bear interest at 15.0% (2010: 15.0%) per annum on the outstanding nominal value of the RULS. The interest is repayable semi-annually on the last day of the relevant six month period from the issue date of RULS. A compounding interest will be charged at 5.0% (2010: 5.0%) per annum on the unpaid interest after the due date. The change in the compounding interest rate from 15.0% to 5.0% has been approved by the RULS holders at its meeting on 15 October 2008 and is effective from the first issuance date of the RULS.
- (ii) The RULS are repayable from the third year from the issue date of RULS as stipulated in the agreement dated 29 June 2004. The RULS has to be settled in full by the final maturity date of 8 July 2029.

#### **31. 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.

Prior to 9 March 2010, TNB and SESB paid 5.0% per annum on the amount of cash deposit as rebate in January every year. This rate was revised to 2.5% per annum and calculated on a pro-rated basis.

#### **32. EMPLOYEE BENEFITS**

The movements during the financial year in the amounts recognised in the financial statements are as follows:

Group	Retirement benefit plan RM'million	Retirement medical plan RM'million	Total RM'million
At 1 September 2009	1,324.0	2,146.6	3,470.6
Charged to income statement (Note 6)	251.6	513.8	765.4
Contribution and benefits paid	(171.2)	(198.5)	(369.7)
At 31 August 2010	1,404.4	2,461.9	3,866.3
Charged to income statement (Note 6)	308.7	550.9	859.6
Contribution and benefits paid	(254.4)	(251.0)	(505.4)
At 31 August 2011	1,458.7	2,761.8	4,220.5

The amounts recognised in the consolidated statement of financial position are analysed as follows:

	Retirement benefit plan RM'million	Retirement medical plan RM'million	Total RM'million
At 31 August 2010			
Present value of obligations	2,720.9	4,089.0	6,809.9
Fair value of plan assets	(817.0)	0	(817.0)
Present value of unfunded obligations	1,903.9	4,089.0	5,992.9
Unrecognised actuarial losses	(478.0)	(1,627.1)	(2,105.1)
Unrecognised past service cost	(21.5)	0	(21.5)
Liability in the statement of financial position	1,404.4	2,461.9	3,866.3
At 31 August 2011			
Present value of obligations	2,851.7	4,225.4	7,077.1
Fair value of plan assets	(924.8)	0	(924.8)
Present value of unfunded obligations	1,926.9	4,225.4	6,152.3
Unrecognised actuarial losses	(462.5)	(1,463.6)	(1,926.1)
Unrecognised past service cost Others:	(15.1)	0	(15.1)
- Retirement benefits plan	3.0	0	3.0
- Gratuity and retirement benefit	6.4	0	6.4
Liability in the statement of financial position	1,458.7	2,761.8	4,220.5

- 31 August 2011 (Cont'd.)

#### 32. EMPLOYEE BENEFITS (CONT'D.)

The expense recognised in the consolidated statement of comprehensive income is analysed as follows:

Group	Retirement benefit plan RM'million	Retirement medical plan RM'million	Total RM'million
2010			
Current service cost	146.2	20.0	166.2
Interest cost	140.2	265.7	427.2
Expected return on plan assets	(44.7)	0	(44.7)
Actuarial losses recognised	21.3	236.7	258.0
Past service cost	15.1	0	15.1
Curtailment gain	(46.3)	Ũ	(46.3)
Others	(1.5)	(8.6)	(10.1)
Total included in staff costs (Note 6)	251.6	513.8	765.4
Actual return on plan assets	46.2	0	46.2
2011 Current service cost Interest cost Expected return on plan assets Actuarial losses recognised Past service cost Others	150.4 171.8 (50.8) 20.7 15.1 1.5	29.7 274.6 0 246.6 0 0	180.1 446.4 (50.8) 267.3 15.1 1.5
Total included in staff costs (Note 6)	308.7	550.9	859.6
Actual return on plan assets	60.3	0	60.3

The charge to the income statement was included in the administrative expenses.

#### 32. EMPLOYEE BENEFITS (CONT'D.)

The principal actuarial assumptions used in respect of the Group's defined benefit plans were as follows:

Group	Retirement benefit plan %	Retirement medical plan %
At 31 August 2010		
Discount rates	6.6	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	8.0
- outpatient	N/A	5.0
At 31 August 2011 Discount rates Expected return on plan assets Expected rate of salary increases Medical cost inflation	6.6 6.0 6.0	7.1 N/A N/A
- inpatient	N/A	8.0
- outpatient	N/A	5.0
Others: - specialist	N/A	5.0

The movements during the financial year in the amounts recognised in the Company's financial statements are as follows:

Company	Retirement benefit plan RM'million	Retirement medical plan RM'million	Total RM'million
At 1 September 2009	1,312.3	2,009.4	3,321.7
Charged to income statement (Note 6)	249.2	502.4	751.6
Contributions and benefits paid	(170.0)	(198.5)	(368.5)
At 31 August 2010	1,391.5	2,313.3	3,704.8
Charged to income statement (Note 6)	297.2	521.2	818.4
Contributions and benefits paid	(251.9)	(227.6)	(479.5)
At 31 August 2011	1,436.8	2,606.9	4,043.7

- 31 August 2011 (Cont'd.)

#### 32. EMPLOYEE BENEFITS (CONT'D.)

The amounts recognised in the Company's statement of financial position are analysed as follows:

	Retirement benefit plan	Retirement medical plan	Total
Company	RM'million	RM'million	<b>RM'million</b>
At 31 August 2010			
Present value of obligations	2,716.8	3,940.4	6,657.2
Fair value of plan assets	(817.0)	0	(817.0)
Present value of unfunded obligations	1,899.8	3,940.4	5,840.2
Unrecognised actuarial losses	(478.0)	(1,627.1)	(2,105.1)
Unrecognised past service cost	(30.3)	0	(30.3)
Liability in the statement of financial position	1,391.5	2,313.3	3,704.8
At 31 August 2011			
Present value of obligations	2,838.3	4,070.5	6,908.8
Fair value of plan assets	(924.1)	0	(924.1)
Present value of unfunded obligations	1,914.2	4,070.5	5,984.7
Unrecognised actuarial losses	(462.3)	(1,463.6)	(1,925.9)
Unrecognised past service cost	(15.1)	0	(15.1)
Liability in the statement of financial position	1,436.8	2,606.9	4,043.7

The expense recognised in the Company's income statement is analysed as follows:

Company	Retirement benefit plan RM'million	Retirement medical plan RM'million	Total RM'million
2011			
Current service cost	140.4	0	140.4
Interest cost	171.7	274.6	446.3
Expected return on plan assets	(50.7)	0	(50.7)
Actuarial losses recognised	20.7	246.6	267.3
Past service cost	15.1	0	15.1
Total included in staff costs (Note 6)	297.2	521.2	818.4
Actual return on plan assets	60.3	0	60.3

#### 32. EMPLOYEE BENEFITS (CONT'D.)

Company	Retirement benefit plan	Retirement medical plan	Total
	RM'million	RM'million	RM'million
2010			
Current service cost	142.3	0	142.3
Interest cost	161.5	265.7	427.2
Expected return on plan assets	(44.7)	0	(44.7)
Actuarial losses recognised	21.3	236.7	258.0
Past service cost	15.1	0	15.1
Curtailment gain	(46.3)	0	(46.3)
Total included in staff costs (Note 6)	249.2	502.4	751.6
Actual return on plan assets	51.5	0	51.5

The charge to the income statement was included in the administrative expenses.

The principal actuarial assumptions used in respect of the Company's defined benefit plans were as follows:

Company	Retirement benefit plan %	Retirement medical plan %
At 31 August 2010		
Discount rates	6.6	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	8.0
- outpatient	N/A	5.0
At 31 August 2011		
Discount rates	6.6	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	8.0
- outpatient	N/A	5.0
Others:		
- specialist	N/A	5.0

- 31 August 2011 (Cont'd.)

#### **33. 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 statement of financial position:

	2011	2010	2009
Group	<b>RM</b> 'million	(Restated) RM'million	(Restated) RM'million
Deferred tax assets	30.2	55.9	0
Deferred tax liabilities	(7,155.1)	(7,270.8)	(7,075.7)
Net total	(7,124.9)	(7,214.9)	(7,075.7)
<b>Company</b> Deferred tax liabilities	(6,175.5)	(6,302.6)	(6,180.4)

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The movements during the financial year relating to deferred tax are as follows:

	2011	2010 (Restated)	2009 (Restated)
Group	<b>RM'million</b>	RM'million	RM'million
As at the beginning of the financial year (charged)/credited			
to income statement:	(7,214.9)	(7,075.7)	(6,337.4)
- property, plant and equipment	(310.6)	(294.1)	(401.9)
- unutilised tax losses	(1.6)	18.4	12.6
- provision and allowances	469.8	134.8	86.3
- accrued revenue	(67.6)	1.7	(435.3)
	90.0	(139.2)	(738.3)
As at the end of the financial year	(7,124.9)	(7,214.9)	(7,075.7)

#### 33. DEFERRED TAXATION (CONT'D.)

	2011	2010	2009
Group	<b>RM</b> ' million	(Restated) RM'million	(Restated) RM'million
Subject to income tax			
Deferred tax assets (before offsetting)			
- provision and allowances	1,531.1	1,061.3	926.5
- unutilised tax losses	31.1	32.7	14.3
- property, plant and equipment	77.1	238.6	321.6
Offsetting	(1,609.1)	(1,276.7)	(1,262.4)
Deferred tax assets (after offsetting)	30.2	55.9	0
Deferred tax liabilities (before offsetting)			
- property, plant and equipment	(8,262.9)	(8,113.9)	(7,902.8)
- accrued revenue	(501.3)	(433.6)	(435.3)
Offsetting	1,609.1	1,276.7	1,262.4
Deferred tax liabilities (after offsetting)	(7,155.1)	(7,270.8)	(7,075.7)

The amount of deductible temporary differences, unused tax losses and reinvestment allowance (which have no expiry date) for which no deferred tax assets is recognised in the statement of financial position are as follows:

	2011 RM'million	2010 RM'million	2009 RM'million
Deductible temporary differences	1,557.6	1,432.7	1,370.8
Tax losses	1,312.0	1,682.5	1,312.4
Reinvestment allowance	35.5	28.2	28.2

# Notes to the Financial Statements - 31 August 2011 (Cont'd.)

#### 33. DEFERRED TAXATION (CONT'D.)

The movements during the financial year relating to deferred tax are as follows:

Company	2011 RM'million	2010 (Restated) RM'million	2009 (Restated) RM'million
As at the beginning of the financial year (charged)/credited			
to income statement:	(6,302.6)	(6,180.4)	(5,499.3)
- property, plant and equipment	105.6	(257.2)	(332.1)
– unutilised tax losses – provision and allowances	0 89.1	0 133.3	0 86.3
- provision and allowances - accrued revenue	(67.6)	1.7	(435.3)
	127.1	(122.2)	(681.1)
As at the end of the financial year	(6,175.5)	(6,302.6)	(6,180.4)
Subject to income tax Deferred tax assets (before offsetting)			
- provision and allowances	1,146.5	1,057.4	924.1
– unutilised tax losses	0	0	0
<ul> <li>property, plant and equipment</li> </ul>	0	0	0
Offsetting	(1,146.5)	(1,057.4)	(924.1)
Deferred tax assets (after offsetting)	0	0	0
Deferred tax liabilities (before offsetting)			
- property, plant and equipment	(6,820.7)	(6,926.4)	(6,669.2)
- accrued revenue	(501.3)	(433.6)	(435.3)
Offsetting	1,146.5	1,057.4	924.1
Deferred tax liabilities (after offsetting)	(6,175.5)	(6,302.6)	(6,180.4)

