

NEW CONNECTION CHARGE GUIDELINES 2008 (rev.2)

A. GENERAL

The New Connection Charge Guidelines 2008 (rev.1) is revised to streamlines the calculation of connection charge for connection of electricity supply to SESCO system up to 33,000 volts overhead lines. All applications for connection of electricity supply shall apply this revised guideline with immediate effect.

The revision is also done in the spirit of equity to the owner of the premises. All relevant memorandum, addendum and revision released in relation to the New Connection Charge Guidelines 2008 (rev.1) shall be superseded with immediate effect.

B. DEFINITIONS

“Actual Cost” means the estimated cost to be incurred by SESCO as generated through SAP PS (Project System) module based on bill of quantities.

“Connection” means the electrical connection between SESCO’s existing power system and SESCO’s meter point at customer’s premises. For all connection of supply, SESCO has the sole discretion to decide on the point of connection and whether to use overhead or underground network systems.

“Connection Charge” means the amount required to be paid by customer who requires new connection or increase supply of electricity.

“Capacity Charge” means the charge a customer has to pay for the development of HT system regardless there is HT installation works.

“Low Tension Charge” means the charge a customer has to pay for the development of LT system. It is necessary for all low tension installation works that include **underground, overhead lines, pillars, street lighting and services** that are required for connection of electricity supply to the development.

“Customer” means any applicant including developer, consultant, contractor and any other person who has the interest to obtain electricity supply from SESCO.

“LT” means low tension voltage at 415 volt (V).

“HT” means high tension voltage at 11 and 33 kilovolt (kV).

“O/H, U/G” mean overhead, underground respectively.

“kV, kVA” mean kilovolt, kilovolt-ampere respectively.

“Premises” means any conventional house, building or other erection and the land legally occupied or used in connection therewith, being under one ownership, occupation or management.

“RES” means Rural Electrification Scheme funded by the Federal Government.

“Single-phase supply” means supply provided by one live and one neutral wires with voltage level of 240V.

“Three phase supply” means supply provided by three live and one neutral wires with voltage level of 415V.

“Turnkey Project” means project undertaken by customer at his own cost for all the installation works, designed or approved by SESCO, necessary for the connection of his load to SESCO’s supply system at a point decided by SESCO.

C. CATEGORY OF PREMISES

Under this new guidelines premises will be categorized as follows:-

1. Housing

Residential premises consisting of 2 units or more and multi floor residential flat, apartment or condominium.

2. Single Premises

Single premises is individual house built in urban or rural areas or resettlement areas, large mansion or villa. Include longhouses, rumah mesra rakyat, rumah mampu milik, rancangan perumahan rakyat, projek bantuan rumah.

3. Shophouse

Shophouse is multi-storey premises built normally with its ground floor for commercial and the other floor for office or domestic usage.

4. Industrial and Other Premises

Industrial and other premises built for commercial or business purpose likes agricultural farm, bakery, car dealer, carpentry workshop, cineplex, clubhouse, cold storage, garage workshop, petrol station, restaurant, mini market, supermarket, showroom, store and warehouse, transmitting station, multi-storey car park, park, multi-storey office building, community and religious premises etc. and the list is not exhaustive.

5. Government Premises and Projects

Premises built and paid by government agencies likes school, hospital, sport complex, museum, water works, library, exhibition hall, multipurpose hall, convention centre, airport, road construction, drainage, dam, flood mitigation, street lighting, hawker/food stall and market under council’s administration, etc. and the list is not exhaustive.

6. Temporary Premises

Premises built normally as site office. Connection of supply to the premises shall be for a maximum period of three (3) years.

D. CONNECTION CHARGES

1. Category (1) and (3)

The Connection Charges equals **Capacity Charge** plus **Low Tension Charge**.

The charge is applicable for development that requires not more than **1000 m of HT underground cable or 20 pole-spans of HT overhead line** to connect to the nearest point of connection decided by SESCO based on current planning criteria.

For those premises outside the **1000 m of underground cable or 20 poles span of overhead lines** electrical distance from available existing network measured along the official road reserve boundary, **additional HT mains charge** for underground cable on per metre basis or overhead line on per pole span basis as shown in **Table 1** will be added to the Connection Charges.

Additional HT Mains Charge	Electrical Distance	Rate in RM
HT Underground cable	1,000 m to 2,000 m	100/m
	> 2,000 m	200/m
HT Overhead line	> 20 pole span	10,000/pole span

Table 1. Rate of HT Underground cable and HT Overhead line

2. Category (2) and (4)

The Connection Charges equals **Capacity Charge** plus **Low Tension Charge**.

The charge is applicable where **HT Actual Cost** does not exceed **300% of the Capacity Charge**.

If **HT Actual Costs** exceed **300% of the Capacity Charge** the Connection Charges equals **Capacity Charge** plus **Low Tension Charge** plus **additional cost** beyond the **300% of the Capacity Charge**.

3. Category (5) and (6)

The Connection Charges equals **HT Actual Cost** plus **Low Tension Charge**

Where supply is connected on temporary basis, the return of major materials (Transformer, Switchgear and Pillar) to SESCO store within the 3 years period shall be considered for refund at the prevailing value of the materials returned. No refund shall be allowed after 3 years from date of commissioning of transformer.

E. METER FEES

Meter fees may be included in the connection charge or bill separately. Cost of various types of single-phase and three-phase meters and other necessary equipment, if included, will be charge as per rates tabulated in **Appendix 1**.

All unit rates in the table do not include installation costs. These will be charged separately if applicable

F. TURNKEY PROJECTS

Customers and Developers are allowed to undertake the construction of **HT and/or LT installation works on turnkey basis**. Customers and Developers who undertake the construction works on turnkey basis shall bear the full cost of the works required to connect

his load to the existing network at a point to be determined by SESCO. Meter fees will be payable to SESCO as in **Appendix 1**.

