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REMARKS FROM

CEO

SINGLE BUYER


Half a year has passed since the beginning of Regulatory Period (RP2). SB continues to align its initiatives with the strategic goals set out in RP2 and the evolving trends in the industry.

Eid Mubarak!

Welcome to the second edition of WattsUp for this year. We hope the past editions of our newsletter have kept everyone well informed of the developments in the Malaysian Electricity Supply Industry (MESI) and the initiatives taken by SB to support MESI. Credits to the editorial team who has worked hard to ensure the continuity of this newsletter.

Half a year has passed since the beginning of Regulatory Period (RP2). SB continues to align its initiatives with the strategic goals set out in RP2 and the evolving trends in the industry.

Early this year, SB has embarked on a RE penetration study for Peninsular Malaysia and Sabah. The study which involves multiple parties including ST, GSO, SEDA, TNB and SESB aims to facilitate energy transition towards higher RE penetration in the national energy mix. We are also proud to continue supporting the large scale solar projects, the implementation of NEDA and the Lao PDR-Thailand-Malaysia (LTM) cross-border electricity trading which saw the first successful transaction this year.

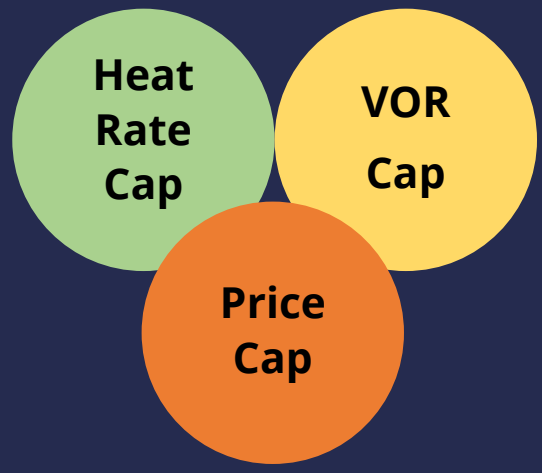
We are committed to continue working with the stakeholders in delivering MESI objectives. We look forward to keeping you updated with news of our activities and the industry in future WattsUp issues. 

Charanjit Singh Gill

Chief Executive Officer
Single Buyer

Monthly Cap for NEDA Participants

- 01** SB publishes Monthly Cap for the upcoming month, by the third week of the previous month
- 02** Only the bids by Ex-PPA/SLA and Large Merchant generators are subject to the Monthly Cap
- 03** Bids higher than the Monthly Cap will be automatically rejected by the Market Participant Interface (MPI) bid validation process
- 04** Monthly Cap information are available in the MPI for registered NEDA Participants



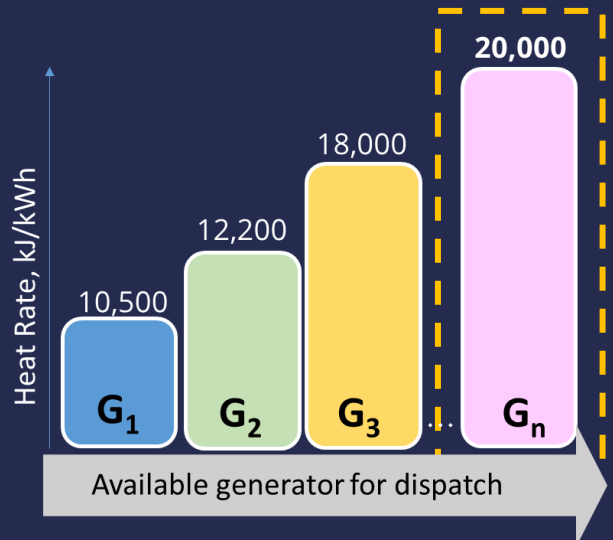
EX-PPA/SLA



Ex-PPA/SLA generators bid Heat Rate and VOR capped at the Heat Rate and VOR caps

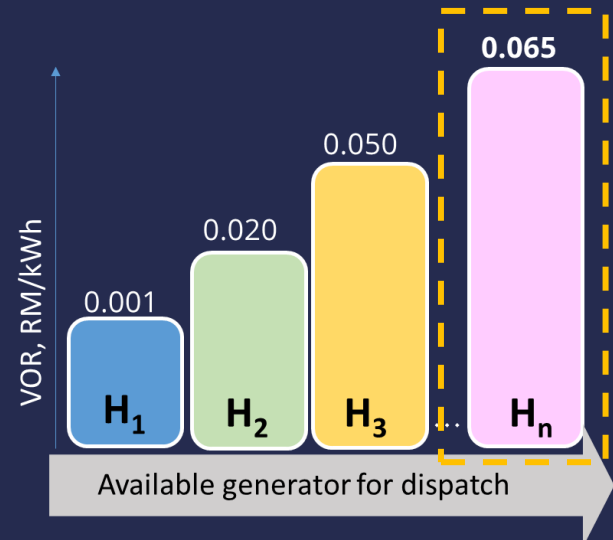
HEAT RATE CAP

The most expensive Heat Rate from PPA/SLA thermal generator (G_n) on **primary fuel available for dispatch** during the month, using a simple stacking order



VOR CAP

The most expensive VOR from PPA/SLA thermal generator (H_n) on **primary fuel available for dispatch** during the month, using a simple stacking order



Note: G_n and H_n can be from two different generators

NEDA

ENGAGEMENT ACTIVITIES

01 MEETING WITH PETRONAS GROUP TECHNICAL SERVICES

2 March 2018, Kuala Lumpur | SB team met with representatives from PETRONAS Group Technical Services at Dayabumi Complex, Kuala Lumpur to brief on NEDA mechanism and explore the possibility of PETRONAS's co-generation facilities to sell excess power to the grid under NEDA.



01

02 VISIT TO PETRONAS REFINERY MELAKA

19 April 2018, Melaka | Following the first meeting held at SB office on 7 February 2018, SB was invited to give further explanation on NEDA mechanism to the PETRONAS Refinery management team. The meeting was held on 19 April 2018 at PETRONAS Refinery in Melaka. The company indicated their interest to participate in NEDA.



