

CEYLON ELECTRICITY BOARD

STANDARD CONSTRUCTION COST 2018

CONTENTS

п	-	-	-
۲	а	a	е
	v	3	·

Ser	vices Related to Overhead Network	
1)	LV New Lines / Conversions / Combined Runs	1
2)	MV Line - Cost per km.	4
3)	Cost for Provision of Bulk Supply (Overhead Network)	5
4)	Cost for Augmentation of Bulk Supply Substations (11 kV/LV, 33 kV/LV Overhead Network)	6
5)	Installation of MV Metering Equipment	6
6)	Installation of Guard	7
7)	Service Connections (Overhead)	8
Ser	vices Related to Underground Network	
8)	Cost For Obtaining Bulk Supply Service Connection From The Underground Network	15
9)	Service Connections (Underground) Up To 42 kVA	17
Oth	er	
10)	Other Charges.	19

to

Eng. P. C. C. Perera Chairman Distribution Coordination (Addl. General Managers) 2018 - 03.20

STANDARD CONSTRUCTION COST - 2018

1) LV NEW LINES / CONVERSIONS / COMBINED RUNS

1.1 LV New Lines

1.1.1 Bulk supply connections and all other third party construction works

1.1.1.1 Aerial Bundled Conductor (ABC) LV line cost per km

Following rates are applicable for 70 & 95 kVA Bulk Supply connections beyond 50m, Property Developers and all other third party construction works.

Conductor	3x95+70mm ²	3x70+54.6mm ²	3x95+70+16mm ²	3x70+54.6+16mm ²
Cost (Rs)	2,002,000.00	1,623,000.00	2,109,000.00	1,750,000.00
Second Circuit cost (Rs)	1,404,000.00	986,000.00	-	-

1.1.1.2 Bare Overhead LV line cost per km

Conductor	FLY - 7/3.40 mm, 3 Phase	WASP- 7/4.39 mm, 3 Phase	
Cost (Rs)	1,410,000.00	1,601,000.00	
Second Circuit cost (Rs)	632,000.00	792,000.00	

1.1.2 RE schemes funded through Decentralized, Provincial Council Budgets and similar RE Schemes

Following rates are applicable only for LV lines funded through the Decentralized Budget, Provincial Council Budget and similar Rural Electrification schemes.

1.1.2.1 Aerial Bundled Conductor (ABC) Lines

Conductor	3x95+70mm ²	3x70+54.6mm ²	95x3+70+16mm ²	3x70+54.6+16mm ²
Cost (Rs)	1,927,000.00	1,548,000.00	2,034,000.00	1,675,000.00
Second circuit cost (Rs)	1,329,000.00	911,000.00	1,296,000.00	937,000.00

1.1.2.1 Bare Overhead Lines

Conductor	FLY - 7/3.40 mm, 3 Phase	WASP- 7/4.39 mm, 3 Phase
Cost (Rs)	1,335,000.00	1,526,000.00
Second Circuit cost (Rs)	557,000.00	717,000.00

tes

Eng. P. C. C. Perera
Chairman
Distribution Coordination Committee
Addl. Surfaira Distribution (2018)

1.2 LV Line Conversion - Cost per km

Canduatan	FLY - 7/3.40 mm, 3 Phase		WASP- 7/4.39 mm, 3 Phase
Conductor	1 Ph. to 3 Ph.	2 Ph. to 3 Ph.	Changing Conductor 3 Ph. Fly
Cost (Rs)	433,000.00	296,000.00	446,000.00

1.3 Combined run of LV Line on existing MV Line

1.3.1 Bulk Supply Connections, Property Developers and all other third party construction works

Following rates are applicable for 70 & 95 kVA Bulk Supply connections beyond 50m, Property Developers and all other third party construction works:

Conductor	FLY	WASP	ABC	ABC
	7/3.40mm	7/4.39mm	70x3+54.6mm ²	95x3+70mm ²
	3 Ph.	3 Ph.	3 Ph.	3 Ph.
Combined Run on 11kV/33kV line cost (Rs)	880,000.00	1,084,000.00	1,021,000.00	1,393,000.00

1.3.2 RE Schemes funded through Decentralized, Provincial Council Budgets and similar RE Schemes

Following rates are applicable only for LV lines funded through the Decentralized Budget, Provincial Council Budget and similar Rural Electrification schemes:

Conductor	FLY	WASP	ABC	ABC
	7/3.40 mm	7/4.39 mm	70x3+54.6 mm ²	95x3+70 mm ²
	3 Ph.	3 Ph.	3 Ph.	3 Ph.
Combined Run on 11kV/33kV line cost (Rs)	805,000.00	1,009,000.00	946,000.00	1,318,000.00

Note

The above costs include the cost of additional intermediate LV poles required to support the LV feeder.

