

Issue	Revision
5.0	1

The Statement of Use of System Charges Effective from 1 April 2023

Based Upon:

The Statement of the Connection Charging Methodology
and
The Statement of the Use of System Charging Methodology

contained within

Section 14 Parts I and II respectively
of the Connection and Use of System Code

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Introduction

This charging statement is published annually in accordance with the National Grid Electricity System Operator Licence.

This document sets out the annual Transmission Network Use of System (TNUoS) tariffs and charges for 2023/24 and the parameters used to calculate these. This document also includes the Application Fees charged by NGESO in relation to applications for connection, use of system and engineering works.

You can find further information on the methodology we use and principles which we derive the TNUoS and Connection charges in Section 14 of the Connection and Use of System Code (CUSC) – the **Statement of the Use of System Charging Methodology**. The CUSC is available on our website at:

<https://www.nationalgrideso.com/codes/connection-and-use-system-code-cusc>

If you would like to contact us or provide feedback on this document, please contact our **Revenue Team** at:

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Schedule 1

Transmission Network Use of System Charge (TNUoS)

1. Basis of 2023/24 Transmission Network Use of System Charges

The Transmission Network Use of System Charges for 2023/24 published in this document have been calculated using the methodology described in the Statement of Use of System Charging Methodology. The Onshore generation and demand tariff calculations utilises a Direct Current Load Flow (DCLF) Investment Cost Related Pricing (ICRP) transport and tariff model. Offshore Local Tariffs are calculated at the time of asset transfer and are increased by indexation each year. Offshore Local Tariffs, Onshore Local Substation Tariffs and a number of the parameters used in tariff setting are also recalculated at the start of each price control.

Three methodology changes have been approved by Ofgem, each with the implementation date of 1st April 2023, and have therefore been implemented in the 2023/24 tariffs. These are:

- CMP343: Transmission Demand Residual bandings and allocation
- CMP389: Transmission Demand Residual (TDR) band boundaries updates
- CMP391: Definition of 'Charges for Physical Assets Required for Connection'

Please note that there have previously been a number of code modifications to update the CUSC in relation to the Limiting Regulation of average generation charge (within the range of €0-2.50/MWh), and specifically there have been legal challenges resulting from Ofgem's decision to approve CUSC Modification Proposal CMP317/327. The judgement of the Court of Appeal in the appeals brought by Ofgem and SSE in relation to this matter was [published](#) on 8th November. Ofgem also issued an [open letter](#) on the same day. We are working with Ofgem to understand the next steps and will communicate with industry as soon as practicable.

If you would like further details on how the TNUoS tariffs have been calculated, changes that have been implemented and the parameters used to set tariffs, you can find it in our 2023/24 Final TNUoS report here:

<https://www.nationalgrideso.com/document/275736/download>

Further information on our current and historical TNUoS Tariffs can be found here:

<https://www.nationalgrideso.com/industry-information/charging/transmission-network-use-system-tnuos-charges>

The following tables provide a summary of some of the parameters utilised to calculate tariffs

Table 1.1: TNUoS Calculation Parameters

Parameter	Value/Basis
Transport model network, nodal generation & nodal demand data	Based upon various data sources as defined in Section 14 of the Connection and Use of System Code (CUSC)
Expansion constant	£16.800286/MWkm
Annuity factor	4.2%
Overhead factor	1.5%
Locational onshore security factor	1.76
Offshore civil engineering discount	£ 0.665605/kW

Table 1.2: Onshore Wider Cable and Overhead Line (OHL) Expansion Factors

TO Region	Cable Expansion Factor			OHL Expansion Factor		
	400kV	275kV	132kV	400kV	275kV	132kV
Scottish Hydro Electric Transmission plc	10.20	11.45	20.77	1.00	1.20	2.59
SP Transmission plc	10.20	11.45	22.58	1.00	1.20	2.87
National Grid Electricity Transmission plc	10.20	11.45	22.58	1.00	1.20	2.87

Table 1.3 Onshore Local Expansion Factors (All TO Regions)

2dp	400kV	275kV	132kV			
			Single Circuit <200MVA	Double Circuit <200MVA	Single Circuit >=200MVA	Double Circuit >=200MVA
Cable Expansion Factor	10.20	11.45	22.58	22.58	22.58	22.58
OHL Expansion Factor	1.00	1.20	10.33	8.38	5.91	3.95