02

03 MEETING WITH EASTERN STEEL SDN BHD

16 May 2018, Putrajaya | A meeting was held between Eastern Steel Sdn. Bhd., ST and SB to explore the possibility of Eastern Steel selling its excess capacity under NEDA. Eastern Steel is currently converting its facility into a co-gen plant.



03

LARGE MERCHANT



Large Merchant generators bid Price and Quantity pairs capped at Price Cap

PRICE CAP

The most expensive energy price calculated using the following formula,

$$\text{Price Cap} = \text{Heat Rate Cap} \times F + \text{VOR Cap}$$

[F is the most expensive primary fuel price for the month]



Working Example

Heat Rate Cap	20,000 kJ/kWh	➔	Price Cap 0.732 RM/kWh
F	33.35 RM/GJ		
VOR Cap	0.065 RM/kWh		

Note: Working example is based on hypothetical numbers

IN SUMMARY

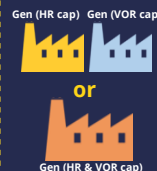
The three caps are derived by identifying the most expensive PPA/SLA Generator based on the following criteria:



Available for dispatch during the relevant month according to the Three Month Ahead Load Forecast*



Operates on primary fuel. [Note: currently, the primary fuels for Peninsular Malaysia are coal and gas]



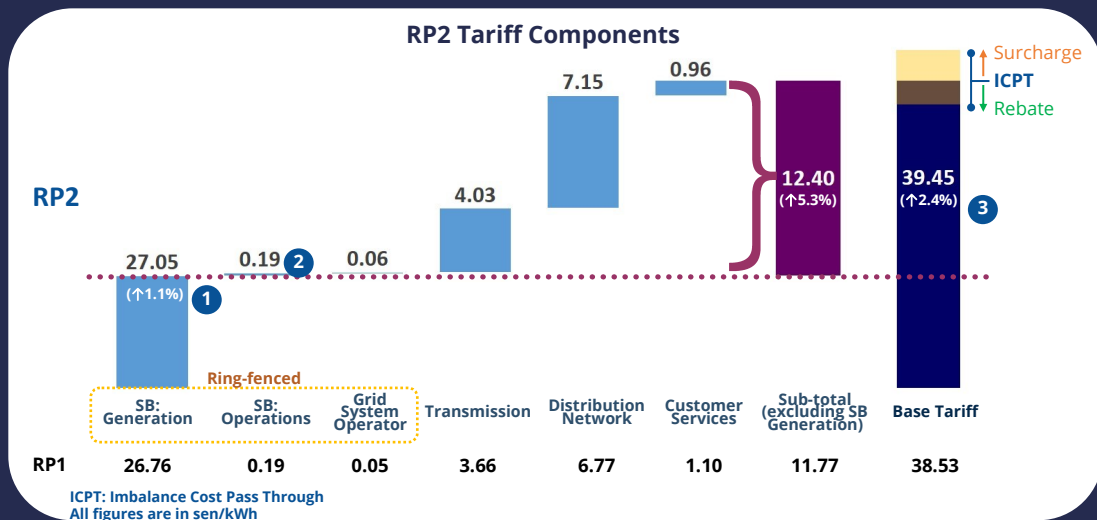
The reference PPA/SLA Generators for the most expensive Heat Rate and the most expensive VOR may be different PPA/SLA Generators

*Refer to Single Buyer Rules for details

INDUSTRY REGULATORY FRAMEWORK

In the previous issue, we introduced the key document that governs the IBR framework¹. Specifically, we delved into the “Business Entities” (BEs) that make up the building blocks of electricity tariff.

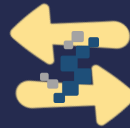
As the Regulatory Period 2 (RP2) for 2018-2020 is effective from 1 January 2018, let’s look at the tariff components and how they differ from RP1 (2015-2017).



1 A slight increase in SB Generation tariff mainly due to increase in fuel prices of coal and gas (the dominant fuels in RP2)



2 SB Operations tariff remain unchanged at 0.19sen/kWh



3 The Base Tariff is derived based on each BE’s tariff². The new base tariff for RP2 is 39.45sen/kWh



SINGLE BUYER RING-FENCING

How is SB ring-fenced?

As a ring-fenced department within TNB, SB must at all times, identify circumstances where interactions with other divisions or units within TNB that may give rise to conflict of interest, lessening of competition or competitive advantage. This is to ensure that SB’s acts and decisions are non-discriminatory against any Participants.

In order to facilitate the above objective, the following initiatives are implemented to ring-fence SB.

Isolation of Accounts and Cost Allocation

SB’s operational expenses and generation specific costs are kept separate as per IBR implementation.

Any cost shared between SB and TNB must be allocated and pre-approved by ST.

Physical Separation

Relocation of SB’s office out of TNB premises. SB’s office is now located at Bangsar South.

Limits on Sharing Information

Ensure non-disclosure of such information to any party that may cause conflict of interests and provide competitive advantage to any party.

Arm’s Length Operation

Interactions with other departments in TNB is governed by Service Level Agreements (SLAs).

¹ The Guidelines on Tariff Determination Under Incentive Based Regulation for Tenaga Nasional Berhad [Electricity Supply Act 1990 (Act 447)].

² Published slides by Suruhanjaya Tenaga on “Electricity Tariff Review in Peninsular Malaysia for Regulatory Period 2 (RP2: 2018-2020) under Incentive-Based Regulation (IBR) Mechanism”.

KeTTHA visits SB

On 24 April 2018, SB welcomed 19 delegates from Kementerian Tenaga, Teknologi Hijau dan Air (KeTTHA), led by the Deputy Secretary General (Energy and Green Technology), Y.Bhg. Datuk Badriyah Hj. Abdul Malek. The visit was also attended by Ir. Abdul Razib Dawood and En. Mohd Rizal Ramli as representatives from ST.

The objective of the visit is for KeTTHA to better understand the operations, functions and recent developments of SB since its inception as a ring-fenced entity in 2012. The visit was also arranged to strengthen the cooperation between the two parties for the benefit of MESI.