1.4 Combined run of LV Line on new MV Line

1.4.1 Bulk Supply Connections, Property Developers and all other third party construction works

Following combined run rates are applicable for Bulk Supply connections, Property Developers, and all other third party construction works:

Conductor	FLY	WASP	ABC	ABC
	7/3.40 mm	7/4.39 mm	70x3+54.6 mm ²	95x3+70mm ²
	3 Phase	3 Phase	3 Phase	3 Phase
Combined Run on 11kV/33kV line cost (Rs)	671,000.00	772,000.00	823,000.00	1,195,000.00



1.4.2 RE Schemes funded through Decentralized, Provincial Council Budgets and similar RE Schemes

Following rates are applicable only for LV lines funded through the Decentralized Budget, Provincial Council Budget and similar Rural Electrification schemes:

Conductor	FLY	WASP	ABC	ABC
	7/3.40 mm	7/4.39 mm	70x3+54.6 mm ²	95x3+70mm ²
	3 Phase	3 Phase	3 Phase	3 Phase
Combined Run on 11kV/33kV line cost (Rs)	596,000.00	697,000.00	748,000.00	1,120,000.00

Note

Span of MV lines are reduced to the span required for LV. Therefore, no LV poles introduced in between MV Poles.

Phos.

Eng. P. C. C. Perera Chairman Distribution Coordination Committee Addl. General Manager (DD-1) 2018.03.20 2) MV LINE - COST PER km.
(These rates are applicable only for Pole Line Constructions)

2.1 Bare Conductors MV Line Cost per km.

Since 45 m span is used in MV construction, it may be economical to use 10.0 m (RC or PS) pole in MV construction. PS 11.0 m poles may be used in special construction where clearances cannot be maintained by 10.0 m poles. (E.g. Road crossings, Urban areas)

2.1.1 11 kV Network

Code	7/4.09 mm RACOON	37/2.79 mm LYNX	19/3.76 mm ELM
Single Circuit on 10m Pole Cost (Rs)	2,158,000.00	-	-
Single Circuit on 11m Pole Cost (Rs)	2,459,000.00	3,596,000.00	3,328,000.00
Single Circuit on 13m Pole Cost (Rs)	2,691,000.00	4,196,000.00	3,954,000.00
Double Circuit on 13m Pole Cost (Rs)	-	7,131,000.00	6,476,000.00

2.1.2 33 kV Network

Code	7/4.09 mm RACOON	37/2.79 mm LYNX	19/3.76 mm ELM
Single Circuit on 10m Pole Cost (Rs)	2,420,000.00	-	-
Single Circuit on 11m Pole Cost (Rs)	2,682,000.00	3,822,000.00	3,535,000.00
Single Circuit on 13m Pole Cost (Rs)	2,905,000.00	4,458,000.00	4,219,000.00
Double Circuit on 13m Pole Cost (Rs)	-	7,813,000.00	7,082,000.00

2.2 Aerial Bundled Conductors (ABC) MV Line Cost per km.

Since 35 m LV span is used in MV ABC construction, it may be economical to use 11.0 m PS pole in MV construction. 13.0 m PS poles may be used in special construction where clearances cannot be maintained by 11.0 m poles. (E.g. Road crossings, Urban areas)

2.2.1 11 kV Network

Line	95mm ² ABC	150mm ² ABC
Single Circuit on 11 m Pole Cost (Rs)	6,784,000.00	8,782,000.00
Single Circuit on 13 m Pole Cost (Rs)	7,410,000.00	9,580,000.00
Double Circuit on 11m Pole Cost (Rs)	11,193,000.00	15,034,000.00
Double Circuit on 13m Pole Cost (Rs)	11,819,000.00	15,832,000.00

2.2.2 33 kV Network

Line	95mm ² ABC	150mm ² ABC
Single Circuit on 11 m Pole Cost (Rs)	8,877,000.00	10,263,000.00
Single Circuit on 13 m Pole Cost (Rs)	9,529,000.00	10,958,000.00
Double Circuit on 11 m Pole Cost (Rs)	15,375,000.00	17,461,000.00
Double Circuit on 13 m Pole Cost (Rs)	16,027,000.00	18,156,000.00

PS

Note

Please note that the DCC emphasized that MV Aerial Bundled Conductors should never be used in CEB network without the prior approval of the respective Additional General Managers attached to the relevant Distribution Divisions.

3) COST FOR PROVISION OF BULK SUPPLY FROM 100kVA to 1000 kVA (OUTDOOR)

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

Eg:- Cost of obtaining a 350kVA Bulk Supply Connection form a 33kV network.