Temporary supply shall not be allowed under turnkey basis.

Customers and Developers who undertake the construction works on turnkey basis for **LT installation works only will still be charged the Capacity Charge**.

As part of SESCO's statutory function to secure electricity supply to all its customers in the most economical manner possible, SESCO has the full right to make use of the land, site or space if so provided under **turnkey projects**, for electricity supply in and around the area. Substation site provided shall be alienated to SESCO free of charge.

G. TECHNICAL DEVELOPMENT POLICY

The developer shall consult SESCO regarding substation site requirement before submission of subdivision plan to Land and Survey Department for all types of development.

With the rule of thumb a substation is required under the following conditions:-

- (i) Development size of 30 units or more premises
- (ii) The maximum distance of LT pole-span from substation is 15 pole-spans
- (iii) Development with a transformer size of 160 kVA and above
- (iv) One substation for every 200 units and part thereof

H. DECLARATION OF CAPACITY

Developments that are found to have **grossly under-declared** their capacity requirement shall be charged **additional capacity charge 200% of the standard rate per kVA for the undeclared capacity**. However there shall be no refund for unrealized load.

I. ASSIGNED LOAD FOR SINGLE-PHASE ELECTRICITY SUPPLY

The assigned load for the various premises is as follows:-

Housing Premises	Assigned Load
Detached Double Storey House	5 kVA
Detached Single Storey House	4 kVA
Semi-Detached Double Storey House	4 kVA
Semi-Detached Single Storey House	3 kVA
Terrace Double Storey House	3 kVA
Terrace Single Storey House	2 kVA
Barrack	2 kVA
Low Cost Plus House/Flat - government approved and stated in building plan	2 kVA
Low Cost House/Flat - government approved and stated in building plan	1.5 kVA
Condominium/Apartment > 3 Bedroom Unit-Floor	5 kVA
Condominium/Apartment ≤ 3 Bedroom Unit-Floor	4 kVA

Table 2. Assigned load for Housing Premises

Shophouse, Industrial and Other Premises	Assigned Load
Shophouse Commercial Unit-Floor**	5 kVA
Shophouse Office Unit-Floor**	3 kVA
Shophouse Residential Unit-Floor	3 kVA
Multi-storey Office Unit-Floor**	3 kVA
Light Industrial Commercial Unit-Floor**	10 kVA
Religious Premises/Community hall > 200 m ² floor area**	5 kVA
Religious Premises/Community hall ≤ 200 m ² floor area**	3 kVA
Lockup/Hawker/Food stall**	2 kVA
Others*	not applicable

Table 3. Assigned load for Shophouse, Industrial and Other Premises

Single Premises	Assigned Load
Kampung Concrete House and others > 220 m ² floor area	5 kVA
Kampung Concrete House > 165 m ² and ≤ 220 m ² floor area	4 kVA
Kampung Concrete House ≤ 165 m ² floor area	3 kVA
Kampung Semi-Concrete/Wooden House > 165 m ² floor area	2 kVA
Kampung Semi-Concrete/Wooden House ≤ 165 m ² floor area	1.5 kVA
Longhouse Concrete	1.5 kVA
Longhouse Semi-Concrete/Wooden	1 kVA
Rumah Mesra Rakyat/Rumah Mampu Milik/Rancangan Perumahan Rakyat/Projek Bantuan Rumah	1.5 kVA
Rakyat Termiskin - registered with government agencies	1 kVA

Table 4. Assigned load for Single Premises

Note:-

1. *Shall be based on applied load (total connected load).
2. **Shall be based on assigned or applied load (total connected load) whichever is higher.
3. Domestic premises application for 3-phase supply with total connected load of less than 20kVA shall be based on assigned load. Above 20kVA shall be based on applied load (total connected load)

J. CONNECTION CHARGE RATE

The approved rate for the various premises is as follows:-

1. **Capacity Charge at RM500/- per KVA**
2. **Low Tension Charge at Actual cost**
3. **A 50% discount on the Capacity Charge** for Government Low Cost Plus House
4. **Waiver on the Capacity Charge** for Rakyat Termiskin, Projek Bantuan Rumah, Longhouse, Kampung House, Rumah Mesra Rakyat, Rumah Mampu Milik, Rancangan Perumahan Rakyat, Government Low Cost House and existing Resettlement Scheme area, provided the assigned load does not exceed 1.5KVA.

APPENDIX 1

STANDARD RATES FOR METER FEES

Item	Description	Unit Rate (RM)
1	Single phase whole current kWh meter for RES, Resettlement Scheme and Low Cost Housing customers	70
2	Single phase whole current kWh meter	150
3	Three phase whole current kWh meter	500
4	CT-operated kWh/kVarh meter for normal low voltage applications where the applied load is $\leq 1,000\text{kVA}$	1,570
5	PT/CT-operated kWh/kVarh + MD meter (Class 0.5s) for normal high voltage applications and/or applications requiring summation function where the applied load is $< 5,000\text{kVA}$	2,060
6	PT/CT-operated kWh/kVarh + MD meter (Class 0.2s) for normal high voltage applications and/or applications requiring summation function where the applied load is $\geq 5,000\text{kVA}$	8,000
6	Low voltage current transformers (CTs) with available ratios: 200/5, 400/5, 800/5, 1200/5, 1600/5 & 2000/5 (set of 3)	300
7	Test terminal block for CT & PT/CT installations, complete with voltage fuse carriers	300
8	Metal meter cabinet - for single phase meter	180
9	Metal meter cabinet - for three phase meter	220
10	60A Service Cutout	36
11	100A Service Cutout	38
12	Neutral Link	10