#### 34. DEFERRED INCOME

Group	2011 RM'million	2010 (Restated) RM'million	2009 (Restated) RM'million
As at the beginning of the financial year Received during the financial year	3,042.2 949.3	2,952.2 458.5	2,899.4 409.2
Released to income statement	(652.8)	(368.5)	(356.4)
Reclassified from other liabilities	34.8	0	0
As at the end of the financial year	3,373.5	3,042.2	2,952.2
Realised within 12 months	523.9	331.3	326.9
Realised after 12 months	2,849.6	2,710.9	2,625.3
	3,373.5	3,042.2	2,952.2

	2011	2010 (Restated)	2009 (Restated)
Company	<b>RM</b> 'million	RM'million	RM'million
As at the beginning of the financial year	2,676.4	2,617.1	2,580.8
Received during the financial year	861.0	386.2	353.5
Released to income statement	(595.2)	(326.9)	(317.2)
As at the end of the financial year	2,942.2	2,676.4	2,617.1
Realised within 12 months	487.4	331.3	326.9
Realised after 12 months	2,454.8	2,345.1	2,290.2
	2,942.2	2,676.4	2,617.1

#### **35. GOVERNMENT DEVELOPMENT GRANTS**

	Group	
	2011 RM'million	2010 RM'million
As at the beginning of the financial year	599.0	579.8
Received during the financial year	92.8	66.5
Released to statement of comprehensive income (Note 7)	(64.6)	(42.9)
Reclassified to other payables	0	(4.4)
As at the end of the financial year	627.2	599.0

The development grants are provided by the Government mainly for the construction of transmission lines.

# Notes to the Financial Statements - 31 August 2011 (Cont'd.)

#### 36. SHARE CAPITAL

	Group and 2011 RM	
<u>Authorised</u> :		
Ordinary shares of RM1.00 each	10,000,000,000	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	0	1,000
Class B Redeemable Preference Shares of RM1.00 each		
As at the beginning/end of the financial year	500	500
Issued and fully paid:		
Ordinary shares of RM1.00 each	5,456,657,139	4,352,719,795
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	5,456,657,140	4,352,719,796
Movements in issued ordinary shares of RM1.00 each		
As at the beginning of the financial year Issuance of ordinary shares of RM1.00 each under the ESOS II Issuance of Bonus Shares as fully paid up, on the basis of one (1) Bonus Shares for every four (4) existing TNB shares held by	4,352,719,795 13,804,154	4,337,054,795 15,665,000 0
As at the end of the financial year	1,090,133,190 5,456,657,139	4,352,719,795

#### 36. SHARE CAPITAL (CONT'D.)

#### 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.
- (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.

- 31 August 2011 (Cont'd.)

#### 36. SHARE CAPITAL (CONT'D.)

Employees' Share Option Scheme ('ESOS') (Cont'd.)

Movements in the number of shares represented by options outstanding and their related weighted average exercise prices are as follows:

	2011		2010	
	Average exercise price RM/share	Number of shares `000	Average exercise price RM/share	Number of shares `000
Beginning of year	7.39	123,641	7.27	117,654
Granted	5.51	26,968	7.26	22,128
Exercised	6.45	(13,804)	6.28	(15,665)
Expired	9.18	(443)	7.62	(476)
Bonus issue	7.42	29,029	0	0
At end of year	7.16	165,391	7.39	123,641

Details relating to the options exercised during the financial year are as follows:

	Fair value of shares at share	Exercise	Number of shares
Exercise date	issue date	price	issued as at
	RM/share	RM/share	31.8.2011
September 2010	8.79 - 9.29	6.71/6.99/7.42/7.33/11.07/6.33/7.33/	2,826,700
		7.18/7.75/7.03/5.57	
October 2010	8.77 - 8.96	6.71/6.99/7.42/7.33/6.33/5.57/7.18/	2,514,850
		7.62	
November 2010	8.39 - 8.85	6.71/6.99/7.42/7.33/6.33/5.57/7.18	2,048,300
December 2010	8.24 - 8.82	6.71/6.99/7.42/7.33/6.33/5.57/7.18	449,925
January 2011	6.13 - 6.79	5.36/5.93/5.86/4.45	52,684
February 2011	5.94 - 6.47	5.36/5.59/5.93/5.86/4.45/5.74	88,153
March 2011	5.95 - 6.38	5.36/5.59/5.93/5.86/5.06/4.45/5.74	302,038
April 2011	5.99 - 6.29	5.36/5.93/5.06/4.45/5.74	293,291
May 2011	5.96 - 7.20	5.36/5.59/5.06/4.45/5.74	246,941
June 2011	6.59 - 7.21	5.36/5.59/5.93/5.86/5.06/4.45/5.74/	2,139,566
		5.45	
July 2011	6.07 - 6.83	5.36/5.59/5.93/5.86/5.06/4.45/	2,679,496
,		5.74/5.45	
August 2011	5.22 - 6.25	5.36/5.86/5.06/4.45/5.45	162,210
TOTAL			13,804,154

#### 36. SHARE CAPITAL (CONT'D.)

Employees' Share Option Scheme ('ESOS') (Cont'd.)

Share options outstanding at the end of the year have the following expiry dates and exercise price.

		Number	of shares
Expiry date	Exercise price	2011	2010
	RM/share	000′	000′
07.07.2013	5.36	43,562	38,137
07.07.2013	5.59	5,243	4,662
07.07.2013	6.20	219	205
07.07.2013	5.93	7,758	6,703
07.07.2013	6.24	359	288
07.07.2013	5.86	8,520	7,181
07.07.2013	5.86	3,425	2,924
07.07.2013	7.35	1,632	1,306
07.07.2013	8.85	18,235	14,926
07.07.2013	9.24	16	13
07.07.2013	8.98	43	34
07.07.2013	7.35	112	90
07.07.2013	7.35	1,278	1,023
07.07.2013	5.06	11,188	11,567
07.07.2013	5.86	1,402	1,184
07.07.2013	5.62	27	52
07.07.2013	6.36	22	18
07.07.2013	7.33	54	43
07.07.2013	7.33	307	246
07.07.2013	7.35	47	37
07.07.2013	7.35	100	80
07.07.2013	7.35	864	691
07.07.2013	8.57	112	90
07.07.2013	9.24	47	37
07.07.2013	4.45	9,965	10,770
07.07.2013	7.35	225	180
07.07.2013	7.35	52	42
07.07.2013	7.35	157	126
07.07.2013	7.33	25	20
07.07.2013	7.33	63	50
07.07.2013	6.36	212	170
07.07.2013	6.09	161	129
07.07.2013	5.62	63	50
07.07.2013	7.35	224	180
	9.24		
07.07.2013		63	50
07.07.2013	5.62	0	60
07.07.2013	7.35	262	210
07.07.2013	4.76	88	70
07.07.2013	8.57	150	120
07.07.2013	7.33	174	139
07.07.2013	6.09	52	46
07.07.2013	5.74	22,353	19,692
07.07.2013	4.76	88	0
07.07.2013	5.08	150	0
07.07.2013	5.62	137	0

- 31 August 2011 (Cont'd.)

#### 36. SHARE CAPITAL (CONT'D.)

Employees' Share Option Scheme ('ESOS') (Cont'd.)

Share options outstanding at the end of the financial year have the following expiry dates and exercise price.

		Numbe	r of shares
Expiry date	Exercise price RM/share	2011 `000	2010 `000
07.07.2013	6.09	485	0
07.07.2013	6.36	212	0
07.07.2013	6.38	37	0
07.07.2013	6.53	90	0
07.07.2013	6.56	63	0
07.07.2013	6.60	150	0
07.07.2013	6.75	27	0
07.07.2013	7.33	270	0
07.07.2013	7.35	63	0
07.07.2013	8.57	150	0
07.07.2013	9.24	63	0
07.07.2013	5.45	24,545	0
		165,391	123,641

The weighted average fair value of options granted during the financial year was determined using the Trinomial valuation model. The significant inputs into the model were as follows:

Grant date	Share price at grant date RM	Exercise price RM	Option life Years	Expected dividend yield %	5 Risk free interest rate %	year average share price movement %
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
06.11.2008	6.11	9.189	5	1.14	3.73	23.43
14.11.2008	6.20	9.189	5	1.14	3.60	23.47
19.12.2008	5.97	7.03/7.95/ 9.17/9.189/ 10.716/ 11.558	5	1.14	2.94/3.02	23.45

# 36. SHARE CAPITAL (CONT'D.)

Employees' Share Option Scheme ('ESOS') (Cont'd.)

				Expected	5	year average
	Share price	Exercise	Option	dividend	<b>Risk free</b>	share price
Grant date	at grant date	price	life	yield	interest rate	movement
	RM	RM	Years	%	%	%
26.12.2008	6.01	9.17	5	1.14	2.92	23.40
27.03.2009	6.10	5.57	4	1.14	1.98/2.81	23.93
26.06.2009	7.73	9.189/9.17	4	1.14	2.89	23.82
06.07.2009	7.77	9.189	4	1.14	2.92	23.82
15.07.2009	7.92	9.189	4	1.14	3.72	23.79
30.12.2009	8.29	5.95/6.35/	4	1.14	3.24	18.72
		7.03/7.18/				
		7.62/7.95/				
		9.17/9.189/				
		10.716/				
		11.558				
29.04.2010	8.48	7.18	3	1.14	2.57/2.99	15.80
30.12.2010	8.37	4.76/5.08	3	1.14	3.12	25.14
		5.62/6.09				
		6.36/6.38				
		6.53/6.56				
		6.60/6.75				
		7.33/7.35				
		8.57/9.24				
29.04.2011	6.01	5.45	2	1.14	2.92/3.29	23.07

The charges to income statement arising from share-based payments during the financial year amounted to RM34.1 million (2010: RM33.4 million) for the Group and RM29.8 million (2010: RM29.9 million) for the Company as set out in Note 6 to these financial statement.

	31.8.2011 RM′000
Ordinary share capital, at par	13,804
Share premium	68,515
Proceeds received on exercise of share options	82,319
Fair value at exercise date of shares issued	108,265

- 31 August 2011 (Cont'd.)

# 36. SHARE CAPITAL (CONT'D.)

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.

- (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 30(b) to these financial statements, these RPS form part of the Company's Fixed Income Securities.

### **37. SHARE PREMIUM**

	Group and Compan	
	2011 RM'million	2010 RM'million
As at the beginning of the financial year	5,354.2	5,271.5
Arising in respect of ordinary shares issued during the financial year	68.5	82.7
Bonus issue during financial year	(1,090.1)	0
As at the end of the financial year	4,332.6	5,354.2

# 38. REVALUATION AND OTHER RESERVES

	Group		Company	
	2011	2011 2010	2011	2010
	<b>RM'million</b>	<b>RM</b> 'million	<b>RM'million</b>	<b>RM</b> 'million
Non-distributable				
Revaluation reserve	894.9	914.3	884.8	904.2
Foreign currency translation reserve	(215.5)	(207.4)	0	0
Reserve on consolidation	(146.6)	(146.6)	0	0
Employees' Share Option Scheme reserve	156.6	122.5	156.5	111.3
	689.4	682.8	1,041.3	1,015.5

The movements in each category of reserves were as follows:

	Group		Cor	npany		
	2011	2011	2011	2010	2011	2010
	<b>RM</b> 'million	<b>RM'million</b>	<b>RM'million</b>	<b>RM</b> 'million		
Revaluation reserve						
As at the beginning of the financial year	914.3	917.8	904.2	907.7		
Realisation of revaluation reserve	(19.4)	(3.5)	(19.4)	(3.5)		
As at the end of the financial year	894.9	914.3	884.8	904.2		
Foreign currency translation reserve						
As at the beginning of the financial year	(207.4)	(267.3)	0	0		
Arising in the financial year	(8.1)	59.9	0	0		
As at the end of the financial year	(215.5)	(207.4)	0	0		

- 31 August 2011 (Cont'd.)