The visit began with presentation on overview of SB's structure, roles, functions and projects by the Chief Corporate Officer of SB, En. Abu Bakar Ahmad. The visit then continued with discussion on the future direction of SB and MESI.

Senior members from KeTTHA and SB agreed that governance reform of SB and GSO must be done in a no-regret step and sure-footed manner to ensure a sustainable MESI. 🚀



WATT SAY YOU ?

In the spirit of Hari Raya celebration, our colleagues shared their preferred locations for good ol' raya shopping for baju raya, kuih raya and many more...

Prisiliawatie Binti Sahimi

I prefer Jalan TAR (Tunku Abdul Rahman) as there are many choices and the prices are also reasonable. You can get delicious and colourful biscuits, cakes and other goods for Raya celebration. The other good places for shopping are Bangi Gateway and also Shah Alam Section 7.

Nur Dalilah Binti Da Halib

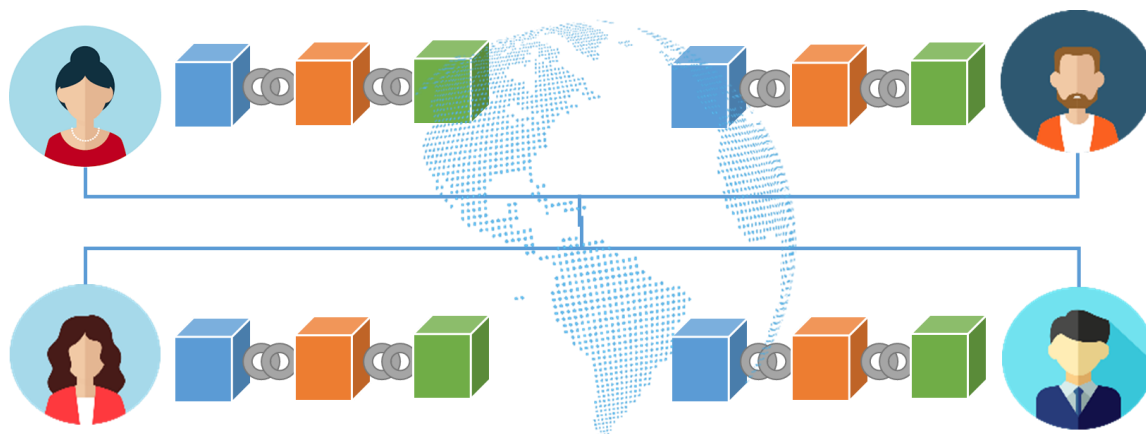
In my opinion, the best place to shop for Raya is Plaza Alam Sentral Shah Alam and PKNS Shah Alam. This is the place where you can find affordable apparels with good quality. There are a lot of choices available. Your satisfaction is guaranteed!

Nor Hidayati Binti Mohammad Johari

Raya shopping at Jalan TAR & Masjid India for the last minute lelong!

What is Blockchain?

Blockchain is becoming more prominent nowadays especially with the rise of cryptocurrencies such as Bitcoin, Ethereum and others. What is blockchain all about?



Blockchain can be described as a chain of blocks that contains data and information. This technique was originally developed back in 1991 by a group of researchers who intended to timestamp digital documents to make it impossible to be backdated. It works like a traditional financial ledger where every new data is added on top of the old one without deleting any of it.

Conceptually, blockchain is a distributed digital ledger that is completely open to anyone. Once the data have

been recorded inside the blockchain, it becomes almost impossible to make any changes to the data. This innovation has lifted up transparency and security to a new level.

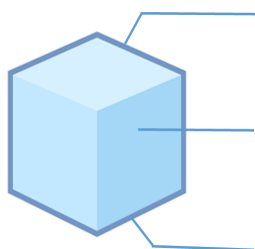
This technology also provides a high level of privacy by ensuring that transaction details are shared only amongst the participants involved in those transactions.

By using blockchain transactions, there is no need for a third party service or middlemen.

What is in the Block?

Basically, each block contains three elements which are the data, hash of the block and hash of previous block. **The hash is the fundamental part of the blockchain technology.**

Once a block is created, its hash is calculated. Any change of data in the block will cause the hash to change, creating a new block. The third element is the hash of the previous block. The latter links all the blocks together in a chronological way to form a continuous line and thus creates a chain of blocks.



Data

- The data stored in the block depends on the type of the blockchain.
- Bitcoin blockchain stores transaction details such as sender, receiver, and the amount of coin.

Hash

- A string of random letters and numbers which are also known as digital fingerprint. (e.g. as53njkd8239nssla9s23kmmnds0)
- It identifies the block and its content, and it is always unique.