Table 1.4 Offshore Local Expansion Factors

Offshore Power Station	Local Expansion Factor (to 2 d.p.)
Barrow	82.41
Beatrice	7.57
Burbo Bank	26.61
Dudgeon	20.63
Galloper	19.28
Greater Gabbard	48.82, 46.59
Gunfleet	93.54
Gwynt Y Mor	45.45
Hornsea 1A	20.59
Hornsea 1B	19.70
Hornsea 1C	18.02
Humber Gateway	43.44
Lincs	74.03
London Array	51.85
Ormonde	79.28
Race Bank	11.00
Rampion	32.94
Robin Rigg	324.85
Robin Rigg West	324.85
Sheringham Shoal	47.12
Thanet	78.36
Walney 1	68.69
Walney 2	61.65
Walney 3	17.34
Walney 4	20.83
West of Duddon Sands	65.29
Westermost Rough	85.40

Please note Greater Gabbard has a Local Expansion Factor for each offshore platform due to varying circuit ratings.

Further Offshore Local Expansion Factors applicable to generation connecting to offshore transmission infrastructure during 2023/24 will be published in future revisions of this statement following the completion of asset transfer.

These scaling factors and generation plant types are set out in the latest Security and Quality of Supply Standard (SQSS), and are used to calculate TNUoS tariffs.

Table 1.5 Generation scaling factors for the purpose of tariff calculation

Generation Plant Type	Peak Security Background	Year-Round Background
Intermittent	Fixed (0%)	Fixed (70%)
Nuclear & CCS	Variable	Fixed (85%)
Interconnectors	Fixed (0%)	Fixed (100%)
Hydro	Variable	Variable
Electricity Storage (including Pumped Storage)	Variable	Fixed (50%)
Peaking	Variable	Fixed (0%)
Other (Conventional)	Variable	Variable

These categories are used to calculate the Not Shared Year-Round and Shared Year-Round tariffs. The categorisation is based on generators' impact on the transmission network, and do not reflect carbon intensity or energy policies. "Carbon" means "flexible generators" and "Low Carbon" means "inflexible generators".

Table 1.6 Categorisation of Low Carbon and Carbon generation

Carbon	Low Carbon
Coal	Wind
Gas	Hydro (excl. Pumped Storage)
Biomass	Nuclear
Oil	Marine
Electricity Storage (including Pumped Storage)	Solar
Interconnectors	Tidal

The categorisation will be updated from time to time, to include new technologies.

2. Schedule of Transmission Network Use of System Wider Zonal Generation Charges (£/kW) in 2023/24

This section summarises the generation tariffs. The tariffs include the implementation of CUSC modification proposals CMP317/327 and CMP391, which were raised following Ofgem's decision on the Targeted Charging Review (TCR) and in particular the Transmission Generation Residual (TGR).

The generation adjustment is used to ensure generation tariffs are compliant with Limiting Regulation, which requires total TNUoS recovery from generators to be within the range of €0-2.50/MWh on average.

As per Ofgem's decision on CMP317/327, followed by the implementation of CMP391, charges for the "Connection Exclusion" (i.e. assets built for generation connection) are not included in the €0-2.50/MWh range. In addition, TNUoS local charges associated with pre-existing assets are included in the €0-2.50/MWh range.

The judgement of the Court of Appeal in the appeals brought by Ofgem and SSE in relation to Ofgem's decision to approve CUSC Modification Proposal CMP317/327 was [published](#) on 8th November and Ofgem also issued an [open letter](#) on the same day. We are working with Ofgem to understand the next steps and will communicate with industry as soon as practicable.

The following table provides the Wider Zonal Generation TNUoS tariffs applicable from 1 April 2023.

