ANNEX 1

Distribution and Supply License Nos : EL/D/09-003, EL/D/09-004, EL/D/09-005 and EL/D/09-006

ALLOWED CHARGES FOR 2018 - Ceylon Electricity Board (CEB)

Preamble

(1) Allowed charges published herewith, provides the maximum fee that Distribution and Supply Licensees can charge from a customer for specific services during the year 2018.

(2) The charges have been approved by the Commission following scrutiny of the filing done by the Licensees based on the approved methodology for determination of such charges.

(3) The charges published herewith covers only commonly required services provided by the Licensees. For determination of charges of other services, rates and calculations provided in Standard Construction Costs 2018 of CEB shall apply.

Abbreviations

A	ampere	AAC	All Aluminum Conductor
kV	kilo volt	ABC	Arial Bundled Conductor
kVA	kilovolt ampere	sq mm	Square Milimeter
LV	Low Voltage	MV	Medium Voltage
LT	Low Tension		

SERVICE CONNECTION CHARGES

Charge Structure

(i) For Single phase 30A overhead retail service connections (Domestic and Religious Categories) a common (flat) charge is applicable up to 50m. CEB should bear the cost of development of the network up to the boundary of the land of the consumer. Cost of service connection beyond 50m inside the premises shall be borne by the consumer at the given rate.

(ii) For Three phase (30A and 60A) overhead retail service connections (Domestic and Religious Categories) a common (flat) charge is applicable up to 50m. CEB should bear the cost of development of the network up to the boundary of the land of the consumer. Cost of service connection beyond 50m inside the premises shall be borne by the consumer at the given rate.

(iii) For Single phase 30A overhead retail service connections (other than Domestic and Religious Categories) a common (flat) charge is applicable up to 50m. CEB should bear the cost of development of the network up to the boundary of the land of the consumer. Cost of service connection beyond 50m inside the premises shall be borne by the consumer at the given rate.

(iv) For Three phase (30A and 60A) overhead retail service connections (other than Domestic and Religious Categories) a common (flat) charge is applicable up to 50m. Cost of service connection beyond 50m shall be borne by the consumer at the given rate.

(A) Allowed Charges for Retail Service Connections

(1.0) Overhead service connections (< 42 kVA) from the existing (low voltage) distribution network

No	Type of Service Connection	Common Charge (Rs)	Variable charge (beyond 50m)	
			50m – 110m	Above 110m
1.1	30 A, Single Phase retail	17,900	750	1,322
1.2	30 A, Three Phase retail	31,500	1,537	1,623
1.3	60 A, Three Phase retail	35,500	1,537	1,623
1.4	Conversion, 30A single phase to 30A three phase, retail	31,500	1,623	1,623
1.5	Conversion, 30A single phase to 60 A three phase, retail	35,500	1,623	1,623

* Variable charge indicated above is only applicable for additional distance beyond 50m

Notes:

(1) Common and variable charges indicated above shall be used irrespective of the number of service poles or quantities of other standard materials required. Any additional materials / works other than those of standard retail supply service connections can be charged separately.

(2) Special technical requirements are applicable for service connections to welding plants, metal crushers, and saw mills etc. which cause disturbances to other customers connected to the same feeder. Technical requirements and Charges for such service connections shall be determined as per 'CEB Standard Construction Cost - 2018'.

(3) If the licensee uses assets which have already been installed to provide other service connections, costs of those assets shall not be included in the final charge for the new service connection, unless a mechanism for the “Reimbursement of Charges Recovered from a Customer” (According to the section 7.3 of the approved Methodology for Charges) has been implemented by the licensee.

(2.0) Underground service connections (< 42 kVA) from the existing (low voltage) distribution network

No	Type of Service Connection	Fixed Charge (Rs) (up to 5m)	Variable charge for distance in excess of 5m (Rs/m)
2.1	15 A/30A Single Phase (16 sqmm cable)	60,700	5,100
2.2	30 A, Three Phase (16 sqmm cable)	104,000	5,600
2.3	60 A, Three Phase	114,000	5,700

		Fixed Charge (Rs) (up to 2m)	Variable charge for distance in excess of 2m (Rs/m)
2.4	15A/30A Single Phase Loop Service	6,800	160
2.5	15A/30A Three Phase Loop Service	18,400	620
2.6	60A Three Phase Loop Service	21,000	1,100

Notes:

(1) Fixed and variable charges indicated above shall be used irrespective quantities of standard materials required. Any additional materials / works other than those of standard retail supply service connections can be charged separately.