Cost = Fixed Cost + Variable Cost = 700,000.00 + 350 x 3,700.00

= Rs. 1,995,000.00

The above cost schedule is inclusive of the costs of the following items too:

- Current Transformers
- ii) MCCBs & Bus Bar Chamber.
- iii) Crimp type Sockets (at the Transformer LV Terminals and MCCBs)
- iv) PVC insulated Cu Cables (This cost is valid up to 50m from Transformer LV Terminals to the MCCB. Any cable length that exceeds 50m will be charged from the customer.)
- v) Bulk Supply Meter Box.
- vi) 4 Nos. of Concrete Earthing System with 50 mm² Cables (30m) with compression lugs, Earth rods and exothermic materials

The customer shall provide the transformer plinth and meter cubicle for housing bulk supply meter box and MCCB as per the CEB guidelines.

If a new MV line has to be constructed for a bulk supply, 50% of the MV line construction cost up to the customer boundary shall be charged from the customer and the rest of the cost will be borne by CEB under system augmentation funds. If any MV line length is constructed within the customer premises, the total cost of constructing that line length shall be charged from the customer.

Note

When a bulk supply service is requested by a customer, the request must be investigated by the Provincial Commercial unit and shall submit the requirement to the Provincial Planning & Development unit for recommendations.

The Planning & Development unit shall assess the commercial requirement and provide the technical proposal based on the following.

- Shall check if any new developments are required to fulfill technical requirements.
- (ii). Shall investigate whether the excess capacity of the transformer can be utilized to draw additional feeders from the transformer to extend the existing distribution network or whether a higher capacity transformer is suitable to achieve the above.

to

5

Ceylon Electricity Board

Standard Construction Cost-2018

The Commercial unit shall issue an estimate according to clause 3 to the customer upon the provision of technical proposal.

Based on the Commercial estimate and technical proposal, the Construction unit shall prepare a detailed estimate for the job and this job will be identified as a single job which has combined funding.

The Commercial estimate shall indicate the cost recoverable and the balance from the detailed estimate shall be met by system augmentation funds.

If the excess transformer capacity is utilized in order to extend the LV distribution network, special attention must be given when placing the transformer, to minimize the possibility of shifting in the future. However, this should not prevent a customer from obtaining the requested service.

4) COST FOR AUGMENTATION OF OUTDOOR BULK SUPPLY CONNECTIONS (11 kV/LV 33 kV/LV) FROM 100kVA TO 1000 kVA

	11kV	33kV
Variable Cost per kVA (Rs.)	3,700.00	3,700.00

Eg:- Cost for augmenting the capacity from 400kVA to 600kVA from a 33kV network.

Cost = Variable Cost

= 200 (Change in kVA) x 3,700.00

= Rs. 740,000.00

Note

Any PVC cable length that exceeds 50m from Transformer LV Terminals to the MCCB will be charged from the customer.

Cost of augmentation shall be calculated based on the above. Any additional costs will be met with system augmentation funds.

For augmentations from the existing 70kVA & 95kVA to bulk supplies above 100kVA, the difference of cost from equivalent payment for the existing capacity to requested capacity as per clause 3 should be paid.

Eg:- Existing 70kVA customer requesting to augment up to 170kVA (MV line cost already paid)

Cost = Cost of Obtaining 170kVA Bulk Supply—Cost of Obtaining 70kVA Bulk Supply

 $= (700,000+170\times3700) - 470,000$

= Rs. 859,000.00

5) COST OF INSTALLATION OF MV METERING EQUIPMENT

11 kV cost (Rs)	1,518,000.00
33 kV cost (Rs)	1,821,000.00

100

Eng. P. C. C. Perera
Chairman
Distribution Coordination Committee
Addl. General delication Cost-2018

6) COST OF INSTALLATION OF GUARD

Cradle Guard (20m span with 3m width)

11 kV cost (Rs)	85,000.00
33 kV cost (Rs)	95,000.00

Note 1

Poles are not included in the above Item 6.

tab

Eng. P. C. C. Perera
Chairman
Distribution Coordination Committee
Addl. General Manager (DD-1)

7) SERVICE CONNECTIONS (OVERHEAD)

7.1 Overhead Service Connections for Domestic and Religious (Up to 42 kVA)

7.1.1 Single Phase up to 50 m

Type	Fixed Cost
30A	Rs. 17,900.00

7.1.2 Single Phase beyond 50 m

CEB shall bear the cost of development of the network up to the boundary of the land of customer. Above fixed cost will also include the cost of service connection up to 50 m from the boundary inside the customer premises. Length in excess of 50 m up to 110 m inside the premises will be charged at Rs. 750 /m. Cost of the service connection beyond 110 m inside the premises shall be borne by the customer at Rs. 1,322/m.

