



Schedule of Operation & Maintenance Charges 2023

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Commercial and Renewable Regulation
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1.1 Background

Generators connected to the Distribution system are required to pay an annual charge to ESB Networks for the operation and maintenance of the substations, overhead lines, and cables built to connect their facility to the Distribution system. The annual charges are based on a standard amount per km line or cable and per item of substation equipment and, for transparency, are itemised in the same manner as the generator standard charges. These standard amounts are referred to as Operation and Maintenance unit charges.

1.2 General Points on O&M unit costs

The operation and maintenance unit costs are intended to reflect only the additional operation and maintenance costs which will be incurred by the DSO arising from the generator connection. For example, when it is proposed to replace transformers in an existing substation with larger units to allow for connection of a generator, then only the extra O&M cost arising from the larger transformers is included in the O&M unit cost. In addition, where an item of plant is shared by a number of generators, they will also share the relevant O&M charge on an annual basis. The share will be on a per MW basis and will be calculated in the same manner as the share of the capital cost.

The O&M unit costs covered in this submission cover operation and maintenance costs on distribution assets only. They are not intended to cover O&M costs on transmission assets.

In practice the O&M costs incurred on a given section of line or item of plant will vary from year to year. However, it is proposed to levy an annual charge based on the estimate of the average cost over the first 20 years of service but incremented annually for inflation. 20 years is the length of the connection agreements offered to generators.

1.3 Make-up of O&M charges

The O&M costs arising from generator connections consist of the following types of cost:

- *Planned Maintenance activities*

These are activities generally carried out on a cyclic or “as needed” basis. The planned maintenance component of the unit costs is based on ESB maintenance policies for the type of plant involved.

- *Fault repair activities.*

The fault repair component is based on an estimate of fault repair costs in the first 20 years of service.

- *Line Diversion.*

This cost arises in the case of overhead lines.

On construction of a line, ESB commits to landowners to divert a section of line free of charge if required in the event that planning permission is obtained for a new house or structure conflicting with line

- *Rates*

ESB pay rates to the local authorities based on the depreciated replacement costs of its networks assets. The O&M unit costs contain a component to reflect the additional rates payable by ESB Networks for assets used to connect the generator.

- *Telecommunication costs*

Telecommunication costs arise in relation to meters and SCADA equipment at the generator sites.

2. ESB Operation and Maintenance Charges for Year 2023

	Network Asset Type	Unit of Charge	Amount excl rates	Rates	Total Amount due (€)
Line Work					
1.	Standard 110kV line (300ACSR)	Per km	1292	1441	2733
2.	38kV 300ACSR	Per km	1280	761	2041
3.	38kV150AAAC (Mulberry) Line	Per km	517	613	1130
4.	38kV 100ACSR	Per km	517	481	998
5.	MV 150ACSR/92 SCA	Per km	325	359	684
Cable Costs (excludes all civil works and ducting)					
6.	110kV cable	Per km	253	3255	3508
7.	38kV cable	Per km	216	1174	1390
8.	MV cable	Per km	157	482	639
9.	38kV cable end mast	Per mast	0	385	385
10.	110kV cable end mast	Per mast	0	1349	1349
Station Work					
110kV stations					
11.	110kV/MV station incl. equipment (2*20MVA)	Per station	27375	27743	55118
12.	110kV/38kV 63MVA green field transformer package	Per station	16203	14938	31141
13.	110kV/38kV 31.5MVA green field transformer package	Per station	16035	11251	27286
14.	110kV/MV 20MVA green field transformer package	Per station	15757	9752	25509

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	Network Asset Type	Unit of Charge	Amount excl rates	Rates	Total Amount due (€)
15.	110kV/MV 31.5MVA green field transformer package	Per station	16035	11926	27961
16.	1*31.5MVA to 2*31.5MVA		3949	8186	12135
17.	2*31.5MVA to 2*63MVA		337	8908	9245
38kV stations					
18.	38kV/MV Station incl. equipment (2*5MVA)	Per station	13603	11204	24807
19.	38kV/MV 5MVA Green field transformer package	Per station	10678	4704	15382
20.	38kV/MV 10MVA Green field transformer package	Per station	10786	5121	15907
21.	38kV/MV 15MVA Green field transformer package	Per station	10823	5395	16218
22.	38kV/MV - install 5MVA transformer into existing station – B/B extension	Per station	2055	4828	6883
23.	38kV/MV - install 10MVA transformer into existing station – B/B extension	Per station	2163	5241	7404
24.	38kV/MV – install 5MVA transformer into existing station no B/B extension	Per station	2010	3819	5829
25.	38kV/MV – install 10MVA transformer into existing station no B/B extension	Per station	2118	4228	6346
26.	Uprate 2*5MVA to 2*10MVA		216	818	1034

Miscellaneous Station items					
	Network Asset Type	Unit of Charge	Amount excl rates	Rates	Total Amount due (€)
27.	38kV cubicle in 38kV station	Per cubicle	313	1441	1754
28.	38kV cubicle in 110kV station	Per cubicle	385	1655	2040
29.	MV cubicle in 110kV station	Per cubicle	385	1655	2040
30.	MV cubicle in 38KV outdoor station	Per cubicle	313	1441	1754
31.	MV cubicle with interface transformer	Per cubicle	806	1914	2720
32.	MV terminal station without NULEC recloser (pre-Gate 2 connections)	Per station	205	267	472
Metering and SCADA					
33.	Metering and SCADA for 2MW-5MW site	Per site	800	0	800
34.	Metering and SCADA for 5MW-10MW site	Per site	934	0	934
35.	Metering and SCADA for >10MW site	Per site	1537	0	1537
36.	Metering for <2MW site	Per site	532	0	532
37.	Protection for MV<2MW		228	144	372
38.	Protection for MV>2MW, <5MW with SCADA via GPRS		373	158	531

Metering and SCADA					
	Network Asset Type	Unit of Charge	Amount excl rates	Rates	Total Amount due (€)
39	SCADA for 38kV connections >2MW, <5MW and MV where no GPRS available		6019	523	6542
38kV customer compound [at windfarm site]					
40	38kV compound at developers site – overhead line incomer	Per station	1939	2963	4902
41	38kV compound at developers site – cable incomer	Per station	1939	3000	4939

Notes

1. Above Charges are exclusive of VAT
2. Where generators share elements of plant, the operation and maintenance charge will be divided pro-rata on the basis of their MEC. The charge will be based on the network as built except as outlined in 3. below.
3. Where the system operator decides to build other than the LCTA for system development reasons, the operation and maintenance charge will be based on the LCTA rather than the actual build
4. Operation and Maintenance Charges include a component for rates payable by ESB Networks to Local Authorities. These rates apply to transmission and distributions networks.