

# NEM Billing Mechanism

Nov 2018



# New NEM Mechanism

## NEM Installation

- For Commercial and Industrial customers
  - MV customers – Solar capacity limit of 75% of Maximum Demand
  - LV customers – solar capacity limit of 60% of Current Transformer rating or 60% of fuse rating
- For Domestic customers
  - three-phase : up to 72kWp
  - single-phase : up to 12kWp

## Smart Inverter

- Application of smart inverter is vital to avoid technical violation toward neighbouring consumers. Smart inverter provides protection and voltage support for system integration effectively and safely into the system.
- This installation must be made compulsory for all NEM customers and all solar installations.

## Billing

- 1-to-1 principle shows the total import unit, total export unit and the net payable amount.
- Export unit are charged in descending order according to tariff. (start from the highest applicable rate).

**New NEM bill calculation to reflect 1-to-1 principle which shows the total import unit, total export unit and the net payable amount.**



Situation (Example)	
Total Import (Usage)	650kWh
Total Export (Excess)	172kWh

BIL ELEKTRK DAN INVOIS CUKAI			
<b>Jumlah yang perlu dibayar RM168.85</b>			
<b>Total Import Charge</b>			
block kWh	usage kWh	rate (RM/kWh)	amount (RM)
1-200	200	0.218	43.60
201-300	100	0.334	33.40
301-600	300	0.516	154.80
601-900	50	0.546	27.30
901 onwards	0	0.571	0.00
<b>Total (import)</b>	<b>650</b>		<b>259.10</b>
<b>Total Export Charge</b>			
block kWh	usage kWh	rate (RM/kWh)	amount (RM)
1-200	0	0.218	0.00
201-300	0	0.334	0.00
301-600	122	0.516	62.95
601-900	50	0.546	27.30
901 onwards	0	0.571	0.00
<b>Total (import)</b>	<b>172</b>		<b>90.25</b>

export unit are charged in descending order (start from the highest applicable rate)

**This is how new NEM Bill  
Layout like by Jan 2019.  
Simple but reflective of the  
1-to-1 principle.**

*Baki NEM* will be in *kWh* and  
no longer in *RM*

Tempoh Bil : 19.08.2018 - 18.09.2018 (31 Hari)					
Tariff : A - Kediaman					
<b>Blok Tarif (kWh)</b>	<b>Blok Prorata (kWh)</b>	<b>Kadar (RM)</b>	<b>Amaun (RM)</b>		
200	200	0.218	43.60		
100	100	0.334	33.40		
300	300	0.516	154.80		
300	50	0.546	27.30		
Jumlah	650		259.10		
<b>Keterangan</b>		<b>Tidak Kena ST</b>	<b>Kena ST</b>	<b>Jumlah</b>	
Kegunaan (kWh Import)	kWh	600	50	650	
Kegunaan ICPT	RM	231.80	27.30	259.10	
Kegunaan Bulan Semasa	RM	0.00		0.00	
Caj Minima Bulanan	RM	231.80	27.30	259.10	
Service Tax (6%)	RM			0.00	
KWTBB (1.6%)	RM			1.64	
<b>Jumlah Caj Semasa Import</b>	<b>RM</b>			<b>4.15</b>	
kWh Eksport: 172(kWh)	RM			90.25	
<b>Jumlah Caj Semasa Eksport</b>	<b>RM</b>			<b>90.25</b>	
	RM				
<b>Jumlah Caj Bersih</b>	<b>RM</b>			<b>174.63</b>	
No Meter	Faktor Meter	Bacaan Meter		Kegunaan	Unit
		Dahulu	Semasa		
M98044931	1.0000	7593	8243	650	kWh Import
M98044931	1.0000	5000	5172	172	kWh Eksport

Untuk pertanyaan, sila hubungi:  
TNB Shah Aalm  
xxxx  
xxxx  
xxxx  
Tel: 03-xxxxxxx  
Fax - 03-xxxxxxx

Subsidi Bahan Api  
Dibiayai Kerajaan  
Persekutuan RMXXXX

KWTBB - Kumpulan  
Wang Tenaga Boleh  
Baharu

ICPT - Imbalance Cost  
Pass Through /  
Pelepasan Imbangan  
Kos Penjanaan

Bayaran melalui cek sah  
setelah penjelasan cek  
oleh bank

Baki NEM: xxxkWh

## This is the near future new NEM bill layout.

Export block will appear on the bill

Tempoh Bil : 19.08.2018 - 18.09.2018 (31 Hari)					
Tariff : A - Kediaman					
<b>Blok Tarif (kWh)</b>	<b>Blok Prorata (kWh)</b>	<b>Kadar (RM)</b>	<b>Amaun (RM)</b>		
200	200	0.218	43.60		
100	100	0.334	33.40		
300	300	0.516	154.80		
300	50	0.546	27.30		
Jumlah Import (kWh) <b>650</b>		Jumlah RM Import <b>259.10</b>			
<b>Blok Tarif (kWh)</b>	<b>Blok Prorata (kWh)</b>	<b>Kadar (RM)</b>	<b>Amaun (RM)</b>		
200	0	0.218	0.00		
100	0	0.334	0.00		
300	122	0.516	62.95		
300	50	0.546	27.30		
Jumlah Eksport (kWh) <b>172</b>		Jumlah RM Eksport <b>90.25</b>			
<b>Keterangan</b>		<b>Tidak Kena ST</b>	<b>Kena ST</b>		
		<b>Jumlah</b>			
Kegunaan (kWh Import)	kWh	600	50		
Kegunaan	RM	231.80	27.30		
ICPT	RM	0.00	0.00		
Kegunaan Bulan Semasa	RM	231.80	27.30		
Caj Minima Bulanan	RM		0.00		
Service Tax (6%)	RM		1.64		
KWTBB (1.6%)			4.15		
<b>Jumlah Caj Semasa Import</b>	<b>RM</b>		<b>264.88</b>		
kWh Eksport: 172(kWh)	RM		90.25		
<b>Jumlah Caj Semasa Eksport</b>	<b>RM</b>		<b>90.25</b>		
	RM				
<b>Jumlah Caj Bersih</b>	<b>RM</b>		<b>174.63</b>		
<b>No Meter</b>	<b>Faktor Meter</b>	<b>Bacaan Meter</b>		<b>Kegunaan</b>	<b>Unit</b>
		<b>Dahulu</b>	<b>Semasa</b>		
M98044931	1.0000	7593	8243	650	kWh Import
M98044931	1.0000	5000	5172	172	kWh Eksport

Untuk pertanyaan, sila hubungi:  
TNB Shah Aalm  
xxxx  
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Subsidi Bahan Api  
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KWTBB - Kumpulan  
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Kos Penjanaan

Bayaran melalui cek sah  
setelah penjelasan cek  
oleh bank

Lebihan NEM: xxxkWh

Tarikh lupus Lebihan  
NEM: dd/mm/yyyy

## Summary of New NEM mechanism

NEM 1-to-1 includes the following:

- 1** The NEM generation rate will be as per the tariff schedule as determined by the Government
- 2** All other applicable charges for example ICPT, SST and KWTBB charges will be calculated based on the import kWh. This is similar to current methodology of calculating these charges.
- 3** Readiness of the billing system with minimal modification to reflect NEM 1-to-1 target to be ready by January 2019
- 4** Supply of energy from NEM customers must not affect the reliability and security of the Grid System

Existing NEM customers must sign a new contract to enable their solar generation to be paid at the new NEM generation rates

# Terima Kasih



RE@tnb.com.my