7.1.3 Three Phase Up to 50 m

Type	Fixed Cost
30 A	Rs. 31,500.00
60 A	Rs. 35,500.00

7.1.4 Three Phase Beyond 50 m

CEB shall bear the cost of development of the network up to the boundary of the land of customer. Above fixed cost will also include the cost of service connection up to 50m from the boundary inside the customer premises. Length in excess of 50 m up to 110 m inside the premises will be charged at Rs. 1,537/m. Cost of the service connection beyond 110 m inside the premises shall be borne by the customer at Rs. 1,623/m.

7.1.5 Single Phase to Three Phase conversion

Existing Service	Fixed Cost	
Existing Service	30 A 3 Phase	60 A 3 Phase
30 A, 1 Phase	Rs. 31,500.00	Rs. 35,500.00
30 A, 3 Phase	_	Rs. 30,000.00

Note

If conversion of existing distribution line is necessary, CEB shall bear the cost of development of the network up to the boundary of the land of customer. Above fixed cost will also include the cost of service connection up to 50 m from the boundary inside the customer premises. Cost of conversion of service connection beyond 50 m inside the premises shall be borne by the customer at Rs. 1,623/m for LV line with 3x70+54.6mm² ABC feeder and Rs. 2,002/m for LV line with 3x95+70mm² ABC feeder as applicable.



7.2 Overhead Service Connections for other Tariff Categories (Up to 42 kVA)

7.2.1 Single Phase up to 50m

Type	Fixed Cost
30A	Rs. 17,900.00

7.2.2 Single Phase beyond 50 m

CEB shall bear the cost of development of the network up to the boundary of the land of customer. Above fixed cost will also include the cost of service connection up to 50 m from the boundary inside the customer premises. Length in excess of 50 m up to 110 m inside the premises will be charged at Rs. 750/m. Cost of the service connection beyond 110 m inside the premises shall be borne by the customer at Rs. 1,322/ m.

7.2.3 Three Phase Connection from Existing (Low Voltage) Network

7.2.3.1 Three Phase Connection up to 42 kVA

(Other than Welding Plants, Metal Crushers, Saw Mills etc.)

Type	Fixed Cost	Variable Cost (Applicable for distance beyond 50m off the existing net	
1,00	Tixed Goot	3x70+54.6mm ² ABC Feeder	3x95+70mm ² ABC Feeder
30A	Rs. 31,500.00	Rs. 1,623/m	Rs. 2,002/m
60A	Rs. 35,500.00	Rs. 1,623/m	Rs. 2,002/m

Note

Cost of any Augmentation work required has to be borne by CEB.

Single phase to three phase conversion cost up to the connection point of existing network if required, to be borne by CEB.

Eng. P. C. C. Perera
Chairman
Distribution Coordination Committee
Addl. General Manager (DD-1)
2018, 03, 20

7.2.3.2 Service Connection to Welding Plants, Metal Crushers, Saw Mills etc. from existing (Low Voltage) Network (up to 42 kVA)

In providing service connections to installations having equipment such as Welding Plants, Metal Crushers, Saw Mills etc., which could have adverse effects on the other customers connected to the existing feeder, a separate feeder has to be constructed and the capital cost of substation enhancement has to be charged as per the table given below. For connections beyond 50m off the existing line route, a variable cost will be charged. If service starts from the transformer, as fixed cost is charged up to 50 m distance, CEB will draw three phase line up to 50 m. The customer has to pay the line construction cost beyond 50m up to the premises where electricity service required at a rate of Rs 1,623/m for LV line with 3x70+54.6mm² ABC feeder and Rs 2,002/m for LV line with 3x95+70mm² ABC feeder.

A separate Aerial Bundled Conductor Line (3x70+1x54.6mm² or 3x95+1x70mm² as required) shall be drawn in the existing line / new line when providing such service connections.

- (i). The above service connections shall not be given from normal customer distribution lines.
- (ii). Capital cost of the new line has been included in the fixed cost.
- (iii). When providing the connection to the First customer, CEB has to bear the balance cost of the feeder as the customer will pay only his share as given in the table below. The balance expenditure shall be charged to the System Augmentation Funds.
- (iv). The fixed cost for different categories of service connections are given in the table below.
- (v). Charges listed here are decided considering the network development cost of providing the connection. Therefore no limitation shall be applied for new connections based on the distance from the substation. Network development needed for giving new connections shall be implemented through system augmentation budget.
- (vi). The costs indicated below are valid only for the feeder section constructed on the existing poles parallel to an existing feeder. If it is required to install poles to get the connection off the existing feeder or extend the existing feeder the length from the Toff or the point of extension to the customer point shall be charged as per above rates.