(B) Allowed Charges for Bulk Supply Connections

(1) Bulk Supply Connections from overhead network

(1.a) Bulk Supply Connections above 42kVA upto 100kVA and Conversion of existing connections of capacities lower than 42 kVA

Type	Fixed Cost (Rs.)	Variable Cost (Rs./meter)
70 kVA (with Bulk Supply Metering)	470,000	2,002
95 kVA (with Bulk Supply Metering)	570,000	2,002

i) Fixed cost listed here includes the cost of providing the requested supply inclusive of metering equipment if the customer premises are within 50m distance from existing LV line.

ii) The balance cost for the construction of Substation except cost of MV line, has to be borne by CEB under System Augmentation funds.

iii) Variable cost should be charged for connections beyond 50m off the existing line at the given rates.

iv) However, the total low voltage line lengths should be less than 200m for 70 kVA connections and 100m for 95 kVA connections from the substation. If the customer premises is beyond the specified length here, a new substation along with a Medium Voltage line should be constructed.

   a. The cost of substation shall be borne by CEB.
   b. CEB shall also bear 50% of the cost of new MV line from existing MV network upto the consumer premises.
   c. The remaining 50% of the MV line cost will be charged from the customer at the variable cost for MV lines (mentioned under the table *"Allowed chargers for LV and MV Overhead Lines"* in this document).
   d. The full cost of the MV line beyond the boundary of the premises (If applicable) shall be paid by the consumer.

These rates are applied for the consumer categories 'General Purpose', 'Industry', 'Hotel' and 'Government'.

(1.b) Bulk Supply Connections from Overhead Network (100kVA to 1000kVA)

	11kV	33kV
Fixed Cost (Rs.)	670,000.00	700,000.00
Variable Cost per kVA (Rs.)	3,700.00	3,700.00

Notes :

I. The above charges are for outdoor type substation constructions
II. Transformer plinth and meter cubicle should be provided by the customer. Additional LV cables (after the meter cubicle) can be charged separately.
III. Cost of augmentation of existing connections shall be determined on the same per kVA basis as indicated in the table.
IV. If a new MV line has to be constructed for bulk supply connection, 50% of the MV line construction cost upto the customer boundary shall be charged by the consumer and the balance will be borne by CEB under system augmentation funds. If any MV line length has to be constructed within the customer premises, the total cost of that line length shall be charged from the customer.
V. For connections above 1000kVA capacity, chargers will be estimated on case by case basis in accordance with CEB Standard Construction Cost - 2018.

(2) Bulk Supply Connections from Underground Network

No	Type of Service Connection	Common Charge (Rs)	Variable Charge (Rs)
2.1	70kVA, Three phase connection from Feeder Pillar	1,750,000	N/A
2.2	112kVA, Three phase connection from Feeder Pillar	2,390,000	N/A
2.3	150kVA up to 1000kVA Connections from Satellite Substations	2,200,000	6,400 per kVA
2.4	1MVA to 16MVA connections from Ring/Radial Substations	19,500,000	21,000,000 per MVA

Notes :

I. Above charges for connections from feeder Pillar (70kVA and 112kVA) includes the cost of LV cable from feeder pillar, MCCB, bulk supply meter enclosure, current transformers and energy meter.
II. Above charges for connections from satellite substations (150kVA upto 1000kVA) includes the cost of cable from 11kVsatellites underground cable network upto the busbar chamber including the cost of RMU, Transformer, MCCB, except metering equipment.
III. Above charges for connections from ring or radial substations (1MVA upto 16MVA) includes the cost of ring cables from 11kV ring underground cable network upto the substation including two ring panels, bus section panel, earthing system

IV. For other types of lines (not indicated above) rates provided in CEB Standard Construction Cost - 2018 shall apply.

V. Type of the line required shall be determined based on technical requirements.

(C) Allowed charges for Low Voltage (230/400 V) and MV (11kV and 33kV) Overhead Lines