# 38. REVALUATION AND OTHER RESERVES (CONT'D.)

	G	roup	Company	
	2011 RM'million	2010 RM'million	2011 RM'million	2010 RM'million
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	122.5 34.1	89.1 33.4	111.3 45.2	81.4 29.9
As at the end of the financial year	156.6	122.5	156.5	111.3
Total revaluation and other reserves				
As at the beginning of the financial year	682.8	593.0	1,015.5	989.1
Arising in the financial year	26.0	93.3	45.2	29.9
Realisation of revaluation reserve	(19.4)	(3.5)	(19.4)	(3.5)
As at the end of the financial year	689.4	682.8	1,041.3	1,015.5

## **39. 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 RM15.6 million (2010: RM853.8 million) of its retained profits as at 31 August 2011, if paid out as dividends. The remaining profits of RM18,614.9 million (2010: RM17,019.9 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 2011 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 RM1.1 million (2010: RM1.1 million) available for distribution as tax exempt dividends to shareholders. This tax exempt income is subject to agreement by the Inland Revenue Board.

# 40. COMMITMENTS

(b)

(a) Capital and other commitments for 5 years

1 n Ri	2010 M'million	2011 RM'million	2010 RM'million
n Ri	M'million	<b>RM</b> 'million	<b>DM</b> 'million
7	976.4	5,587.9	591.5
9	12,429.3	8,369.6	11,760.2
6	13,405.7	13,957.5	12,351.7
5.	3.6	10,400.7	<b>3.0</b> 13,403.7 <b>13,737.3</b>

	Group ( 2011 RM'million	and Company 2010 RM'million
Future minimum lease payments		
Not later than one year	0	11.0

The above lease payments relate to the non-cancellable operating leases of the Group and Company.

# 41. CONTINGENT LIABILITIES (UNSECURED)

	Group		Company	
	2011 RM'million	2010 RM'million	2011 RM'million	2010 RM'million
Claims by third parties	594.9	617.4	402.9	427.4
Trade guarantees and performance bonds	152.5	24.5	0	0
Guarantees given to financial institutions in respect				
of facilities granted	0	284.4	0	3,174.0
Stamp duties on transfer of assets to a subsidiary <sup>(1)</sup>	0	108.0	0	0
Bank guarantees	3.6	3.6	0	0
Other contingent liabilities	2.4	4.9	0	0
	753.4	1,042.8	402.9	3,601.4

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 Company.

<sup>(1)</sup> 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. The Directors are of the view that the probability of the liability crystallising is remote.

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# 42. 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
- TNB Integrated Learning Solution Sdn Bhd
- TNB Engineering Corporation Sdn Bhd

- Sabah Electricity Sdn Bhd
- TNB Research Sdn Bhd
- TNB Capital Ltd.
- TNB Repair And Maintenance Sdn Bhd
- Tenaga Cable Industries Sdn Bhd
- Universiti Tenaga Nasional Sdn Bhd
- TNB Power Daharki Ltd

## <u>Associates</u>

- Teknologi Tenaga Perlis Consortium Sdn Bhd
- GB3 Sdn Bhd
- Fibrecomm Network (M) Sdn Bhd
- Jimah Energy Ventures Holdings Sdn Bhd
- Integrax Berhad

All related party transactions were entered into a normal course of business and at prices available to third parties or at negotiated terms.

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.

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:

		Company	
		2011 RM'million	2010 RM'million
(a)	Transactions with subsidiaries		
	Income - Sales of electricity - Interest income - Dividend income - Rental income	31.9 185.5 46.2 27.3	33.2 179.7 15.6 28.6
	Expenditure - Purchases of electricity - Training fees - Interest expense	5,807.6 50.2 88.0	4,199.5 38.5 96.0
	Amounts due from subsidiaries	2,611.3	2,978.8
	Amounts due to subsidiaries	4,076.4	3,901.8



# 42. SIGNIFICANT RELATED PARTY DISCLOSURES (CONT'D.)

	Group		Company	
	2011	2010	2011	2010
	<b>RM</b> 'million	<b>RM</b> ′million	<b>RM'million</b>	<b>RM</b> ′million
b) <u>Transactions with associates</u>				
Income				
- Sales of electricity	0.5	13.2	0.5	13.2
- Interest income	43.9	3.6	43.9	3.6
- Dividend income	36.8	40.5	36.8	40.5
- Leasing income	9.2	4.7	9.2	4.7
Expenditure				
- Purchases of electricity	3,966.3	3,226.6	3,966.3	3,226.6
Amounts due from associates	14.6	5.7	14.6	5.3
Amounts due to associates	707.9	623.6	707.9	623.6

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.

	Group		Company	
	2011 RM'million	2010 RM'million	2011 RM'million	2010 RM'million
(c) Key management compensation				
Short term employee benefits				
- Salaries, allowances and bonus	17.7	11.2	10.1	6.6
- Benefits-in-kind	1.0	0.5	0.8	0.3
- Defined contribution retirement plan	1.7	1.2	1.0	0.8
- Other staff benefits	0.3	0.5	0.3	0.4
Share-based payment				
- ESOS expense	1.7	0.7	1.5	0.6

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.

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.

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### 43. SEGMENTAL REPORTING

Segmental reporting is not presented as the Group is principally engaged in the generation, transmission, distribution and sales of electricity and the provision of other related services, which are substantially within a single business segment. The Group operates primarily in Malaysia.

# 44. SIGNIFICANT ACQUISITION

On 23 March 2011, TNB had acquired 66,538,269 ordinary shares of RM1.00 each in Integrax Berhad (ITB) representing 22.12% equity interest in ITB for a total consideration of RM106,461,230.40, fully satisfied in cash.

The principal activity of ITB is investment holding while its subsidiaries are principally involved in port operations, marine services, industrial property and mining. Lekir Bulk Terminal Sdn. Bhd., one of the subsidiaries of ITB and its associate, Lumut Maritime Terminal Sdn. Bhd. are principally involved in the provision of coal handling services and port facilities for one of TNB's largest power plant, Stesen Janakuasa Sultan Azlan Shah, Manjung.

With the acquisition, TNB has become a substantial shareholder of ITB, a public company listed on the Main Market of Bursa Malaysia Securities Berhad. ITB is treated as an associate of the Group and consolidated under the equity method. The impact of the acquisition is a negative goodwill of RM29.9 million recognised in the income statement.

# **45. FINANCIAL INSTRUMENTS**

#### (a) Categories of financial instruments

The table below provides an analysis of financial instruments categorised as follows:

- (i) Loans and receivables (L&R);
- (ii) Fair value through profit or loss (FVTPL);
- (iii) Available-for-sale financial assets (AFS); and
- (iv) Other financial liabilities measured at amortised cost (OL).

Group	Carrying amount RM'million	L&R/ OL RM'million	FVTPL RM'million	AFS RM'million
2011				
<u>Financial assets</u>				
Unsecured loan stocks in associate	21.1	21.1	0	0
Investment in unquoted debt securities	164.0	164.0	0	0
Available-for-sale financial assets/Investments	38.0	0	0	38.0
Derivative financial instruments	91.4	0	91.4	0
Long term receivables	388.6	388.6	0	0
Trade and other receivables	6,022.1	6,022.1	0	0
Amounts due from associates	14.6	14.6	0	0
Fair value through profit and loss/Marketable securities	8.6	0	8.6	0
Deposits, bank and cash balances	3,954.2	3,954.2	0	0
	10,702.6	10,564.6	100.0	38.0

# (a) Categories of financial instruments (Cont'd.)

	Carrying	L&R/			
	amount	OL	FVTPL	AFS	
Company	RM'million	<b>RM</b> 'million	<b>RM</b> 'million	<b>RM</b> 'million	
<u>Financial assets</u>					
Unsecured loan stocks in subsidiary and associate	556.6	556.6	0	0	
Investment in unquoted debt securities	164.0	164.0	0	0	
Available-for-sale financial assets/Investment	38.0	0	0	38.0	
Derivative financial instruments	1.5	0	1.5	0	
Long term receivables	388.6	388.6	0	0	
Trade and other receivables	3,724.9	3,724.9	0	0	
Amounts due from subsidiaries	2,611.4	2,611.4	0	0	
Amounts due from associates	14.6	14.6	0	0	
Fair value through profit and loss/Marketable securities	8.6	0	8.6	0	
Deposits, bank and cash balances	2,703.9	2,703.9	0	0	
	10,212.1	10,164.0	10.1	38.0	

Co	arrying	L&R/	
α	mount	OL	FVTPL
Group RM'	million	<b>RM</b> 'million	<b>RM</b> 'million
2011			
<u>Financial liabilities</u>			
Payables 5	5,585.6	5,585.6	0
Amounts due to associates	707.9	707.9	0
Derivative financial instruments	44.1	0	44.1
Borrowings 19	9,054.1	19,054.1	0
Other liabilities	435.9	435.9	0
25	5,827.6	25,783.5	44.1
Company			
Payables 3	3,549.8	3,549.8	0
Amounts due to subsidiaries	4,076.4	4,076.4	0
Amounts due to associates	707.9	707.9	0
Derivative financial instruments	44.1	0	44.1
Borrowings 12	2,174.2	12,174.2	0
Other liabilities	309.6	309.6	0
20	0,862.0	20,817.9	44.1

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# 45. FINANCIAL INSTRUMENTS (CONT'D.)

# (b) Net gains and losses arising from financial instruments

	Group RM'million	Company RM'million
Net gains/(losses) on:		
Fair value through profit or loss	64.8	28.2
Loans and receivables	0	(31.4)
Financial liabilities measured at amortised cost		
- Borrowings	13.3	(1.9)
	78.1	(5.1)

## (c) Financial risk management

The Group has exposure to the following risks from its use of financial instruments:

- Credit risk
- Liquidity risk
- Market risk

# <u>Credit risk</u>

Credit risk is the risk of a financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Group's exposure to credit risk arises principally from its receivables from customers, deposits, bank and cash balances, derivative instruments and investment securities. In addition, the Company's exposure to credit risk arises principally from loans and advances to subsidiaries and financial guarantees given to banks for credit facilities granted to subsidiaries.

# (i) Receivables

# Risk management objectives, policies and processed for managing the risk

Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis. Normally financial guarantees given by banks, shareholders or directors of customers are obtained, and credit evaluations are performed on customers requiring credit over a certain amount.

#### Exposure to credit risk

The Group's and Company's credit policy provides trade receivables with a 30 days (2010: 30 days) credit period. The Group has no major significant concentration of credit risk other than business and residential trade receivables due to its diverse customer base. An allowance has been made for estimated unrecoverable amounts, determined by reference to past default experience of individual debtors and collective portfolio.

# (c) Financial risk management (Cont'd.)

Credit risk (Cont'd.)

(i) Receivables (Cont'd.)

Exposure to credit risk (Cont'd.)