The fixed cost for different categories of service connections are given in the table below:

Size of the service connection	60A, 3 Phase	30A, 3 Phase	30A, 1 Phase
No. of service connections (allowable)	2	4	4
Fixed cost per service connection (up to 50 m) to be charged from the customer	Rs.263,000.00	Rs. 182,500.00	Rs.120,000.00

15

Eng. P. C. C. Perera Chairman Distribution Coordination Committee Addl. General Manager (DD-1) 2018.03.20

7.2.4 Single Phase to Three Phase Conversion (For other Tariff categories) (Other than Welding Plants, Metal Crushers, Saw Mills etc.)

	Fixed	d Cost	Variable Cost (Applicable for distance beyond 50		
Existing Service			3x70+54.6mm ² ABC Feeder	3x95+70mm ² ABC Feeder	
	30 A 3 Phase	60 A 3 Phase	reeder	reedei	
30 A, 1 Phase	Rs. 31,500.00	Rs. 35,500.00	Rs. 1,623/m	Rs. 2,002/m	
30 A, 3 Phase	-	Rs. 30,000.00	Rs. 1,623/m	Rs. 2,002/m	

Fixed Costs

The fixed costs include the cost of MCCB or MCB, Meter Box, length of service wire & D-brackets required.

Variable Costs

Variable costs include the cost of the service beyond 50m length and line material such as poles, D-brackets, Stays, Struts etc., as applicable.

A suitable service bracket shall be provided and installed by the customer.

Note

Charges listed above in 7.1 & 7.2 are decided considering the network development cost of providing the connections. Therefore no limitation shall be applied for new connections based on the distance from the substation. Network development needed for giving new connection shall be implemented through system augmentation budget.

7.3 Multiple service connections through 42kVA connection

This does not apply to service connection to welding plants, metal crushers, saw mills etc. which falls under clause 7.2.3.2

To provide electricity supplies for multiple connections in the same building, structure or land in case of overhead network connections, the summation of which does not exceed 42kVA after applying diversity factors, a single load wire should be drawn to the building to suit 60A 3 Phase (42kVA), bus bar chambers, circuit breakers and any other associated equipment has to be installed in providing these connections.

- If the total calculated demand with all the diversity factors applied is less than 42kVA:
 - O And if the first customer or the owner of the establishment pays the connection charges, decided by clause 7.1 or 7.2 for a 60A 3 Phase Connection (in case of combination of categories 7.2 rate is applicable), additional new connections shall be considered as loop services and will be charge as per clause 9.5 and 9.6 only for 30A & 60A.
 - Or if CEB meets this capacity cost to facilitate multiple service connections, prospective customers shall be charged as per clause 7.1 & 7.2. The decision to bear the capacity cost by CEB should be granted from the relevant approving authority.



7.4 Three phase connections above 42 kVA up to 95 kVA

7.4.1 New Service Connections

The following rates are applicable for provision of connections from the existing LV network:

Туре	Fixed Cost	Variable Cost
70 kVA (with Bulk Supply Metering)	Rs. 470,000.00	Rs.2,002.00 / m
95 kVA (with Bulk Supply Metering)	Rs. 570,000.00	Rs.2,002.00 / m

Note

- i) Fixed cost listed here includes the cost of providing the requested supply inclusive of metering equipment. In case of multiple service connections bus bar chamber, incoming breaker and labour charges are already covered in this pricing formula.
- ii) Variable cost shall be charged only for the connections beyond 50m off the existing low voltage line at the given rates.
- iii) However, the total low voltage line lengths shall be less than 200 m for 70 kVA connections and 100 m for 95 kVA connections from the substation.
- iv) If the customer premise is beyond the specified length above, a new substation has to be constructed to provide the requested supply. The cost involvement to construct the substation (excluding MV line) shall to be borne by CEB.
- v) A portion of the cost of the Medium Voltage (MV) line shall be charged from the applicant as given below:
 - CEB shall bear 50% of the cost of the MV line from the existing MV network to the boundary of the land of the customer. The balance 50% of the cost of the MV line has to be paid by the customer.
 - The full cost of the MV line beyond the boundary of the land of the customer to the location of the substation shall be paid by the customer.
 - The relevant CEB cost components shall be covered from the System Augmentation funds.
- vi) To provide electricity supplies for multiple connections in the same building, structure or land in case of overhead network connections, the summation of the connections either falls within 70kVA or 95kVA after applying diversity factors, a single load wire should be drawn to the building as per clause 7.4.1 (ii), bus bar chambers, circuit breakers and any other associated equipment has to be installed in providing these connections.
 - If the total calculated demand with all the diversity factors applied is less than 95kVA:
 - And if the first customer or the owner of the establishment pays the capacity cost as per clause 7.4.1, additional new connections shall be considered as loop services and will be charge as per clause 9.5 and 9.6 only for 30A & 60A. For a 70kVA secondary connection from a 95kVA main connection, actual cost to be charged.