Hash of previous block

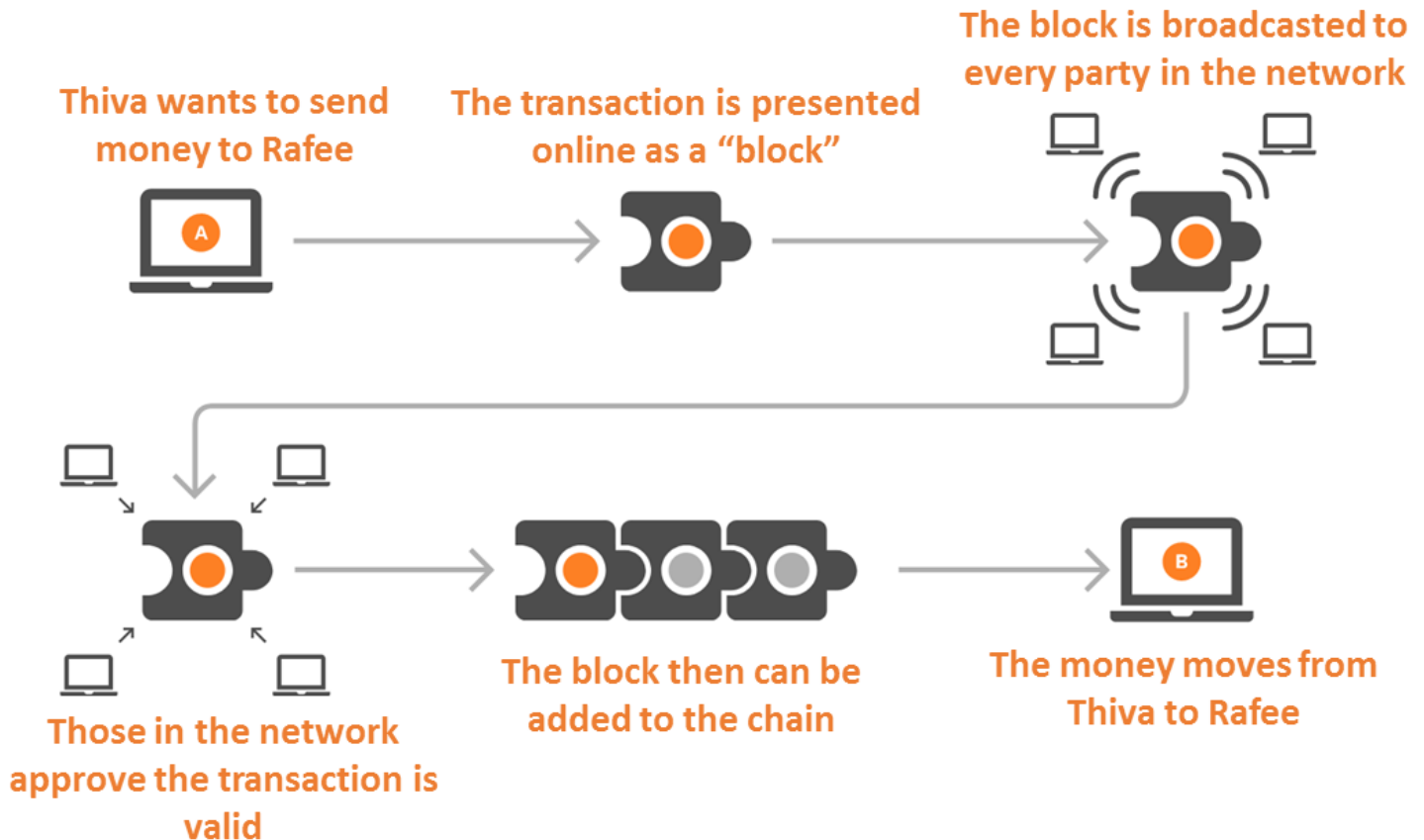
- It links all the blocks together in a chronological way to form a continuous line and creates a chain of blocks.

How does it work?

One of the important aspects of blockchain technology is the way that it confirms and validates transactions. When someone requests a transaction, a block that contains a digital signature as well as a timestamp and other relevant information about the transaction is created. That block is then transmitted across a peer-to-peer (P2P) network consisting of computers known as nodes, which will then act as validators for the transaction. The network of nodes validates the transaction using known algorithms.

Once the transaction is approved by the network, the block will be added to the chain and the transaction will be completed.

Application of blockchain in electricity industry is still at infancy stage and mostly are still being developed for P2P trading. Examples of blockchain application for P2P projects are Verv-Ocean Protocol in London, Stone Edge Farm in Chicago, and De Ceuvel in Amsterdam.



In summary, this technology will promote greater transparency, enhance security, and increase efficiency of any transaction process. It also helps to reduce cost for certain businesses as the service of a third party or middleman is no longer necessary. Across global supply chains, energy, financial services, healthcare, government and many other industries, innovators are exploring ways to use blockchain to

disrupt and transform the traditional business models. The world is facing a new industrial revolution that will fundamentally alter the way we live, the way we work, and relate to one another.

In our next edition, we will discuss further on the impact of disruptive technologies to the electricity industry. 🧩



WATT'S HAPPENING

APRIL
JUNE 2018



25 APR

SB Ethics and Compliance Seminar, Petaling Jaya

SB recently organised a seminar on ethics and compliance targeted for all SB staff. The objective of the seminar is to create awareness among SB staff on the various codes and regulations governing SB's operations. External speakers were also invited to provide the latest updates on Personal Data Protection Act, cyber security and corporate integrity.



25 APR

High Level Policy Discussion On Coal In ASEAN Region, Putrajaya

A policy discussion on coal in the ASEAN region was organised by KeTTHA on 25 April 2018 in Putrajaya. The event was attended by ST, TNB Fuel Services, SB, GSO and other stakeholders. The primary objectives of the discussion are to identify policy options and identify gaps in current practices and approaches to achieve a stable coal supply. COO of SB, En. Abdul Malik was one of the moderators during the panel discussion.



**17 - 20
APR**

Knowledge Transfer on Renewable Energy with DNV GL, Singapore

Representatives from ST, SB, GSO, SESB and TNB Grid Planning recently attended a 4-day knowledge transfer session at DNV GL office in Singapore. The session is aimed to enhance local capability to address the challenges of variable RE in power system planning and operation.



**2 - 4
MAY**

SB Business Plan Workshop, Port Dickson

SB's management and senior officers recently convened to review and prepare a business plan for SB for the next 5 years (2018-2022). The workshop also aims to realign SB initiatives in RP2 with the budget approved by ST and identify potential initiatives to be conducted in RP3.



**15
MAY**

SB & GSO Governance Reform Workshop, Cyberjaya

Representatives from SB led by Mr. Charanjit Singh, attended the SB & GSO Governance workshop on 15 May 2018. The workshop was organised by ST to present the findings and proposed action plan on the reform study conducted by ST's consultants (KPMG Malaysia). The event was also attended by key stakeholders and industry players which include KeTTHA, Khazanah, IPPs and financial institutions.



5 JUN

Demand Forecast Committee (DFC) Meeting, Putrajaya

ST and SB co-presented the results from long-term demand forecast study for 2018 to DFC for endorsement. This year's study adopted a new methodology called the "Hybrid Load Forecast" which incorporates new approaches such as end-use model to capture detailed models of how consumers use energy at the demand side. RAM Consultancy Services (in collaboration with Monash University Malaysia) also presented the preliminary findings of the GDP forecasting project headed by SB.