As of 31 August 2011, the total trade receivables and impairment provided are as follows:

	Group 2011 RM'million	Company 2011 RM'million
Trade receivables	5,426.7	4,088.1
Impairment losses	(607.7)	(530.3)
	4,819.0	3,557.8

Given the varied nature of the Group's customer base, the following analysis of trade receivables by type of customer is considered the most appropriate disclosure of credit concentrations.

	Group 2011 RM'million	Company 2011 RM'million
Industrial	1,826.0	1,176.1
Commercial	2,001.4	1,587.6
Domestic	1,396.8	1,217.7
Specific agriculture	10.2	10.2
Mining	2.0	2.0
Public lighting	110.3	94.5
Others	80.0	0
	5,426.7	4,088.1

The net trade receivables are denominated in the following currencies:

	Group	Company
	2011	2011
	RM'million	<b>RM</b> 'million
MYR	4,551.5	3,557.8
USD	10.5	0
PKR	257.0	0

- 31 August 2011 (Cont'd.)

# 45. FINANCIAL INSTRUMENTS (CONT'D.)

# (c) Financial risk management (Cont'd.)

Credit risk (Cont'd.)

# (i) Receivables (Cont'd.)

# Impairment losses

The ageing of trade receivables as at the end of the reporting period was:

Group	Gross RM'million	Individual impairment RM'million	Collective impairment RM'million	Net RM'million	
2011					
Not past due	3,493.0	(2.4)	(0.5)	3,490.1	
Past due 0-30 days	575.0	(1.4)	(0.3)	573.3	
Past due 31-120 days	602.6	(5.5)	(1.1)	596.0	
Past due 121-240 days	249.0	(87.9)	(2.0)	159.1	
Past due more than 240 days	507.1	(429.7)	(76.9)	0.5	
	5,426.7	(526.9)	(80.8)	4,819.0	

Company	Gross RM'million	Individual impairment RM'million	Collective impairment RM'million	Net RM'million
2011				
Not past due	2,781.6	(2.4)	(0.5)	2,778.7
Past due 0-30 days	293.9	(1.4)	(0.3)	292.2
Past due 31-120 days	384.2	(5.0)	(1.1)	378.1
Past due 121-240 days	198.0	(87.2)	(2.0)	108.8
Past due more than 240 days	430.4	(387.8)	(42.6)	0
	4,088.1	(483.8)	(46.5)	3,557.8

# Trade receivables that are neither past due nor impaired

With respect to the trade receivables that are neither past due nor impaired, there is no indication as of the reporting date that the debtors will not meet their payment obligations. The quality of these trade receivables is such that management believes no impairment is necessary, except in situations where they are part of individually impaired trade receivables.

# Trade receivables that are past due but not impaired

Full allowance for impairment was not made in respect of these past due trade receivables based on the past historical collection funds and available deposits.

# (c) Financial risk management (Cont'd.)

Credit risk (Cont'd.)

(i) Receivables (Cont'd.)

Impairment losses (Cont'd.)

The movements in the allowance for impairment losses of trade receivables during the financial year were:

	Group RM'million	Company RM'million
At 1 September 2010	(576.7)	(500.3)
Impairment loss recognised	(36.4)	(30.0)
Impairment loss reversed	6.5	0
Impairment loss written off	(1.1)	0
At 31 August 2011	(607.7)	(530.3)

The movements in the allowance for impairment losses of other receivables during the financial year were:

	Group RM'million	Company RM'million	
At 1 September 2010	(64.8)	(64.8)	
Impairment loss reversed	9.0	19.1	
At 31 August 2011	(55.8)	(45.7)	

Trade receivables are secured by deposits in the form of cash and bank guarantees. The deposits amount are reviewed on an individual basis periodically.

# (ii) Investments, deposits, bank and cash balances and derivative instruments

Risk management objectives, policies and processes for managing the risk

Investments and deposits, bank and cash balances are allowed only in liquid securities and only with reputable financial institutions. Transactions involving derivative financial instruments are with approved financial institutions.

## Exposure to credit risk, credit quality and collateral

The maximum exposure to credit risk is represented by the carrying amounts in the statement of financial position.

In view of the sound credit rating of counterparties, management does not expect any counterparty to fail to meet its obligations. The Group does not have overdue investments that have not been impaired.

The investments, deposits, bank and cash balances and derivative instruments are unsecured.

- 31 August 2011 (Cont'd.)

# 45. FINANCIAL INSTRUMENTS (CONT'D.)

# (c) Financial risk management (Cont'd.)

Credit risk (Cont'd.)

(iii) Financial guarantees

#### Risk management objectives, policies and processes for managing the risk

The Company provides unsecured financial guarantees to banks in respect of banking facilities granted to certain subsidiaries and associates. The Company monitors on an ongoing basis the results and repayments made by the subsidiaries and associates.

# Exposure to credit risk, credit quality and collateral

The maximum exposure to credit risk amounts to RM269.8 million and RM2,766.2 million for the Group and Company respectively representing the outstanding banking facilities of the subsidiaries and associates as at end of the reporting period.

As at end of the reporting period, there was no indication of any subsidiary or associate would default on repayment.

The financial guarantees have not been recognised since the fair value on initial recognition was not material as the probability of the subsidiaries and associates defaulting on its banking facilities is remote.

(iv) Intercompany balances

Risk management objectives, policies and processes for managing the risk

The Company provides unsecured loans and advances to subsidiaries. The Company monitors the results of the subsidiaries regularly.

#### Exposure to credit risk, credit quality and collateral

As at the end of the reporting period, the maximum exposure to credit risk is represented by their carrying amounts in the statements of financial position.

Loans and advances are only provided to subsidiaries by the Company.

#### Impairment losses

As at the end of the reporting period, there was no indication that the loans and advances to the subsidiaries are not recoverable. The Company does not specifically monitor the ageing of current advances to the subsidiaries. Nevertheless, these advances have been overdue for less than a year. Non-current loans to subsidiaries are neither past due nor impaired.

#### Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's exposure to liquidity risk arises principally from its various payables, loans and borrowings.

The Group maintains a level of cash and cash equivalents and bank facilities deemed adequate by the management to ensure, as far as possible, that it will have sufficient liquidity to meet its liabilities when they fall due.

# (c) Financial risk management (Cont'd.)

# Liquidity risk (Cont'd.)

The table below summarises the maturity profile of the Group's financial liabilities as at the end of the reporting period based on the undiscounted contractual payments:

Group	Carrying amount RM'million	Contractual interest/ coupon rate	Contractual cash flows RM'million	Under 1 year RM'million	1-2 years RM'million	2-5 years RM'million	More than 5 years RM'million
2011							
Non-derivative financial liabilities							
Payables	5,585.6	0%	5,585.6	5,585.6	0	0	0
Amount due to associates	707.9	0%	0	707.9	0	0	0
Borrowings	19,054.1	0.75% to 15.54%	18,618.7	1,543.5	1,078.3	3,654.6	12,342.4
Other liabilities	435.9	0%	435.9	55.6	106.2	274.1	0
	25,783.5		24,640.2	7,892.6	1,184.5	3,928.7	12,342.4
<u>Derivative financial</u> <u>liabilities</u>							
Interest rate swap Forward exchange contracts (Gross settled):	44.1	3.76%	40.9	19.0	13.1	7.3	15.1
Outflow	0		86.3	86.3	0	0	0
Inflow	(1.5)		(87.8)	(87.8)	0	0	0
	25,826.0	-	24,679.5	7,910.0	1,197.6	3,936.0	12,357.5

- 31 August 2011 (Cont'd.)

# 45. FINANCIAL INSTRUMENTS (CONT'D.)

# (c) Financial risk management (Cont'd.)

Liquidity risk (Cont'd.)

The table below summarises the maturity profile of the Company's financial liabilities as at the end of the reporting period based on the undiscounted contractual payments:

	Carrying amount RM'million	Contractual interest/ coupon rate	Contractual cash flows RM'million	Under 1 year RM'million	1-2 years RM'million	2-5 years RM'million	More than 5 years RM'million
2011							
Non-derivative financial liabilities							
Payables	3,549.8	0%	3,549.8	3,549.8	0	0	0
Amount due to subsidiaries	4,076.4	0.5% to 5.3%	0	1,608.6	176.2	1,351.2	940.4
Amount due to associates	707.9	0%	0	707.9	0	0	0
Borrowings	12,174.2	0.75% to 8.30%	12,064.5	824.5	637.4	1,462.2	9,140.4
Other liabilities	309.6	0%	309.6	30.3	80.9	198.4	0
	20,817.9	-	15,923.9	6,721.1	894.5	3,011.8	10,080.8
<u>Derivative financial</u> <u>liabilities</u>							
Interest rate swap Forward exchange contracts (Gross settled):	44.1	3.76%	40.9	19.0	13.1	7.3	1.5
Outflow	0		86.3	86.3	0	0	0
Inflow	(1.5)		(87.8)	(87.8)	0	0	0
	20,860.4	_	15,963.2	6,738.5	907.6	3,019.1	10,082.3

## (c) Financial risk management (Cont'd.)

#### <u>Market risk</u>

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and other prices will affect the Group's financial position or cash flows.

#### (i) Currency risk

The Group is exposed to foreign currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of Group entities. The currencies giving rise to this risk are primarily US Dollar (USD), Japanese Yen (JPY), European Dollar (EURO) and Pakistani Rupees (PKR).

## Risk management objectives, policies and processes for managing the risk

The Group is required to hedge a minimum of 50.0% of TNB's known foreign currency exposure up to 12 months period. The Group uses forward exchange contracts and other financial derivatives to hedge its foreign currency risk. Most of the forward exchange contracts have maturities of less than three months.

### Exposure to foreign currency 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.

Group	USD RM' million	JPY RM'million	EURO RM'million	Others RM'million
2011				
Financial assets				
Receivables, deposits and prepayments	10.5	0	0	257.0
Deposits, bank and cash balances	0	0	0	15.6
Derivative financial instruments	89.9	0	0	0
Forward foreign currency	0.3	1.2	0	0
	100.7	1.2	0	272.6
<u>Financial liabilities</u>				
Borrowings	2,909.9	5,457.9	0	25.8
Derivative financial instruments	44.1	0	0	0
	2,954.0	5,457.9	0	25.8

- 31 August 2011 (Cont'd.)

# 45. FINANCIAL INSTRUMENTS (CONT'D.)

# (c) Financial risk management (Cont'd.)

Market risk (Cont'd.)

(i) Currency risk (Cont'd.)

Group	USD RM'million	JPY RM'million	EURO RM'million	Others RM'million
2010				
Financial assets				
Receivables, deposits and prepayments	14.8	0	11.3	0
Deposits, bank and cash balances	1.6	0	0	14.6
Derivative financial instruments	1.9	0	0	0
	18.3	0	11.3	14.6
Financial liabilities				
Payables				
- external	41.6	0	0	0
Borrowings	4,516.5	5,306.8	0	0
Derivative financial instruments	17.8	0	0	0
	4,575.9	5,306.8	0	0
Company				
2011				
<u>Financial assets</u>				
Amounts due from subsidiaries	475.7	0	0	0.2
Forward foreign currency	0.3	1.2	0	0
	476.0	1.2	0	0.2
<u>Financial liabilities</u>				
Amounts due to subsidiaries	33.5	0	0	0
Borrowings	1,239.0	4,318.1	0	0
Derivative financial instruments	44.1	0	0	0
	1,316.6	4,318.1	0	0

# (c) Financial risk management (Cont'd.)

Market risk (Cont'd.)

(i) Currency risk (Cont'd.)