o Or if CEB meets this capacity cost to facilitate multiple service connections, prospective customers shall be charged as per clause 7.1, 7.2 & 7.4. The decision to bear the capacity cost by CEB should be granted from the relevant approving authority.

7.4.2 Cost of Augmentation of Three Phase Connection - Above 42 kVA up to 95 kVA

Existing kVA	63 kVA 70 k		75 kVA
Augmented kVA			
70 kVA	Rs. 150,000.00	-	
95 kVA	Rs. 250,000.00	Rs. 100,000.00	Rs. 80,000.00

Note

Any request for Augmentation for 100 kVA and above shall be charged at the rates given in Clause 4 of this circular.

Guidelines for Preparation of Estimates.

(i) Measurement of the Service Connection Length.

The Service Connection Length is the Horizontal Distance (Ground Distance) from the Pole to the Service Bracket at the customer's premises. No. allowance shall be added for the Sag or Down Run.

However, lengths of Service Wire shall be issued on the basis of actual length required to construct the Service Connection including Sag and the Down Run.

Fixed cost charged from the customer includes the cost of the length of service wire required for Sag and the Down Run.

Insulated Wires for Three Phase Service Connections (ii)

Three Phase Service Connection shall be connected with a Twin Flat Service Main Wire both core insulated (Black and Gray for two Phases) and a Duplex Service Main Wire (Third phase Brown and other Conductor for neutral).

If there is a shortage of Twin Flat Service Main Wire both core insulated, Single Core Insulated Wire may be used.

(iii) Last Span

In all categories of service connections the last span shall generally not exceed 30m, however in special circumstances it may be appropriate to change the last span slightly with the approval of the engineer concerned.

Service Connections for Customers beyond 1.8 km from the Distribution Substation (iv)

Distribution feeders shall not be extended beyond 1.8 km from the distribution substation to provide service connections.

Note

Variable Cost mentioned in 7.1 & 7.2 above are prepared based on Standard Construction Cost for LV lines.

13

Ceylon Electricity Board

Eng. P. C. C. Perera Chairman Distribution Coordination Committee Addl. General Manager (DD-1)

Standard Construction Cost-201

2018.03.20

(v) Applicable Diversity Factors for Overhead Networks

Service Type	Category	Diversity Factor
60A 3P	GP	0.75
60A 3P	Domestic	0.70
30A 3P	GP	0.60
30A 3P	Domestic	0.50
30A 1P	GP	0.50
30A 1P	Domestic	0.40

In case of air conditioned premises, rooftop solar connected installations, connections described under clause 7.2.3.2 and industrial installations the diversity factor shall be taken as 1.

15

Eng. P. C. C. Perera
Chairman
Distribution Coordination Committee
Addl. General Manager (DD-1)
2018. 03, 20

8) COST FOR OBTAINING BULK SUPPLY SERVICE CONNECTION FROM THE UNDERGROUND NETWORK

	257556	ilk Supply Service Connections from Feed	ei Filiais - TUKVA	4 & 112kVA
10-160			70kVA	112kVA
		Cost for providing single bulk supply		
8.1	а	(This cost includes LV cable, MCCB, bulk supply meter enclosure, Energy meter, etc.)	1,750,000.00	2,390,000.00
		Cost for providing multiple connections through Bulk Supply		
	b	(This cost includes LV cable, MCCB, bulk supply meter enclosure, bus bar chamber, etc.)	1,760,000.00	2,400,000.00
		Bulk Supply Service Connections from 150kVA to 1000kV		tions
	а	Fixed Cost		2,200,000.00
	b	Variable Cost per kVA *		6,400.00
	under chaml MCCE	ground cable network up to the bus bar ber including the cost of RMU, Transformer, B,BBC etc except metering equipment.		
	TVIII III	sapasing room.		
	17111111	Bulk Supply Service Connections from F	Ring/Radial Subs	stations
8.3	a	Bulk Supply Service Connections from F	Ring/Radial Subs	stations 19,500,000.00

Note 1

Above 16 MVA also this estimation method can be applied however as per the ground situation additional costs may be charged.