The following charges / rates shall apply for standard overhead line constructions which are applicable for preparation of case by case estimates

No	Type of Line	Charge (Rs/km)
1.1	LV, Three Phase, AAC 7/3.4mm (Fly) conductor	1,410,000
1.2	LV, Three Phase, 7/4.39mm (WASP) conductor	1,601,000
1.3	LV, Three Phase, ABC 3x70+54.6 sq mm conductor	1,623,000
1.4	LV, Three Phase, AAC 7/3.4mm (Fly) conductor (Subsidized charge by CEB for govt, DCB,PCB funded projects)	1,335,000
1.5	LV, Three Phase, 7/4.39mm (WASP) conductor (Subsidized charge by CEB for govt, DCB,PCB funded projects)	1,526,000
1.6	LV, Three Phase, ABC 3x70+54.6 sq mm conductor(Subsidized charge by CEB for govt, DCB,PCB funded projects)	1,548,000
1.7	LV, Single Phase to three phase conversion, AAC 7/3.4mm (Fly) Conductor	433,000
1.8	LV, Two Phase to three phase conversion, AAC 7/3.4mm (Fly) Conductor	296,000
1.9	LV, three phase, Fly/WASP conversion	446,000
1.10	11 kV, Three Phase, Raccon (7/4.09mm) Conductor on 10 m poles	2,158,000
1.11	11 kV, Three Phase, Raccon (7/4.09mm) Conductor on 11m poles	2,459,000
1.12	33 kV, Three Phase, Raccon (7/4.09mm) Conductor on 10m poles	2,420,000
1.13	33 kV, Three Phase, Raccon (7/4.09mm) Conductor on 11m poles	2,682,000

Notes :

VI. For other types of lines (not indicated above) rates provided in CEB Standard Construction Cost - 2018 shall apply.

VII. Type of the line required shall be determined based on technical requirements.

(D) ALLOWED CHARGES FOR MISCELANIOUS SERVICES

No	Type of Service	Charge (Rs)
1	Disconnection at the customer's request	1,250
2	Reconnection at the customer's request	1,250
3	Reconnection after a statutory disconnection	1,250
4	Testing of an energy or energy/demand meter (230 V)	2,500
5	Testing of a three phase energy meter (less than 42kV)	3,500
6	Testing of an energy/demand meter and associated equipment used at 400 V	13,500
7	Testing of an energy or energy/demand meter and associated equipment (used at voltages higher than 400 V)	13,500
8	Installation testing	CCE
9	Changing an account name and/or the tariff category	Free of Charge
10	Changing an energy or energy/demand meter	Free of charge for changing defective meters. For other cases CCE shall apply.
11	Provision of temporary electricity supply	CCE
12	Augmentation of an existing electricity supply	CCE
13	Issuing an estimate for Shifting of poles/lines/transformer/ any other electrical plant	2,500 (Deductible from the estimate)
	Shifting of poles/lines/transformer/ any other electrical plant	CCE
14	Clearing of way leaves	CCE based on compensation charges decided by Divisional Secretaries and cost of removing way leaves.
15	Issuing a clearance report	10,000 (deductible from the estimate)
16	Issuing a Duplicate Bill	Free of Charge
17	Grid interconnection of Generation facility	CCE
18	Repair of damages to service connection wire: Responsibility of removing way leaves along the path of service connection wire rests with the consumer. Cost of repair to service wire due to non-removing of way leaves is to be charged from the respective consumer.	CCE
19	Connection charges for Net Metering/Net Accounting/Net Plus schemes • Application Processing Charge • 1phase Net Metering Connection • 3 phase Net Metering Connection	 2,000 6,250 14,200
20	Standard Rate for Ordinary Supply Customers to Change over to the time of day tariff One time charge for re programming the meter • 1 phase Connection = Rs. 9,800	