2010	USD RM'million	JPY RM'million	EURO RM'million	Others RM'million
Financial assets				
Amounts due from subsidiaries	1,120.6	0	0	0.3
Deposits, bank and cash balances	1.5	0	0	0
Derivative financial instruments	1.9	0	0	0
	1,124.0	0	0	0.3
Financial liabilities				
Amounts due to subsidiaries	1,978.7	959.9	0	0
Borrowings	2,586.8	4,312.9	0	0
Derivative financial instruments	17.8	0	0	0
	4,583.3	5,272.8	0	0

# Currency risk sensitivities analysis

A 10.0% strengthening of the foreign currencies against MYR at the end of the reporting period would have increased/(decreased) pre-tax profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular interest rates, remained constant and ignores any impact of forecasted sale and purchases.

Group	Profit or loss RM'million
2011	
USD	(130.6)
JPY	(792.4)
	(*/
Company	

2011	
USD	(79.6)
JPY	(431.8)

A 10.0% weakening of the foreign currencies against MYR at the end of the reporting period would have had equal but opposite effect on the above currencies to the amounts shown above, on the basis that all other variables remained constant.

Nevertheless, foreign currency risk arises from Group entities which have a functional currency other than MYR is not material and hence, sensitivity analysis is not presented.



- 31 August 2011 (Cont'd.)

# 45. FINANCIAL INSTRUMENTS (CONT'D.)

# (c) Financial risk management (Cont'd.)

Market risk (Cont'd.)

(ii) Interest rate risk

The Group's investment in fixed rate debt securities and its fixed rate borrowing are exposed to a risk of change in their fair value due to changes in interest rates. The Group's variable rate borrowings are exposed to a risk of change in cash flows due to changes in interest rates. Investment in equity securities and short term receivables and payables are not significantly exposed to interest rate risk.

#### Risk management objectives, policies and processes for managing the risk

The Group has entered into interest rate swap with a notional contract amount of RM616.6 million (2010: RM835.9 million) in order to achieve an appropriate mix of fixed and floating rate exposure within the Group's policy. Such interest rate swaps have the economic effect of converting borrowings from floating rates to fixed rates. Generally, the group raises long-term borrowings at floating rates and swaps them into fixed rates that are lower than those available if the Group borrowed at fixed rates directly. Under the interest rate swaps, the Group agrees with other parties to exchange, at specified intervals (semi-annually), the difference between fixed contract rates and floating-rate interest amounts calculated by reference to the agreed notional amounts.

### Exposure to interest rate risk

The interest rate profile of the Group's and the Company's significant interest-bearing financial instruments, based on carrying amounts as at the end of the reporting period were:

	Group 2011 RM'million	Company 2011 RM'million
Fixed rate instruments:		
Financial assets	1,843.8	1,674.4
Financial liabilities	18,437.4	11,338.3
Floating rate instruments:		
Financial assets	0	475.7
Financial liabilities	616.6	835.9

# (c) Financial risk management (Cont'd.)

Market risk (Cont'd.)

(ii) Interest rate risk (Cont'd.)

#### Exposure to interest rate risk (Cont'd.)

A change of 100 basis point (bp) in interest rates at the end of the reporting period would have increased the finance cost to RM5.3 million. However, this change has no impact to post-tax profit or loss as the floating instrument have been fixed via Interest Rate Swap. This analysis assumes that all other variables, in particular foreign currency rates, remained constant.

The financial assets are not sensitive to interest rate changes.

The exposure of financial assets of the Group to interest rate use are as follow:

Group	Balances under Non Islamic principles RM'million	Balances under Islamic principles RM'million	Total RM'million
2011			
Financial assets			
Unsecured loan stocks in associates	21.1	0	21.1
Investment in unquoted debt securities	0	164.0	164.0
Long term receivables	333.4	0	333.4
Trade and other receivables	50.6	0	50.6
Deposits, bank and cash balances	1,438.7	1,460.4	2,899.1
	1,843.8	1,624.4	3,468.2
2010			
<u>Financial assets</u>			
Trade and other receivables	523.7	299.7	823.4
Deposits, bank and cash balances	5,044.3	2,880.3	7,924.6
	5,568.0	3,180.0	8,748.0

- 31 August 2011 (Cont'd.)

# 45. FINANCIAL INSTRUMENTS (CONT'D.)

# (c) Financial risk management (Cont'd.)

Market risk (Cont'd.)

# (ii) Interest rate risk (Cont'd.)

The exposure of financial assets of the Company to interest rate use are as follow:

Company	Balances under Non Islamic principles RM'million	Balances under Islamic principles RM'million	Total RM′million
2011			
<u>Financial assets</u>			
Unsecured loan stock in subsidiary and associate	556.6	0	556.6
Investment in unquoted debt securities	0	164.0	164.0
Long term receivables	333.4	0	333.4
Trade and other receivables	50.6	0	50.6
Amounts due from subsidiaries	476.0	0	476.0
Deposits, bank and cash balances	733.5	1,460.4	2,193.9
	2,150.1	1,624.4	3,774.5
2010			
<u>Financial assets</u>			
Trade and other receivables	0	299.7	299.7
Amounts due from subsidiaries	405.8	0	405.8
Deposits, bank and cash balances	3,330.0	2,880.3	6,210.3
	3,735.8	3,180.0	6,915.8

# (c) Financial risk management (Cont'd.)

Market risk (Cont'd.)

# (ii) Interest rate risk (Cont'd.)

The exposure of financial liabilities of the Group to interest rate use are as follow:

	Balances	Balances	
	under Non Islamic	under Islamic	
	principles	principles	Total
Group	RM'million	RM'million	RM'million
2011			
Financial liabilities			
Borrowings	14,543.5	4,510.5	19,054.0
	14,543.5	4,510.5	19,054.0
Total interest sensitivity gap	(12,699.7)	(2,886.1)	(15,585.8)
2010			
Financial liabilities			
Borrowings (including accrued interest)	16,921.6	4,654.9	21,576.5
Other liabilities	0.2	0	0.2
	16,921.8	4,654.9	21,576.7
Total interest sensitivity gap	(11,353.8)	(1,474.9)	(12,828.7)

- 31 August 2011 (Cont'd.)

# 45. FINANCIAL INSTRUMENTS (CONT'D.)

# (c) Financial risk management (Cont'd.)

Market risk (Cont'd.)

# (ii) Interest rate risk (Cont'd.)

The exposure of financial liabilities of the Company to interest rate use are as follow:

Company	Balances under Non Islamic principles RM'million	Balances under Islamic principles RM'million	Total RM'million
2011			
<u>Financial liabilities</u>	0.007.0	0.10/ 0	101740
Borrowings	9,987.9	2,186.3	12,174.2
Amounts due to subsidiaries	2,644.0	0	2,644.0
	12,631.9	2,186.3	14,818.2
Total interest sensitivity gap	(10,481.8)	(561.9)	(11,043.7)
2010			
<u>Financial liabilities</u>			
Borrowings (including accrued interest)	12,304.5	2,185.9	14,490.4
Amounts due to subsidiaries	2,937.6	0	2,937.6
	15,242.1	2,185.9	17,428.0
Total interest sensitivity gap	(11,506.3)	994.1	(10,512.2)

# (c) Financial risk management (Cont'd.)

Market risk (Cont'd.)

(ii) Interest rate risk (Cont'd.)

The table below summarises the effective weighted average interest rate as at 31 August 2011 and 31 August 2010 by major currencies for each class of financial asset and financial liability.

Group	USD %	JPY %	EURO %	RM %	Others %
2011					
Financial assets					
Unsecured loan stocks in associate	0	0	0	12.0	0
Long term receivable	0	0	0	4.0	0
Trade and other receivables	0	0	0	4.0	0
Deposits, bank and cash balances	0	0	0	3.4	7.5
<u>Financial liabilities</u> Borrowings	5.3	2.0	0	6.6	15.5
2010					
<u>Financial assets</u>					
Trade and other receivables	0	0	0	0	12.2
Deposits, bank and cash balances	0	0	0	3.0	7.8
<u>Financial liabilities</u>					
Borrowings	5.7	1.8	0	6.5	0

- 31 August 2011 (Cont'd.)

# 45. FINANCIAL INSTRUMENTS (CONT'D.)

# (c) Financial risk management (Cont'd.)

Market risk (Cont'd.)

# (ii) Interest rate risk (Cont'd.)

The table below summarises the effective weighted average interest rate as at 31 August 2011 and 31 August 2010 by major currencies for each class of financial asset and financial liability.

Company	USD %	JPY %	EURO %	RM %	Others %
2011					
<u>Financial assets</u>					
Unsecured loan stocks in subsidiary					
and associate	0	0	0	14.9	0
Long term receivable	0	0	0	4.0	0
Trade and other receivables	0	0	0	4.0	0
Amounts due from subsidiaries	2.5	0	0	5.0	0
Deposits, bank and cash balances	0	0	0	3.4	0
Financial liabilities					
Amounts due to subsidiaries	2.6	4.1	0	0	0
Borrowings	7.7	1.5	0	6.2	0
2010					
Financial assets					
Amounts due from subsidiaries	2.9	0	0	5.6	0
Deposits, bank and cash balances	0	0	0	3.0	0
	0	0	0	5.0	0
Financial liabilities					
Amounts due to subsidiaries	2.6	4.1	0	0	0
Borrowings	5.7	1.8	0	6.5	0

# (c) Financial risk management (Cont'd.)

Market risk (Cont'd.)

(iii) Other price risk

Equity price risk arises from the Group's investment in equity securities.

#### Risk management objectives, policies and processes for managing the risk

Management of the Group monitors the equity investments on individual basis by fund managers. Material investments within the portfolio are managed on an individual basis and all buy and sell decisions are approved by the Risk Management Committee of the Group.

The results and cash flows of the Group and Company is significantly independent of equity price change.

#### Fair value of financial instruments

The carrying amounts of cash and cash equivalents, short term receivables and payables and short term borrowings approximate fair values are equivalent to nominal values due to the relatively short term nature of these financial instruments.

The carrying amount of non-current financial assets and liabilities of the Group and Company at the reporting date approximated their fair value except as set out below:

	2011		2010	
Group	Carrying amount RM'million	Fair value RM'million	Carrying amount RM'million	Fair value RM'million
Unsecured loan stocks in associate	21.1	24.4	N/A	N/A
Investment in unquoted debt securities	164.0	388.5	N/A	N/A
Long term receivables	388.6	292.3	0	0
Borrowings	19,054.1	19,784.2	21,838.9	22,658.4
Company				
Unsecured loan stocks in subsidiary and associate	556.6	508.4	N/A	N/A
Investment in unquoted debt securities	164.0	388.5	N/A	N/A
Long term receivables	821.2	724.9	405.8	404.1
Borrowings	12,174.2	12,816.4	14,628.6	15,191.9
Amounts due to subsidiaries (non-current)	2,467.8	2,752.2	2,796.7	3,083.5

\* N/A - Not applicable.

- 31 August 2011 (Cont'd.)

# 45. FINANCIAL INSTRUMENTS (CONT'D.)

# (c) Financial risk management (Cont'd.)

Fair value of financial instruments (Cont'd.)

The following summarises the methods used in determining the fair value of financial instruments reflected in the above table:

## Investments in equity and debt securities

The fair values of financial assets that are quoted in an active market are determined by reference to their quoted closing price at the end of the reporting period. For investment in unquoted debt securities, is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the end of the reporting period.

## **Financial Instruments**

The fair value of forward exchange contracts is based on their quoted price, if available. If a quoted price is not available, then fair value is estimated by the difference between the contractual forward price and the current forward price for the residual maturity of the contract.