Eng. P. C. C. Perera
Chairman
Distribution Coordination Committee
Addl. General Manager (DD-1)
2018.03.20
Standard Construction Cost-2018

Note 2

All the above costs are without Municipal Council road reinstatement charges except for the Item 8.3 (b) The bulk supply applicants have to pay for the Municipal Council road reinstatement charges according to the actual length of cable laying for the particular bulk supply service.

Note 3

Electricity supplies for multiple users in the same building, structure or land in case of overhead network connections, a single load wire should be drawn to the building as per clause 8.1 (b), bus bar chambers, circuit breakers and any other associated equipment has to be installed in providing these connections.

- If the total calculated demand with all the diversity factors applied is 70kVA or 112kVA:
 - And if the first customer or the owner of the establishment pays the capacity cost as per clause 8.1 (b), additional new connections shall be considered as loop service and will be charge as per clause 9.5 and 9.6.
 - Or If CEB bears this capacity cost to facilitate multiple service connections, prospective customers shall be charged as per clause 8.1 (a), 9.1 and 9.3.
 The decision to bear the capacity cost by CEB should be granted from the relevant approving authority.

Eng. P. C. C. Perera Chairman Distribution Coordination Committee Addl. General Manager (DD-1)

9) SERVICE CONNECTIONS (UNDERGROUND) UP TO 42 KVA

		15 A	30A	60A
1.	Underground Service Single Phase	E-THE REPORT OF THE PARTY OF TH		
1.a)	Fixed cost(include the cost of cable up to 5m length along the trench)	Rs. 60,700.00	Rs. 60,700.00	-
1.b)	Variable cost (16mm²/2C Al. Cable) per meter length (for distance beyond 5m length)	Rs. 5,100.00	Rs. 5,100.00	-
2.	Shifting Service (U.G.) Single Phase	Detailed estima	ated cost applies.	
3.	Three Phase Service Connection			
2 01	Fixed Cost *	7.	Rs. 104,000.00	Rs. 114,000.00
3.a)			Rs. 5,600.00	Rs. 5,700.00

^{*} Fixed Cost for Three Phase 30A is calculated considering the connection is given from Mini Feeder Pillar and the fixed cost includes termination kit, 1/5th of mini feeder pillar cost, costs of labour, transport and overhead. Fixed Cost for Three Phase 60A is calculated considering the connection is given from LV Underground Distributor and the fixed cost includes termination kit, 1/4th of LV Underground Distributor cost, costs of labour, transport and overhead. Both fixed costs are up to a length of 5m from boundary inside the customer premises.

Note

Additional Cable length of 5m required to connect to the Mini Feeder Pillar after the trench and along the wall at the customer's end to connect to the MCB/MCCB is included in the fixed cost. Hence 5m length specifically mentioned in the fixed cost is the length of the cable to be laid in the trench.

The above fixed cost includes the cost of cable up to 5m from boundary inside the customer premises. Variable cost will only be charged for length of cable beyond 5m distance. For Domestic & Religious customers CEB shall bear variable cost up to the boundary of the premises from mini feeder pillar/the distributor under System Augmentation Fund.

the

Eng. P. C. C. Perera
Chairman
Distribution Coordination Committee
Addl. General Manager (DD-1)

^{**} Variable Cost for Three Phase 30A is calculated including the cost of 35mm² XLPE, Al cable and Variable Cost for Three Phase 60A is calculated including the cost of Al cable. Variable Costs shall be charged for distance beyond 5m length inside the premises.

		15 A	30A	60A
4.	Shifting Service (U.G.) Three Phase	Detailed estimate	ate shall be prep	pared.
5.	Single Phase Loop Service			
5.a)	Fixed Cost (up to 2 m distance)	Rs. 6,800.00	Rs. 6,800.00	
5.b)	Variable Cost	Rs. 160.00/m	Rs. 160.00/m	-
6.	Three Phase Loop Service			
6.a)	Fixed Cost (up to 2 m distance)	Rs. 18,400.00	Rs. 18,400.00	Rs. 21,000.00
6.b)	Variable Cost	Rs. 620/m	Rs. 620/m	Rs. 1,100/m

Policy for recovering cost in new three phase connection

When a three phase service is given from the UG network (Other than 15 A, 3P service from an existing cable at the building) following capital costs (Mini feeder pillar and associated items) are charged from the customers as follows.

a) 30A, 3ph connection from existing UG network	Capital Cost Rs. 23,100.00	Remarks 1/5 th of the total cost of MFP
b) 60A, 3ph connection from existing UG network	Rs. 28,900.00	1/4 th of the total cost of MFP

*MFP - Mini Feeder Pillar

When providing the connection to the first customer, the balance expenditure shall be charged to the System Augmentation Vote.