ELECTRICITY DEMAND DURING HARI RAYA

Hari Raya Aidilfitri this year fell on Friday, 15 June 2018 which meant it was a long weekend for everyone! What do you think the electricity demand looked like during Hari Raya? Definitely the demand was much lower than any typical day of the year. The **orange** area in the chart below shows the demand during Hari Raya this year while the **blue** plot shows the demand for a typical Friday.

Let's look at how human behaviour on Hari Raya shaped the electricity demand pattern of our system.



1

Most people are either already in bed sleeping unless they are busy preparing meals for the day. The electricity demand decreased due to slow down of human activities.



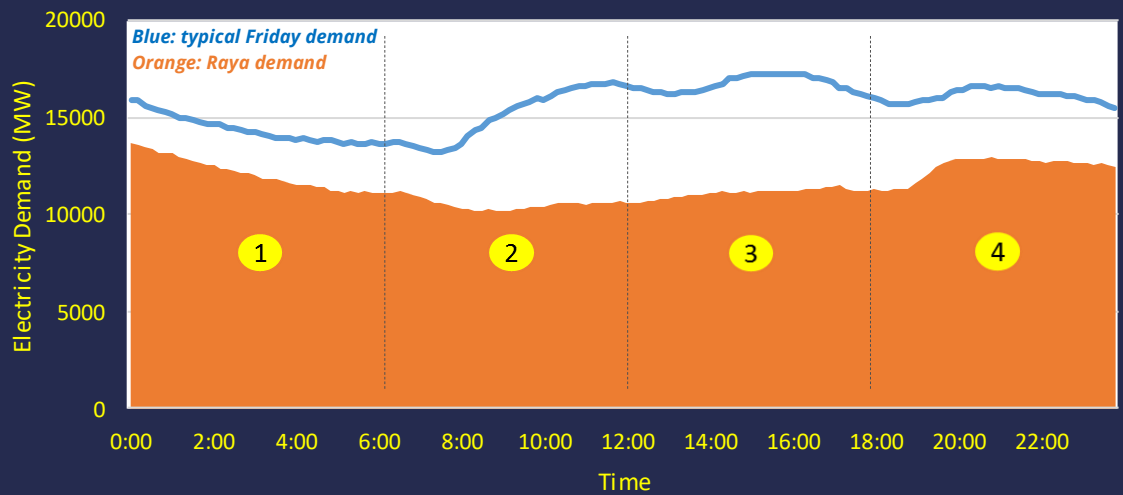
2



As the sun rises, those celebrating Hari Raya would be waking up early for morning prayer and preparing for the Hari Raya prayer at the mosques.

Electricity demand of the day would be the **lowest** when most people are at the mosques for the Hari Raya prayer.

Although Hari Raya fell on a Friday, it did not follow the typical weekday demand profile. Instead it was similar to a typical Sunday demand curve.



LIVING ROOM

3

The electricity demand throughout the day remained flat as people are either at home or on the road visiting relatives and friends.



4



We can expect the electricity demand to **peak at night** when more appliances and lights are switched on as raya visits are still on-going. The demand starts to decline after 10pm as people start to retire for the night.

RENEWABLE ENERGY PENETRATION STUDY

For Peninsular Malaysia and Sabah

SB organised a workshop on Renewable Energy Penetration Study for Peninsular Malaysia and Sabah on 14 - 16 May 2018 in Cyberjaya, Selangor

More than 60 participants comprising of representatives from SB, ST, KeTTHA, EPU, GSO, TNB Grid Planning, SESB and SEDA participated in this workshop.

The workshop was also attended by the CEO of ST, Ir. Azhar bin Omar and COO of ST, Ir. Razib bin Dawood. DNV GL, which is the consultant engaged for this study conducted the 3-day session.

In his welcoming remarks, En. Abdul Malik Mohd Jaafar, the COO of SB, shared that the objectives of this workshop are:

- to acquire knowledge on new generation system planning methodology adopted for the study incorporating high penetration of Variable Renewable Energy (VRE)
- to share the preliminary outcome of the study
- to get feedback and input from the stakeholders

To add more excitement to the workshop, the organisers conducted quiz sessions via "Kahoot!" at the end of each topic. Prizes were given to the highest scoring participants as an appreciation for their attention and focus throughout the sessions.

DNV GL will refine the findings based on the feedback and

Key highlights on the study

A joint-study

between ST, SB and GSO

Conducted by

DNV GL Singapore

Main Objective

To understand the impact of RE penetration for Peninsular Malaysia & Sabah

Commencement Date

10 January 2018

Target Completion Date

July 2018

DNV GL company introduction

Quality Assurance Manager, Mr. Leo Akkerman

01

Welcoming remarks

COO of SB, En. Abdul Malik

02

Literature review presentation

Project Manager, Mr. Chen Li

Preliminary results presentation for Peninsular Malaysia

Project Manager, Mr. Chen Li

03

04

Preliminary results presentation for Sabah

Consultant, Dr. Shuaixun

Concluding remarks

GM of System Planning SB, Dr. Nor Azlan

05

06

comments received from the participants. The consultants will also continue to conduct the analysis in finalising the acceptable RE penetration limit that will be presented at the next study committee meeting.



IN MEMORY OF OUR BELOVED “KAK LAT”

On 11 May 2018, the former Personal Assistant (PA) to Mr. Charanjit (CEO of SB), Latifah Md Salleh passed away just 8 months after her retirement. She was Mr. Charanjit’s PA for 10 years prior to her retirement.

Allahyarhamah was well-known for her motherly kindness and friendliness to everyone especially her colleagues. “Kak Lat”, as we fondly call her, was a passionate globetrotter. She travelled to many countries and we enjoyed listening to her travel tales exploring the world.