The fair value of interest rate swaps and currency options are based on figures provided by calculating agents/ counterparties. Those figures except for currency options are tested for reasonableness by discounting estimated future cash flows based on the terms and maturity of each contract and using market interest rates for a similar instrument at the measurement date.

# Loans and Borrowings

Fair value, which is determined for disclosure purposes, is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the end of the reporting period. In respect of the liability component of convertible notes, the market rate of interest is determined by reference to similar liabilities that does not have a conversion option.

#### Interest rates used to determine fair value

The interest rates used to discount estimated cash flows, when applicable, ranges between 0.49% to 21.30%.

The unrealised gains/(losses) have been recognised in other operating/expenses in profit or loss.

Although the Group believes that its estimates of fair value are appropriate, the use of different methodologies or assumptions could lead to different measurements of fair value.

The favourable and unfavourable effects of using reasonably possible alternative assumptions have been calculated by recalibrating the model values using expected cash flows and risk-adjusted discount rate based on the probability weighted average of the Group's ranges of possible outcomes.

# 46. CAPITAL MANAGEMENT RISK

The primary objective of the Group's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios in order to support its business and maximise shareholder's value.

The Group manages its capital structure and makes adjustments to it, in light of changes in economic conditions. In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, issue new shares or return capital to shareholders.

Consistent with others in the industry, the Group monitors capital on the basis of the gearing ratios. This ratio is calculated as total borrowings divided by capital employed. Total borrowings include non-current and current borrowings as shown in the consolidated statement of financial position. Capital employed is the summation of total equity (as shown in the consolidated statement of financial position) and total borrowings.

The gearing ratios as at 31 August were as follows:

	2011 RM'million	2010 RM'million (Restated)
Borrowings (Note 30) Total equity	19,054.1 30,271.7	21,263.6 30,180.3
Total capital employed	49,325.8	51,443.9
Gearing ratio	0.39	0.41

During the financial year, the Group's capital management strategy was to obtain and maintain an investment grade credit rating.

The decrease in gearing ratio as at August 2011 was primarily due to the repayment of debts during the financial year.

# 47. CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS

#### Changes in accounting policies

During the financial year, the Group changed the following accounting policies upon adoption of new accounting standards, amendments and improvements to published standards and interpretations:

#### (a) FRS 139 – Financial Instruments: Recognition and Measurement (FRS 139)

The Group and the Company have applied the new policies in relation to financial instruments in accordance with the transitional provisions in FRS 139 by recognising and re-measuring all the financial assets and financial liabilities as at 1 September 2010 as appropriate. The related adjustments to the previous carrying amounts are made to the opening retained earnings as appropriate, comparatives are not restated.

- 31 August 2011 (Cont'd.)

# 47. CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS (CONT'D.)

Changes in accounting policies (Cont'd.)

# (a) FRS 139 - Financial Instruments: Recognition and Measurement (FRS 139) (Cont'd.)

The impact of the adoption of FRS 139 to the opening retained profits of the Group and the Company is set out as below:

		At 1 September 2010		
Group	As previously reported As at 31.8.2010 RM'million	Effect of adoption of FRS 139 RM'million	Restated figures As at 1.9.2010 RM'million	
<u>Statement of changes in equity</u> Retained profits	18,389.2	265.6	18,654.8	
Company Retained profits	17,873.7	(144.3)	17,729.4	
Group				
<u>Statement of financial position</u> Derivative financial instruments				
- Non-current liabilities	0	70.8	70.8	
- Non-current assets	0	53.4	53.4	
Investment in unquoted debt securities	50.7	113.3	164.0	
Long term receivables	0	(31.8)	(31.8)	
Financial assets at fair value through profit or loss/				
Short term investments	72.5	40.8	113.3	
Borrowings	18,100.9	(160.7)	17,940.2	
Company Derivative financial instruments				
- Non-current liabilities	0	70.8	70.8	
Investment in unquoted debt securities	50.7	113.3	164.0	
Long term receivables	886.3	(270.1)	616.2	
Financial assets at fair value through profit or loss/				
Short term investments	72.5	40.8	113.3	
Borrowings	11,922.6	(42.5)	11,880.1	

# 47. CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS (CONT'D.)

Changes in accounting policies (Cont'd.)

# (a) FRS 139 - Financial Instruments: Recognition and Measurement (FRS 139) (Cont'd.)

The impact of adoption of FRS 139 to the financial position and results for the financial year ended 31 August 2011 is set out below:

Statement of Financial Position Group	Increase/(decrease) to balances as at 31 August 2011 RM'million
Non-current assets: Derivative financial instruments	36.5
Non-current liabilities: Borrowings Derivative financial instruments	(13.3) 28.2
<b>Company</b> Current assets: Amounts due from a subsidiary	(31.4)
Non-current liabilities: Borrowings Derivative financial instruments	(1.9) 28.2
Income Statement Group	Increase/(decrease) for the financial year ended 31 August 2011 RM'million
Finance cost	78.1
<b>Company</b> Finance income Finance cost	(31.4) 23.9

- 31 August 2011 (Cont'd.)

# 47. CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS (CONT'D.)

Changes in accounting policies (Cont'd.)

#### (b) Transfers of assets from customers (IC Interpretation 18)

The Group and the Company implemented IC Interpretation 18 "Transfers of Assets from Customers", which is prospectively effective for transfers of assets from customers on or after 1 January 2011. The IC interpretation requires that entities which receives cash from customers when that amount of cash must be used only to construct or acquire an item of property, plant and equipment and the entity must then use the item of property, plant and equipment either to connect a customer to a network or to provide the customer with ongoing access to a supply of goods or services, or to do both, the entity shall recognise the cash received as revenue.

The Group and the Company have previously (up to 31 December 2010) credited the contribution paid in advance by electricity customers relating to the construction of assets to the income statement on a straight-line basis over the expected useful lives of the related assets when these assets were placed into commercial operation. From 1 January 2011, the contributions paid in advance are credited to the income statement within other revenue when the customer is connected to the electricity network. The impact to the current financial year is RM268.7 million and RM263.9 million for the Group and Company respectively.

## (c) Leases (FRS 117)

Following the adoption of the improvement to FRS 117 "Leases", leasehold land in which the Group and Company have substantially all the risks and rewards incidental to ownership has been reclassified retrospectively from operating lease to finance lease. Previously, leasehold land was classified as an operating lease unless title is expected to pass to the lessee at the end of the lease term.

#### (d) Presentation of financial statements (FRS 101(Revised))

Prior to the adoption of FRS 101 (Revised), the components of the financial statements presented consisted of a balance sheet, an income statement, a statement of changes in equity, a cash flow statement, and notes to the financial statement.

The adoption of FRS 101 (revised) has resulted in a change in the presentation of financial statements. The revised standard prohibits the presentation of items of income and expenses (that is 'non-owner changes in equity') in the statement of changes in equity. All 'non-owner changes in equity' are required to be shown in a statement of comprehensive income which can be presented as a single statement or two statements (comprising the income statement and statement of comprehensive income). The Group has elected to present the statement of comprehensive income in two statements. Comparative have been restated to conform to current financial year presentation.

# (e) FRS 7 - Financial Instruments: Disclosures

FRS 7 introduces new disclosures relating to financial instruments and does not have any impact on the classification and valuation of the Group's and Company's financial instruments. FRS 7 does not require comparative disclosures when the standard is first applied.

# 47. CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS (CONT'D.)

#### Prior year adjustment

# (f) Revenue recognition

Electricity revenue for energy supply activities includes an assessment of energy supplied to customers between the date of the last meter reading and the financial year end of the Group and Company (unread and unbilled). An assessment is also made of any factors that are likely to materially affect the ultimate economic benefits which will flow to the Group and Company, including bill cancellation and adjustments. To the extent that the economic benefits are not expected to flow to the Group and Company, the value of that revenue is not recognised.

During the financial year, the Group and Company had reviewed the accounting treatment for the billing cycle as it relates to consumption not billed due to timing differences. Based on the reassessment, additional accrued revenue arising from energy consumption between the date of the last meter reading and the year end (unread) as at 31 August 2011 for the Group and Company amounted RM2,091.0 million (2010: RM1,799.5 million, 2009: RM1,802.2 million) and RM1,741.4 million (2010: RM1,734.7 million, 2009: RM1,741.3 million) respectively. The impact to the income statements was however not material to the prior financial year results. TNB has effected this change as a prior year adjustment (PYA) in accordance with FRS 108 'Accounting Policies, Changes in Accounting Estimates and Errors'.

Arising from the above change, the financial statements for the previous financial periods have been restated as per note (h) and (i).

# **Reclassification**

#### (g) Reclassification of financial position items

During the financial year, the Group made certain reclassification to the comparatives to conform to current year presentation of results in the financial statements providing more relevant information about the effects of the transaction on the Group's financial position.

The financial statements for the previous financial periods have been restated as per note (i).

- 31 August 2011 (Cont'd.)

# 47. CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS (CONT'D.)

# Impact

(h) Impact on the Group and Company's income statement/statement of comprehensive income

Group	For the financi As previously reported RM'million	al year ended 31 Prior year adjustment on revenue recognition RM'million	August 2010 As restated RM'million
Revenue	30,320.1	(2.7)	30,317.4
Profit before taxation	4,022.1	(2.7)	4,019.4
Taxation	(824.8)	1.6	(823.2)
Profit for the year	3,197.3	(1.1)	3,196.2
Earnings per share for profit attributable to the owners of the Company	3,201.9	(1.1)	3,200.8
- basic (sen)	73.74	0	58.92
- diluted (sen)	73.40	0	58.71
Company			
Revenue	28,368.8	(6.5)	28,362.3
Profit before taxation	3,508.5	(6.5)	3,502.0
Taxation	(800.0)	1.6	(798.4)
Profit for the year	2,708.5	(4.9)	2,703.6

# 47. CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS (CONT'D.)

Impact (Cont'd.)

(i) Impact on the Group and Company's statement of financial position

	As	Prior year adjustment on	Change in accounting	Balances as at 31	August 2009
Group	previously reported RM'million	revenue recognition RM'million	policy FRS 117 RM'million	Change in classification RM'million	As restated RM'million
Property, plant and equipment	58,227.4	0	833.6	0	59,061.0
Prepaid operating leases	833.6	0	(833.6)	0	0
Associates	297.3	0	0	(50.7)	246.6
Investments	0	0	0	50.7	50.7
Long term receivables	0	0	0	533.0	533.0
Receivables, deposits and					
prepayments	3,774.1	1,802.2	0	(533.0)	5,043.3
Payables	5,604.0	0	0	(430.2)	5,173.8
Deferred income (current)	0	0	0	326.9	326.9
Other liabilities	(235.5)	0	0	(430.2)	(665.7)
Deferred tax liabilities	(6,640.4)	(435.3)	0	0	(7,075.7)
Deferred income	(2,952.2)	0	0	326.9	(2,625.3)
Retained profits	15,804.6	1,366.9	0	0	17,171.5
Company					
Property, plant and equipment	48,688.7	0	689.0	0	49,377.7
Prepaid operating leases	689.0	0	(689.0)	0	0
Associates	166.3	0	(007.0)	(50.7)	115.6
Investments	0.00	0	0	50.7	50.7
Long term receivables	525.0	0	0	533.0	1,058.0
Receivables, deposits and	020.0	0	0	000.0	1,000.0
prepayments	2,494.6	1,741.3	0	(533.0)	3,702.9
Payables	3,952.6	0	0	(430.2)	3,522.4
Deferred income (current)	0,702.0	0	0	326.9	326.9
Other liabilities	(52.7)	0	0	(430.2)	(482.9)
Deferred tax liabilities	(5,745.1)	(435.3)	0	(400.2)	(6,180.4)
Deferred income	(2,617.1)	(00.0)	0	326.9	(2,290.2)
Retained profits	15,782.5	1,306.0	0	0	17,088.5

- 31 August 2011 (Cont'd.)