Eng. P. C. C. Perera Chairman Distribution Coordination Committee Addl. General Manager (DD-1)

2018.03.20

10) OTHER CHARGES.

Other charges for miscellaneous services

No	Types of Charge	Charge (Rs.)	
1.	Disconnection at the customer's request	1,250.00	
2.	Reconnection at the customer's request	1,250.00	
3.	Reconnection after a statutory disconnection	1,250.00	
4.	Testing of an energy meter used at 230 V	2,500.00	
5.	Testing of a three phase energy meter (less than 42 kVA)	3,500.00	
6.	Testing of an energy or energy/demand meter and associated equipment used at 400 V	13,500.00	
7.	Testing of an energy or energy/demand meter associated equipment (used at voltages higher than 400 V)	13,500.00	
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	2,500.00 (Deductible from the estimate)	
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	10,000.00 (Deductible from the estimate)	
16.	Issuing a duplicate bill	Free of charge	
17.	Grid interconnection of generation facility	CCE	
18.	Delays in Payment – Bulk Supply Customers 15 days after issuing the bill to the customer, a monthly interest rate of 1.16% will be charged to the bill from the 16th day onwards. If customer fails to pay the bill and interest thereon within 30 days from issuing the bill, supply will be disconnected upon disconnection order. Reconnection of the supply will be given upon the payment of outstanding amount together with 1.16% interest on the outstanding amount until the day of reconnection and Reconnection processing fee.		
19.	Delays in Payment – Ordinary Supply Customers After 30 days period, if a disconnection order is issued, a monthly interest rate of 1.16% will be charged from the customer on the outstanding amount effective from the date of issuing the disconnection order. If supply is disconnected, reconnection of the supply will be given upon the payment of outstanding amount together with interest and a reconnection processing fee.		

19

Standard Construction Cost-2018

20.	Repair of damages to Service connection wire Responsibility of removing way leaves along the path of service connection wire rests with the customer. Cost of repair to service wire damaged due to non-removal of way leaves shall be charged from the respective customers.	CCE
21.	Connection Charges for Net Metering/Net Accounting/Net Plus Schemes (LT Metered) Application Processing Charge (Rs) 1 Phase Connection Cost (Rs) 3 Phase Connection Cost (Rs)	2,000.00 6,250.00 14,200.00
21.	Connection Charges for Net Plus Schemes (HT Metered) In accordance with circular no. 2017/DCC/COM-11 dated 2017.05.17.	HT Metering cost as per Clause 5 of Standard Construction Cost
	Standard Rate for Ordinary Supply Customers to change over to the time of day tariff, one time charge for re programming the meter.	
22.	1 Phase Connection Cost (Rs) 3 Phase Connection Cost (Rs)	9,800.00 11,000.00
	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 Static meter free of charge.	
23.	Application fee for a new Bulk Supply Connection	2,000.00 (Will be set off from the estimate)
24.	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 (The customer who applies for investigation shall make a deposit equal to this amount to the distribution licensee for individual power quality assessment)	15,000.00
25.	Re-fixing of finalized accounts	CCE (Excluding Meter Cost)
26.	Issuing a detailed Account Statement	Free of cost, if available in Web. Otherwise Rs. 100.00 per page
27.	Providing Load Profile and Other Data in Smart Meters	Free of charge if remote reading facility is available in the meter.

 $^{^{*}}$ CCE – Case by Case Estimation by the Licensee based on Standard Construction Cost – 2018 and Catalogue & Price List of Materials 2018 issued by CEB.



28. Shifting of Bulk Supply Connections Associated with the Transformers (100kVA and above)

Shifting of existing Bulk Supply Connections within the premises or to a different premises under the same customer due to factory expansion, environmental considerations and other acceptable reasons shall be considered on case by case basis with the approval of the respective Distribution Division Addl. GMs.

Following Costing policy should be applied when shifting of Bulk Supply Connection Associated - with a transformer within the same premises or to the different premises. The shifting cost to be recovered from the customer as per the price formula given below.

Total cost of Full cost for Rebate for the usable Shifting cost (Labour cost for shifting the the new bulk items bulk supply (T/F L/A, DDLOs, removing CT/PT unit and supply connection equipment) connection Metering equipment)

When the new premises is in a different Province, request for shifting the connection shall be made to the Province where the new connection is required and total cost of shifting the BS connection shall be charged by the same Province. Relevant material and labour costs to be transferred between two Provinces following usual accepted procedure.

Eng. P. C. C. Perera
Chairman
Distribution Coordination Committee
Addl. General Manager (DD-1)