To the family of Allahyarhamah Latifah, we express our heartfelt condolences for the loss of their loved one. “Kak Lat” will be dearly missed by us as a compassionate, charming and loving friend. 🌸 — Al Fatimah

Planning Division Hi-Tea Event—2014



“I first saw the late Latifah in 1983 when I was a fresh control assistant engineer at NLDC. My immediate impression of her was that of a cheerful and positive individual with a great outlook on life. I worked with her at Systems Operations for 5 years and then I moved to other departments. As fate would have it she became my PA when I was the Chief Engineer of System Planning in 2006.

She had a zest for life and was an avid traveller who has visited numerous countries. We used to talk about what she would do after retirement and of her plans to continue her travels and other personal goals. She was very health conscious and her sudden demise recently was an absolute shock. It was a very sad loss of a dear friend and I can only imagine how her family must have felt.

Latifah shall always be in my memories as a dedicated and loyal friend and colleague who made everyone around her a bit more “ceria” with her positive outlook. She is deeply missed but she remains in our thoughts and prayers forever. Amin” – Charanjit

“You’ve touched so many hearts during your presence. The smile you always wore on your face has warmed many souls. Your parting has indeed left a void which could never be filled but I know you’re at a better place now. We all miss you so dearly, Kak Lat. May Allah grant you the best place in Jannah.”

– Nazaitul Idya



“Kak Lat adalah seorang yang ceria dan tidak pernah memikirkan masalah yang mengelilinginya. Beliau suka bercerita tentang kenangan manisnya mengembara. Minatnya mengembara tidak dapat dinafikan kerana saban tahun beliau pasti akan mengisinya dengan langkah-langkah yang indah.

Saya mengenali Kak Lat dari tahun 80-an dan kami sama-sama pulang dari pejabat dengan menumpang arwah bapa saya untuk balik ke Ampang. Kehilangan Kak Lat amat tidak diduga dan memberi kesan yang mendalam kepada saya. Semoga damailah Kak Lat di sana bersama para anbiya’ dan ditempatkan di syurga firdausi InsyaAllah”.

– Suraiya

RAMADAN KAREEM



SB took the opportunity throughout the month of Ramadan to participate in various activities and charities with the less fortunate.

The activities include *Tadarus Al Quran* with TNB Hal Ehwal Wanita (HELWA), "Baju Raya Project" organised by UPM Serdang, "Kempen Satu Warga Kerja, Satu Barang" organised by Persatuan Kebajikan Pekerja Islam and "Program Sumbangan Baju Raya dan Berbuka Puasa" with Pertubuhan Anak Yatim dan Kebajikan Darul Izzah, Bangi, Selangor.

We also extended some contribution to the families close to our hearts: Puan Suzy the wife of Allahyarham Zubli Quzairov, Cik Khadijah, the daughter of Allahyarhamah Latifah and Puan Aisyah, Noraini and Beri, the cleaning assistants for SB's office.

PROGRAM AMAL BAJU RAYA PROJECT | **SABTU**
 26 Mei 2018
 8.30 am - 1.00 pm
 UPM Serdang

TEMPAT: Panggung Percubaan, UPM Serdang
MASA PENGHANTARAN: 8.30 pagi hingga 1.00 tengahari

Apa Yang Kami Perlukan ● **Bagaimana** ●

Baju kurung (kebaya, etc), tudung, jubah, baju Melayu, mana-mana jenis baju raya lelaki dan perempuan, dewasa dan kanak-kanak yang baru ataupun terpakai.
 Pelbagai jenis baju untuk kanak-kanak berumur 12 tahun ke bawah.

Pilih baju yang **MASIH ELOK DAN BERSIH**, dan bungkus mengikut kategori jenis baju. Siap, boleh hantar kepada kami.

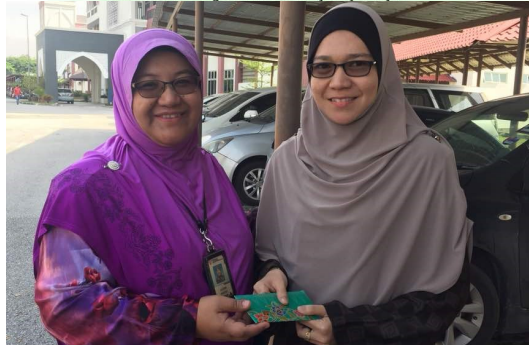
KELOLAAN: PERTUBUHAN PROJEK KASIH
 PPM 01010 08092014

DENGAN KERJASAMA: UPM, PUTRA Bakti, Community Recycle for Charity

PERTANYAAN: Adib (012-7624974)
 Facebook/Instagram/Twitter: BajuRayaProject



Tadarus Al-Quran with TNB Hal Ehwal Wanita (HELWA)



Puan Suzy receiving *duit raya* for Muhayr Ashrov & Mukhlis Ashrov, sons of Allahyarham Zubli Quzairov



Mr. Charanjit handing *duit raya* to SB's cleaning assistants



"Program Sumbangan Baju Raya dan Berbuka Puasa" with Pertubuhan Anak Yatim dan Kebajikan Darul Izzah, Bangi, Selangor

MEET THE PEOPLE BEHIND SB

GENERAL MANAGER MARKET OPERATION & ASSESSMENT ALFIFA FAUZAN

In this issue, we speak to our General Manager of Market Operation and Assessment, Alfifa Fauzan, about her roles in SB and women in leadership



few career shifts after that but recently rejoined the SB family in 2017 as General Manager of Market Operation and Assessment (MOA).

As GM of MOA, my main role is to lead and oversee the activities of three units namely Short-term Scheduling, Medium-term Scheduling and New Enhanced Dispatch Arrangement (NEDA). Each unit has its own designated task and plays an integral part in SB. I feel fortunate to have an excellent and motivated team that is great to work with. My other key responsibility is to provide insights and expert advice on market operation issues and new industry initiatives to the stakeholders.

WattsUp: How has SB helped you in your career development?

Alfifa: Our job here in SB allows us to have a good understanding of the electricity supply industry from a macro point of view. The challenges that we face in SB in embracing industry megatrends consistently motivate me to explore new ideas and solutions.

The experience that I gain throughout my years in SB have helped to develop my character, leadership and expertise. I am appreciative of the fact that this has shaped me to become the point of reference among my peers particularly, and the industry players in general.