	• 3 phase Connection = Rs. 11,000 Based on availability, The existing single rate meter shall be replaced with a programmable 3 phase 3 wire meter or a Direct Connected single phase meter free of change.
21	Professional fee of independent professional who conduct investigations for the purposes of individual power quality assessment under section 36(a) of Electricity (Distribution) Performance Standard Regulations = Rs. 15,000 (The customer who applies for investigation shall make a deposit equal to this amount to the distribution licensee) individual power quality assessment

*CCE – Case by Case Estimate by the Licensee based on Standard Construction Cost – 2018 and Price List of Materials 2018 issued by CEB

ANNEX 2

Issues in the proposed Allowed Charges for 2018 by Ceylon Electricity Board

1 Issues with the charges of the new service connections and conversions of connections.

A new clause had been introduced to allowed charges methodology revised in 2016, to explicitly prohibit double recovery of asset cost because of the lack of a mechanism for "Reimbursement of Charges Recovered from a Customer" (According to the section 7.3 of the approved Methodology for Charges)

2 New charge structure for Bulk supply connections from overhead network

In 2017 CEB proposed a new methodology for calculation of charges based on kVA capacity instead of distance, for underground bulk supply connections. The section 5.1.8 of the approved Methodology for Allowed Charges stipulates the charge structure applicable for Bulk supply connections at different voltages and distances from licensee's distribution network. The methodology requires the charges structure to comprise of a fixed charge and variable charge based on distance. Therefore this was a deviation from methodology. In 2018 CEB has proposed a similar method also for bulk supply connections from 150kVA to 1MVA from overhead network as well.

The charge structure laid out in the Allowed charges methodology has been originally conceived and designed to make the process of determining charges fair, reasonable and transparent. Taking the network expansion that took place in recent years, and the reduction of average length of service connections into account, the proposed charge structure with variable charge based on kVA capacity seems to be capable of achieving these objectives in an equivalent manner.

Therefore the commission approves the new charge structure for 2018.

3 Charges for Bulk supply connections from underground network

CEB proposed new charge structure for Bulk supply connections from underground network in 2017 which was approved by the commission. Along with the approval CEB was directed to carry out an ex-post analysis of charges levied vs costs incurred, for service connections above 1MVA. However CEB has only provided 2 connections with capacities greater than 1MVA, during 2017.

Therefore CEB is directed to carry out an ex-post analysis for charges levied vs costs incurred, for service connections above 1MVA provided under this new scheme (for 2017 and 2018) along with the next charges filing.

For 150kVA to 1MVA connections, CEB uses standard construction costs of 400kVA, 630kVA, 800kVA, 1000kVA substations, based on historical average of cable length of connections, to derive a fixed charge and a variable charge based on capacity, using a regression model. They have modified the best fit curve

that comes out from this model in different manners in last two submissions (in 2017 and 2018), which has resulted in disproportionate change of charges for this category.

Therefore CEB is directed to propose a consistent method of modifying the best fit curve in determining charges for this category, or to use the best fit curve and discount a fixed amount that can be recovered through system augmentation funds.

4 Providing Load profile and other data in Smart Meters

As per the Methodology for Allowed Charges (Revised September 2016), the service of Providing Load profile and other data in Smart Meters shall be available free of charge.

Issue: CEB has proposed a charge of Rs. 500 per month for this service, on the basis that remote reading facility is not available for some of these meters and therefore involves a labour cost.

Amendment: CEB is directed to provide this service free of charge and to make it available only for consumers with meters with remote reading facility.

5 Reimbursement of Charges Recovered from a consumer

In line with the Clause 27 (3) of the Sri Lanka Electricity Act (Act no 20 of 2009), the methodology for Allowed Charges includes a provision for reimbursement of the part of the monies paid by a customer for an electric line / plant, if the facilities so installed are subsequently used by the Licensee to provide electricity supplies to other parties. Accordingly, the Licensees are required to implement this provision along with the revised charges for 2018. The mechanism proposed in the Methodology for Allowed Charges is as follows;

One tenth of the cost and the interest calculated at (1%+SLIBOR) shall be reimbursed to the first customer who had paid in full for a facility (electric line), every time an electricity supply is given off that facility up to nine (9) customers, within the five (5) year period from the date of installation.

Although this mechanism is made as simple as possible, CEB is not ready to implement this scheme along with the Allowed Charges for 2018.