# 47. CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS (CONT'D.)

Impact (Cont'd.)

(i) Impact on the Group and Company's statement of financial position (Cont'd.)

	As	Prior year adjustment on	l Change in accounting	Balances as at 31 August 2010		
Group	previously reported RM'million	revenue recognition RM'million	policy FRS 117 RM'million	Change in classification RM'million	As restated RM'million	
Property, plant and equipment	58,031.8	0	863.5	0	58,895.3	
Prepaid operating leases	863.5	0	(863.5)	0	0	
Associates	296.4	0	0	(50.7)	245.7	
Investments	0	0	0	50.7	50.7	
Long term receivables	0	0	0	480.5	480.5	
Receivables, deposits and						
prepayments	3,881.4	1,799.5	0	(480.5)	5,200.4	
Payables	5,596.9	0	0	(320.0)	5,276.9	
Deferred income (current)	0	0	0	331.3	331.3	
Other liabilities	(216.4)	0	0	(320.0)	(536.4)	
Deferred tax liabilities	(6,837.1)	(433.7)	0	0	(7,270.8)	
Deferred income	(3,042.2)	0	0	331.3	(2,710.9)	
Retained profits	18,389.2	1,365.8	0	0	19,755.0	
Company						
Property, plant and equipment	48,767.3	0	721.9	0	49,489,2	
Prepaid operating leases	721.9	0	(721.9)	0	47,407.2 0	
Associates	161.3	0	0	(50.7)	110.6	
Investments	0	0	0	50.7	50.7	
Long term receivables	405.8	0	0	480.5	886.3	
Receivables, deposits and	400.0	0	0	400.0	000.0	
prepayments	2,199.4	1,734,7	0	(480.5)	3,453.6	
Payables	3,759.6	0	0	(320.0)	3,439.6	
Deferred income (current)	3,739.0	0	0	331.3	331.3	
Other liabilities	(48.0)	0	0	(320.0)	(368.0)	
Deferred tax liabilities	(5,869.0)	(433.6)	0	(320.0)	(6,302.6)	
Deferred income	(2,676.4)	(433.0)	0	331.3	(2,345.1)	
Retained profits	17,873.7	1,301.1	0	0	(2,343.1) 19,174.8	
	17,075.7	1,501.1	0	0	17,174.0	

# 48. SUPPLEMENTARY INFORMATION DISCLOSED PURSUANT TO BURSA MALAYSIA SECURITIES BERHAD LISTING REQUIREMENTS

The following analysis of realised and unrealised profits or losses at the legal entity level is prepared in accordance with Guidance on Special Matter No. 1, Determination of Realised and Unrealised Profits or Losses in the Context of Disclosure Pursuant to Bursa Malaysia Securities Berhad Listing Requirements, as issued by the Malaysian Institute of Accountants.

Total retained profits of Tenaga Nasional Berhad:

Group	2011 RM'million
Total retained profits of the Company and its subsidiaries: - Realised - Unrealised	23,672.5 (6,139.8)
Total share of retained profits from jointly controlled entities: - Realised - Unrealised	(10.1) 0
Total share of retained profits from associates: - Realised - Unrealised	270.8 (103.6)
Consolidation adjustment	2,011.7
Total retained profits of the Group	19,701.5

The disclosure of realised and unrealised profits above is solely for compliance with the directive issued by the Bursa Malaysia Securities Berhad and should not be used for any other purpose.

# Statement by Directors

Pursuant To Section 169 (15) of the Companies Act, 1965

We, Tan **Sri Leo Moggie** and **Dato' Sri Che Khalib bin Mohamad Noh**, two of the Directors of Tenaga Nasional Berhad, do hereby state that, in the opinion of the Directors, the financial statements set out on pages 196 to 323 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 2011 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 28 October 2011.

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TAN SRI LEO MOGGIE CHAIRMAN

DATO' SRI CHE KHALIB BIN MOHAMAD NOH PRESIDENT/CHIEF EXECUTIVE OFFICER

# **Statutory Declaration**

Pursuant To Section 169 (16) of the Companies Act, 1965

I, Mohamed Rafique Merican bin Mohd Wahiduddin Merican, 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 196 to 323 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.

## MOHAMED RAFIQUE MERICAN BIN MOHD WAHIDUDDIN MERICAN

Subscribed and solemnly declared by the above named Mohamed Rafique Merican bin Mohd Wahiduddin Merican at Kuala Lumpur, Malaysia on 28 October 2011, before me.



COMMISSIONER FOR OATHS



# **Independent Auditors' Report**

to the Members of Tenaga Nasional Berhad (Incorporated in Malaysia) (Company No. 200866-W)

## **REPORT ON THE FINANCIAL STATEMENTS**

We have audited the financial statements of Tenaga Nasional Berhad on pages 196 to 323 which comprise the statements of financial position as at 31 August 2011 of the Group and of the Company, and the statements of income, comprehensive income, changes in equity and cash flows of the Group and of the Company for the financial year then ended, and a summary of significant accounting policies and other explanatory notes, as set out on Notes 1 to 48.

## Directors' Responsibility for the Financial Statements

The Directors of the Company are responsible for the preparation of financial statements that give a true and fair view in accordance with MASB Approved Accounting Standards in Malaysia for Entities Other than Private Entities and the Companies Act, 1965, and for such internal control as the directors determine are necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### 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 audit 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 judgement, 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 entity's preparation of financial statements that give a true and fair view 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 entity'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 a basis for our audit opinion.

## Opinion

In our opinion, the financial statements have been properly drawn up in accordance with MASB Approved Accounting Standards in Malaysia for Entities Other than Private Entities and the Companies Act, 1965 so as to give a true and fair view of the financial position of the Group and of the Company as of 31 August 2011 and of their financial performance and cash flows for the financial year then ended.

# **Independent Auditors' Report**

to the Members of Tenaga Nasional Berhad (Incorporated in Malaysia) (Company No. 200866-W) (Cont'd.)

#### **REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS**

In accordance with the requirements of the Companies Act, 1965 in Malaysia, we also report the following:

- (a) In our opinion, the accounting and other records and the registers required by the Act to be kept by the Company and its subsidiaries of which we have acted as auditors have been properly kept in accordance with the provisions of the Act.
- (b) We have considered the financial statements and the auditors' reports of all the subsidiaries of which we have not acted as auditors, which are indicated in Note 14 to the financial statements.
- (c) We are satisfied that the financial statements 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 financial statements of the subsidiaries did not contain any qualification or any adverse comment made under Section 174(3) of the Act.

#### **OTHER REPORTING RESPONSIBILITIES**

The supplementary information set out in Note 48 on page 323 is disclosed to meet the requirement of Bursa Malaysia Securities Berhad and is not part of the financial statements. The directors are responsible for the preparation of the supplementary information in accordance with Guidance on Special Matter No. 1, Determination of Realised and Unrealised Profits or Losses in the Context of Disclosure Pursuant to Bursa Malaysia Securities Berhad Listing Requirements, as issued by the Malaysian Institute of Accountants ("MIA Guidance") and the directive of Bursa Malaysia Securities Berhad. In our opinion, the supplementary information is prepared, in all material respects, in accordance with the MIA Guidance and the directive of Bursa Malaysia Securities Berhad.

#### **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.

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PRICEWATERHOUSECOOPERS (No. AF: 1146) Chartered Accountants

Kuala Lumpur 28 October 2011

THAYAPARAN A/L S. SANGARAPILLAI (No. 2085/09/12 (J)) Chartered Accountant

# Analysis of Shareholdings AS AT 19 OCTOBER 2011

# SHARE CAPITAL

Authorised Share Capital	: 10,000,000,000 ordinary shares of RM1.00 each One (1) Special Rights Redeemable Preference Share of RM1.00 each 1,000 Class A Redeemable Preference Shares of RM1.00 each 500 Class B Redeemable Preference Shares of RM1.00 each
Issued and Fully Paid-Up Share Capital	: 5,456,663,388 ordinary shares of RM1.00 each One (1) Special Rights Redeemable Preference Share of RM1.00 each
Voting Right	: One (1) voting right for one (1) ordinary share

# ANALYSIS OF SHAREHOLDINGS

SIZE OF SHAREHOLDINGS	NO. OF SHAREHOLDERS	% OF SHAREHOLDERS	NO. OF SHARES	% OF ISSUED SHARE CAPITAL
LESS THAN 100	1,194	2.58	41,357	0.00
100 – 1,000	7,710	16.62	5,953,172	0.11
1,001 – 10,000	32,888	70.93	101,857,794	1.87
10,001 - 100,000	3,805	8.21	96,200,624	1.76
100,001 to less than 5% of issued shares	767	1.65	2,030,209,523	37.21
5% AND ABOVE OF ISSUED SHARES	3	0.01	3,222,400,918	59.05
TOTAL	46,367	100.00	5,456,663,388	100.00

# DIRECTORS' SHAREHOLDINGS

		NO. OF SHARE	S
NO.	NAME OF DIRECTORS	DIRECT/INDIRECT INTEREST	%
1.	TAN SRI LEO MOGGIE	-	-
2.	DATO' SRI CHE KHALIB BIN MOHAMAD NOH	-	-
3.	DATUK NOZIRAH BINTI BAHARI (Appointed w.e.f. 28 June 2011)	-	-
4.	DATO' MOHAMMAD ZAINAL BIN SHAARI	-	_
5.	Dato' zainal abidin bin putih	1,562	0.00
6.	TAN SRI DATO' HARI NARAYANAN A/L GOVINDASAMY	-	-
7.	DATO' FUAD BIN JAAFAR	78,125	0.00
8.	TAN SRI DATO' SERI SITI NORMA BINTI YAAKOB	1,562	0.00
9.	DATO' ABD MANAF BIN HASHIM	-	-
10.	DATO' Ir. AZMAN BIN MOHD - Tasec Nominees (Tempatan) Sdn. Bhd.	4,375	0.00
11.	CHUNG HON CHEONG	-	-
12.	SURIA BINTI AB RAHMAN (Alternate Director to Dato' Mohammad Zainal bin Shaari)	-	-
13.	DATUK PUTEH RUKIAH BINTI ABD MAJID (Resigned w.e.f. 1 April 2011)	-	-

# Analysis of Shareholdings

# SUBSTANTIAL SHAREHOLDERS

NO.	NAME OF SUBSTANTIAL SHAREHOLDERS	NO. OF SHARES	%
1.	KHAZANAH NASIONAL BERHAD	1,939,655,861	35.55
2.	<ul> <li>EMPLOYEES PROVIDENT FUND BOARD</li> <li>1,875,000 shares held in its own name</li> <li>740,744,182 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.</li> <li>1,137,500 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.</li> <li>680,000 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.</li> <li>5,072,000 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.</li> <li>4,800,000 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.</li> <li>4,888,375 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.</li> <li>3,768,750 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.</li> <li>4,487,500 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.</li> <li>21,748,562 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.</li> <li>5,138,400 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.</li> <li>6,178,300 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.</li> </ul>	800,518,569	14.67
3.	AMANAHRAYA TRUSTEES BERHAD SKIM AMANAH SAHAM BUMIPUTERA	542,000,875	9.93