WattsUp: What is on your wish list for the next 10 years with SB?

Alfifa: I would love for SB to become the think-tank for the industry as I believe we possess the capability and expertise. I envision SB to become a well-respected organisation that acts as a reputable reference point locally and internationally. I wish that one day SB could be seen as one of the most attractive places to work with due to its importance and its integral role in driving MESI initiatives.

WattsUp: What does true leadership mean to you, especially women in leadership?

Alfifa: A true leader should be able to create more leaders. That is the greatest testimony of a true leader. I do not think gender makes a significant difference in representing a true leader as long as you have the expertise and skills in the particular area.

You will definitely gain respect and recognition if you have the credibility and humility. Leaders need to voice out their opinions, but at the same time be considerate to others. Finally, a leader needs to have high integrity and confidence level in order to gain trust from others.

WattsUp: Any random facts about you that can be shared with us?

Alfifa: Perhaps I can say that I am very close to my family. My family is everything to me and I know that they will always be there to support me when I need it.

WattsUp: What is your hobby?

Alfifa: I love to read self-motivational books related to strategic matters because they are interesting and helpful in doing my job. Normally, I read multiple books at the same time. I would place different books at different places. For example, I have one book in my car, another one in the office and at home.

WattsUp: What is the current book that you are reading?

Alfifa: It is called The Magic of Thinking Big by David J. Schwartz. The book is about the way we look at situations from a wider perspective. You will be surprised at how much you can achieve when you look at the bigger picture. From that point, you will be able to start prioritising and other matters will fall into place. When you know how to look at the bigger picture, you would know how to strategise. 📖

WattsUp: Can you tell us a bit about your background?

Alfifa: I am the eldest of four siblings. My early education up until secondary school was in my hometown, Taiping, Perak. I did my Bachelor of Electrical Engineering in Universiti Sains Malaysia Tronoh and Master of Business Administration (MBA) in University of Southern Queensland.

WattsUp: How and when did you first join SB? What is your role in SB?

Alfifa: Back in 2012, I was involved in the establishment and setting up of the new SB office in Bangsar South. I had a

TOWARDS BETTER AIR QUALITY

Implementation of the Environmental Quality (Clean Air) Regulations 2014 (CAR 2014) brings higher air quality standards

The CAR 2014 came into force on 5 June 2014 replacing the earlier regulations introduced in 1978 and is applicable to all thermal power plants in Malaysia.

The regulations mainly concern the environmental protection and pollution control. The implementation is a part of the administrative responsibility of the government to improve air quality in ensuring public health and safety.

Plant operators are required to take measures to reduce emission of pollutants into the open air in accordance with the standard of 'best available techniques economically achievable'.

The CAR 2014 provides for a grace period for the existing thermal plants to comply within 5 years from the coming into force date of the regulations.

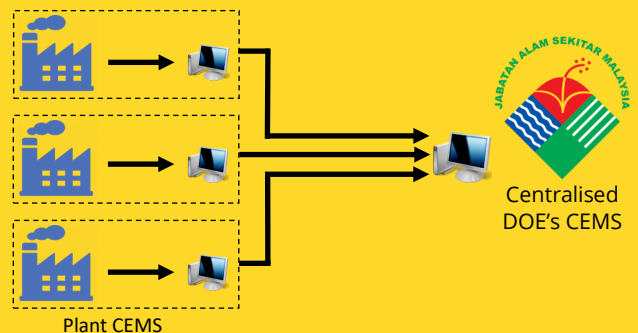
SB is currently working hand in hand with ST and the thermal plants in Peninsular Malaysia to assess the cost impact, work plans, and compliance issues in ensuring ease of implementation of the CAR 2014.

* This article is contributed by our former colleague, Danial Nizam



Did you know?

Thermal power plants are equipped with continuous emission monitoring system (CEMS). CEMS is a system that provides online reports on plant emissions to Malaysian Department of Environment (DOE) for monitoring and compliance purposes.



SB CORNER

Ucapan Kreatif Hari Raya Aidilfitri 2018



SB telah menganjurkan satu pertandingan mengarang ucapan Hari Raya sempena sambutan Aidilfitri 2018. Tiga ucapan yang paling kreatif telah dipilih untuk menerima hadiah misteri dan dimuatkan dalam SB Corner kali ini.



AHMAD NURHAFAZI BIN AHMAD RANI

Di keheningan pagi tatkala subuh menjelma,
Ku siapkan diri bersama keluarga,
Maaf dipinta diiringi senyuman mesra,
Selamat Hari Raya kepada semua.



NOR SURAIYA BINTI ABD RAHMAN

Dot dot com dot dot mai,
Kita suka awak bersuka ria,
Tua muda miskin kaya beramai-ramai,
Aidil fitri sudah tiba mari beraya.



SAYIDATUL ATIQAH BINTI MOHTAR RUDIN

Ayam itik semua dah ada,
Untuk dimasak di dalam kualiti,
Habis cuti semua orang dah ada,
Bolehlah buat 'Open House' Lagi.

Selamat hari raya aidilfitri untuk semua yang menyambutnya.
Semoga Aidilfitri kali ini lebih bermakna dari yang sebelumnya.

WORDS OF WISDOM

Some people don't like change, but you need to embrace change if the alternative is disaster.

- Elon Musk

CONTACT US

We welcome any comments or content that you would like us to include in the upcoming editions of WattsUp.

Please email us at sbet@singlebuyer.com.my

Disclaimer: The contents of this newsletter are of a general nature and is intended for informational purposes only. You are advised to seek specific advice on any matter that may be affected by such information. The views of third parties set out in this newsletter are not necessarily the views of SB.