# **30 LARGEST SHAREHOLDERS**

NO.	NAME OF SHAREHOLDERS	NO. OF SHARES	%
1.	KHAZANAH NASIONAL BERHAD	1,939,655,861	35.55
2.	CITIGROUP NOMINEES (TEMPATAN) SDN. BHD. EMPLOYEES PROVIDENT FUND BOARD	740,744,182	13.58
3.	AMANAHRAYA TRUSTEES BERHAD SKIM AMANAH SAHAM BUMIPUTERA	542,000,875	9.93
4.	LEMBAGA TABUNG HAJI	208,615,968	3.82
5.	KUMPULAN WANG PERSARAAN (DIPERBADANKAN)	204,720,325	3.75
6.	AMANAHRAYA TRUSTEES BERHAD AMANAH SAHAM MALAYSIA	114,628,225	2.10
7.	AMANAHRAYA TRUSTEES BERHAD AMANAH SAHAM WAWASAN 2020	99,575,425	1.82
8.	CARTABAN NOMINEES (ASING) SDN. BHD. EXEMPT AN FOR STATE STREET BANK & TRUST COMPANY (WEST CLT OD67)	76,425,531	1.40
9.	PERMODALAN NASIONAL BERHAD	50,373,093	0.92
10.	HSBC NOMINEES (ASING) SDN. BHD. BBH AND CO BOSTON FOR VANGUARD EMERGING MARKETS STOCK INDEX FUND	45,629,907	0.84
11.	MALAYSIA NOMINEES (TEMPATAN) SENDIRIAN BERHAD GREAT EASTERN LIFE ASSURANCE (MALAYSIA) BERHAD (PAR 1)	44,387,325	0.81
12.	AMANAHRAYA TRUSTEES BERHAD AMANAH SAHAM DIDIK	44,305,737	0.81
13.	AMANAHRAYA TRUSTEES BERHAD AS 1MALAYSIA	37,673,500	0.69

NO.	NAME OF SHAREHOLDERS	NO. OF SHARES	%
14.	MAYBAN NOMINEES (TEMPATAN) SDN. BHD. MAYBAN TRUSTEES BERHAD FOR PUBLIC ITTIKAL FUND (N14011970240)	36,394,000	0.67
15.	CARTABAN NOMINEES (ASING) SDN. BHD. EXEMPT AN FOR RBC DEXIA INVESTOR SERVICES TRUST (CLIENTS ACCOUNT)	34,984,262	0.64
16.	CITIGROUP NOMINEES (TEMPATAN) SDN. BHD. EXEMPT AN FOR PRUDENTIAL FUND MANAGEMENT BERHAD	34,688,768	0.64
17.	VALUECAP SDN. BHD.	34,582,400	0.63
18.	MAYBAN NOMINEES (TEMPATAN) SDN. BHD. MAYBAN TRUSTEES BERHAD FOR PUBLIC REGULAR SAVINGS FUND (N14011940100)	33,123,875	0.61
19.	HSBC NOMINEES (ASING) SDN. BHD. EXEMPT AN FOR THE BANK OF NEW YORK MELLON (MELLON ACCT)	31,629,998	0.58
20.	CARTABAN NOMINEES (ASING) SDN. BHD. GOVERNMENT OF SINGAPORE INVESTMENT CORPORATION PTE LTD FOR GOVERNMENT OF SINGAPORE (C)	31,030,618	0.57
21.	HSBC NOMINEES (ASING) SDN. BHD. EXEMPT AN FOR JPMORGAN CHASE BANK, NATIONAL ASSOCIATION (U.A.E.)	24,949,693	0.46
22.	CITIGROUP NOMINEES (TEMPATAN) SDN. BHD. EMPLOYEES PROVIDENT FUND BOARD (NOMURA)	21,748,562	0.40
23.	CARTABAN NOMINEES (TEMPATAN) SDN. BHD. PETROLIAM NASIONAL BERHAD (STRATEGIC INV)	21,738,625	0.40
24.	PERTUBUHAN KESELAMATAN SOSIAL	19,126,700	0.35
25.	AMANAHRAYA TRUSTEES BERHAD PUBLIC ISLAMIC DIVIDEND FUND	17,599,475	0.32
26.	HSBC NOMINEES (ASING) SDN. BHD. EXEMPT AN FOR JPMORGAN CHASE BANK, NATIONAL ASSOCIATION (U.S.A.)	14,266,817	0.26
27.	CITIGROUP NOMINEES (TEMPATAN) SDN. BHD. EXEMPT AN FOR AMERICAN INTERNATIONAL ASSURANCE BERHAD	13,263,050	0.24
28.	AMANAHRAYA TRUSTEES BERHAD PUBLIC ISLAMIC EQUITY FUND	11,521,437	0.21
29.	AMANAHRAYA TRUSTEES BERHAD PUBLIC ISLAMIC SECTOR SELECT FUND	11,483,750	0.21
30.	AMANAHRAYA TRUSTEES BERHAD PUBLIC GROWTH FUND	11,034,000	0.20
	TOTAL	4,551,901,984	83.41

# Net Book Value of Land & Buildings

# GROUP

Location	LAND								BUILDINGS Desc		Description		
	Leasehold			Freehold			Total			Built-Up			
	No. of Lots (1)	Area (sq M) (2)	NBV (RM'000) (3)	No. of Lots (4)	Area (sq M) (5)	NBV (RM'000) (6)	No. of Lots (1+4)	Area (sq M) (2+5)	NBV (RM'000) (3+6)	No. (10)	Area (sq M) (11)	Total NBV (RM'000) (12)	(13)
Perlis	42	128,132	2,041	50	140,204	3,469	92	268,336	5,510	81	10,496	68,210	
Kedah	176	848,527	14,672	363	781,561	55,644	539	1,630,088	70,316	349	95,409	238,743	
Pulau Pinang	132	1,677,537	65,872	397	475,992	53,756	529	2,153,529	119,628	292	37,966	451,910	Power Stations,
Perak	588	934,551	124,897	331	3,305,169	102,706	919	4,239,720	227,603	662	230,406	882,564	Rural Power Stations, Mini
Selangor	471	50,592,257	369,147	623	2,623,971	240,356	1,094	53,216,228	609,503	1,331	236,745	2,647,288	Hydros, Jetties,
W. Persekutuan	197	359,606	62,012	195	232,994	101,652	392	592,600	163,664	526	174,809	897,066	Dams, Main
Putrajaya/ Cyberjaya	-	-	65	3	-	658	3	-	723	60	-	37,956	Intake Substations, Distribution
N.Sembilan	271	1,109,113	15,330	188	686,222	39,934	459	1,795,335	55,264	297	146,859	566,964	Substations,
Melaka	212	699,987	17,444	328	381,478	51,593	540	1,081,465	69,037	242	89,809	110,036	Residential Houses,
Johor	656	2,311,459	91,303	680	1,199,066	63,284	1,336	3,510,525	154,587	778	111,110	919,608	Apartments,
Pahang	283	1,237,993	22,815	281	429,567	22,516	564	1,667,560	45,331	572	92,312	530,311	Holiday Bungalows,
Terengganu	264	4,364,697	48,389	111	71,212	18,006	375	4,435,909	66,395	313	67,802	325,094	Office Buildings, Warehouse, Stores & Workshop
Kelantan	267	930,469	13,563	252	524,608	16,633	519	1,455,077	30,196	322	399,426	892,932	
Sabah	83	6,261,621	12,976	63	4,501,754	32,465	146	10,763,375	45,441	428	132,600	297,373	
Pakistan	-	-	-	1	828,486	1,863	1	828,486	1,863	3	12,713	825	
Total	3,642	71,455,949	860,526	3,866	16,182,284	804,535	7,508	87,638,233	1,665,061	6,256	1,838,462	8,866,880	

Note: NBV - Net Book Value



# **Proxy Form**

Number of Ordinary Share(s) held					
CDS Account No.					
I/We,	N	RIC No./Passpa	rt No./Co. No		
(FULL NAME IN CAPITAL LETTE	ERS)				
of			being a Memb	per/Members of Tenag	ga Nasional Berhad,
(FULL	ADDRESS)		-	-	
hereby appoint:					
Name	e/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 attend and vote for me/us and on my/our behalf at the 21<sup>st</sup> ANNUAL GENERAL MEETING of TENAGA NASIONAL BERHAD to be held at Dewan Serbaguna, Kompleks Sukan TNB, Jalan Pantai Baru, 59200 Kuala Lumpur on **Thursday**, **15 December 2011**, at **10.00 a.m.** and/or at any adjournment thereof.

My/Our proxy is to vote as indicated below:

ORD	INARY BUSINESS	FOR	AGAINST				
1.	ORDINARY RESOLUTION 1	RDINARY RESOLUTION 1To receive the Audited Financial Statements for the Financial Year ended 31 August 2011 and the Reports of the Directors and Auditors thereon					
2.	ORDINARY RESOLUTION 2	Approval for Payment of Directors' Fees					
	Re-election of the following Articles of Association:	Directors who retire in accordance with Article 135 of the Company's					
3.	ORDINARY RESOLUTION 3	Dato' Zainal Abidin bin Putih					
4.	ORDINARY RESOLUTION 4	Tan Sri Dato' Hari Narayanan a/I Govindasamy					
5.	ORDINARY RESOLUTION 5	Dato' Mohammad Zainal bin Shaari					
	Re-election of the following Articles of Association:						
6.	ORDINARY RESOLUTION 6	Datuk Nozirah binti Bahari					
	Re-appointment of the foll Companies Act, 1965:	owing Directors who retire in accordance with Section 129 (6) of the					
7.	ORDINARY RESOLUTION 7	Tan Sri Leo Moggie					
8.	ORDINARY RESOLUTION 8	Tan Sri Dato' Seri Siti Norma binti Yaakob					
9.	ORDINARY RESOLUTION 9	Re-appointment of Messrs PricewaterhouseCoopers as Auditors of the Company and to authorise the Directors to fix their remuneration					
SPEC	CIAL BUSINESS						
10.	ORDINARY RESOLUTION 10		•				
11.	ORDINARY RESOLUTION 11	Proposed Renewal of Share Buy-Back Authority					

(Please indicate with an "X" in the box provided for each Resolution as how you wish your votes to be cast. If no voting instruction is given, the proxy/ proxies is/are hereby authorised to vote, or abstain from voting at his/her discretion)

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2011

# NOTES:

- 1. Any member entitled to attend and vote at this Meeting is entitled to appoint a proxy to attend and vote in his stead. A proxy may but need not be a member of the Company and the provisions of Section 149 (1) (b) of the Companies Act, 1965 shall not apply to 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 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. A member shall not be entitled to appoint more than two (2) proxies to attend and vote at the meeting. Where a member appoints two (2) proxies, the appointment shall be invalid unless the proportion of the shareholdings 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. Only members registered in the Record of Depositors as at 8 December 2011 shall be eligible to attend the meeting or appoint a proxy to attend and vote on his behalf.
- 6. The instrument appointing a proxy must be deposited at Symphony Share Registrars Sdn. Bhd., Level 6, Symphony House, Pusat Dagangan Dana 1, Jalan PJU 1A/46, 47301 Petaling Jaya, Selangor Darul Ehsan not less than forty-eight (48) hours before the time set for the Meeting.

STAMP

# Symphony Share Registrars Sdn. Bhd.

Level 6, Symphony House Pusat Dagangan Dana 1 Jalan PJU 1A/46 47301 Petaling Jaya Selangor Darul Ehsan