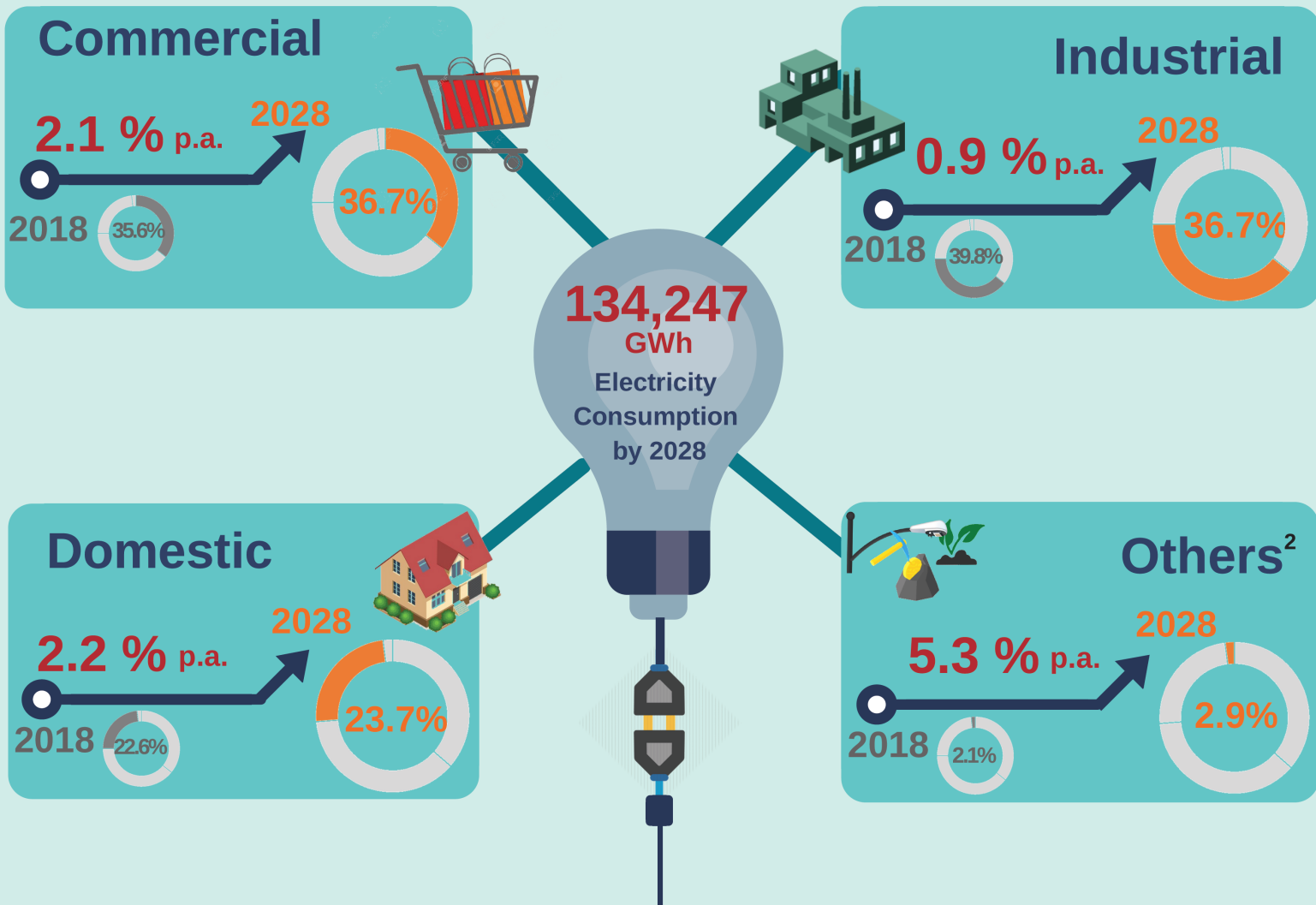
DEMAND OUTLOOK¹

In Peninsular Malaysia

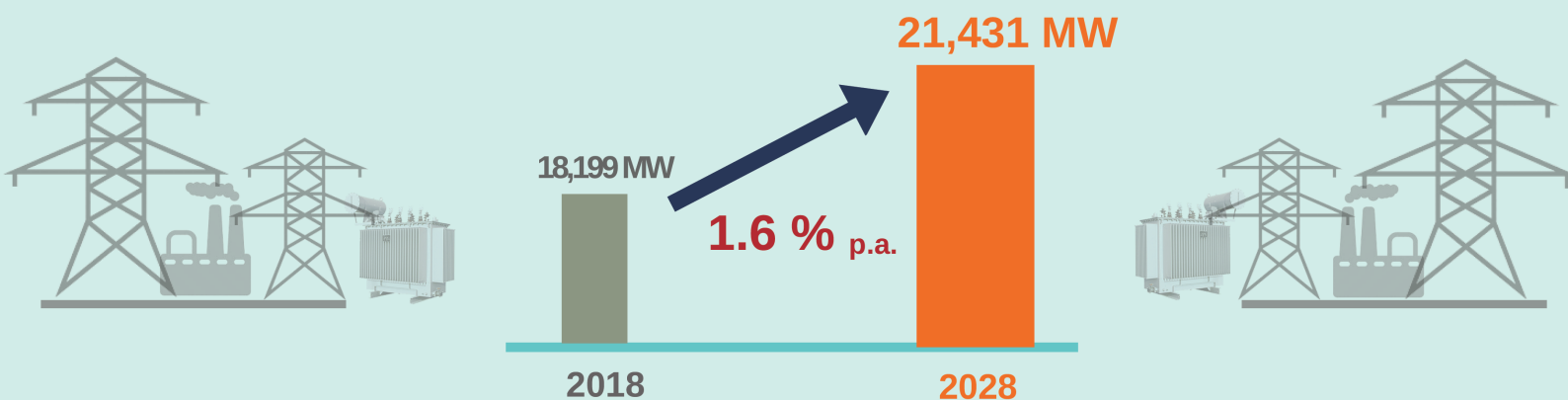
ELECTRICITY DEMAND

Outlook : 2018 - 2028

Demand from the commercial sector will grow significantly over the next 10 years, as the Malaysian economy shifts from manufacturing to services.



PEAK DEMAND



¹ As approved by Demand Forecast Committee on 5 June 2018

² Mining, Public Lighting and Agriculture Sector