Table 1.7 Wider Zonal Generation TNUoS Tariffs

Generation Tariffs		System Peak Tariff	Shared Year Round Tariff	Not Shared Year Round Tariff	Adjustment Tariff	Conventional Carbon	Conventional Low Carbon	Intermittent
						40%	75%	45%
Zone	Zone Name	(£/kW)	(£/kW)	(£/kW)	(£/kW)	Load Factor (£/kW)	Load Factor (£/kW)	Load Factor (£/kW)
1	North Scotland	2.558709	20.305939	17.235592	-0.928179	16.647142	34.095576	25.445086
2	East Aberdeenshire	3.171138	11.427984	17.235592	-0.928179	13.708389	28.049539	21.450006
3	Western Highlands	2.710368	18.493578	16.686853	-0.928179	15.854361	32.339226	24.080784
4	Skye and Lochalsh	2.626662	18.493578	23.249693	-0.928179	18.395791	38.818360	30.643624
5	Eastern Grampian and Tayside	3.700935	13.332871	14.334388	-0.928179	13.839660	27.106797	19.406001
6	Central Grampian	3.328099	13.788852	14.755544	-0.928179	13.817678	27.497103	20.032348
7	Argyll	2.700601	11.596102	21.623762	-0.928179	15.060368	32.093261	25.913829
8	The Trossachs	2.800923	11.596102	12.689997	-0.928179	11.587184	23.259818	16.980064
9	Stirlingshire and Fife	2.103830	10.674622	12.039268	-0.928179	10.261207	21.220886	15.914669
10	South West Scotlands	0.370923	11.025484	12.264853	-0.928179	8.758879	19.976710	16.298142
11	Lothian and Borders	3.605846	11.025484	7.386751	-0.928179	10.042561	18.333531	11.420040
12	Solway and Cheviot	1.146695	7.291170	6.952777	-0.928179	5.916095	12.639671	9.305625
13	North East England	3.832599	5.572265	4.386436	-0.928179	6.887900	11.470055	5.965776
14	North Lancashire and The Lakes	0.908507	5.572265	1.478619	-0.928179	2.800682	5.638146	3.057959
15	South Lancashire, Yorkshire and Humber	4.545364	2.018955	0.292103	-0.928179	4.541608	5.423504	0.272454
16	North Midlands and North Wales	2.975847	0.674119	-	-0.928179	2.317316	2.553257	-0.624825
17	South Lincolnshire and North Norfolk	1.934573	2.933009	-	-0.928179	2.179598	3.206151	0.391675
18	Mid Wales and The Midlands	1.004435	2.880546	-	-0.928179	1.228474	2.236666	0.368067
19	Anglesey and Snowdon	4.248151	0.751303	-	-0.928179	3.620493	3.883449	-0.590093
20	Pembrokeshire	6.776956	-8.818684	-	-0.928179	2.321303	-0.765236	-4.896587
21	South Wales & Gloucester	1.831177	-8.700561	-	-0.928179	-2.577226	-5.622423	-4.843431
22	Cotswold	1.157805	4.331887	-11.779252	-0.928179	-2.749320	-8.300711	-10.758082
23	Central London	-3.516583	4.331887	-3.935042	-0.928179	-4.286024	-5.130889	-2.913872
24	Essex and Kent	-2.815943	4.331887	-	-0.928179	-2.011367	-0.495207	1.021170
25	Oxfordshire, Surrey and Sussex	-0.353416	-1.860957	-	-0.928179	-2.025978	-2.677313	-1.765610
26	Somerset and Wessex	-0.786734	-2.609986	-	-0.928179	-2.758907	-3.672403	-2.102673
27	West Devon and Cornwall	-1.216180	-7.435294	-	-0.928179	-5.118477	-7.720830	-4.274061

The System Peak, Shared Year-Round and Not Shared Year-Round tariffs are locational elements that reflect the cost of providing incremental capacity to generation on an area of the main integrated onshore transmission system. The non-locational adjustment ensures that the appropriate amount of transmission revenue is recovered from generators within the generation cap of €0-2.50/MWh.

For conventional low-carbon generation technologies, the wider zonal generation tariff is the sum of the Peak Tariff, the Shared Year-Round Tariff scaled by the generator's Annual Load Factor, the Not Shared Year-Round Tariff and the Adjustment Tariff.

For conventional carbon generation technology, the wider zonal generation tariff is the sum of the Peak Tariff and the Adjustment Tariff, and the Shared Year-Round Tariff and Not Shared Year-Round Tariff scaled by the generator's Annual Load Factor (ALF).

For intermittent generation technologies, the wider zonal generation tariff is the sum of the Shared Year-Round Tariff scaled by the generator's Annual Load Factor, the Not Shared Year-Round Tariff and the Adjustment Tariff.

The 40%, 75% and 45% ALFs used in this table for the Conventional Carbon, Conventional Low Carbon and Intermittent example tariffs are for illustration only. Tariffs for individual generators are calculated using their own ALF.

Wider generation charges are charged based on which zone the transmission substation is in that the generator connects to.

3. Schedule of Annual Load Factors for 2023/24

The below tables show the final Annual Load Factors (ALFs) to be used in the calculation of generator TNUoS tariffs for 2023/24, effective from 1 April 2023. The ALFs are based on generation data for the last five years from 2017/18 until 2021/22. Where historic data is not available for a new or mothballed station, we use a generic ALF corresponding to the station's generation technology type.

Table 1.8 Annual Load Factors

Power Station	Technology	Specific ALF
ABERDEEN	Offshore_Wind	41.2497%
ACHRUACH	Onshore_Wind	41.8315%
AFTON	Onshore_Wind	45.7149%
AIKENGALL II	Onshore_Wind	29.8211%
AN SUIDHE	Onshore_Wind	37.0169%
ARECLEOCH	Onshore_Wind	31.4297%
BAD A CHEO	Onshore_Wind	40.9230%
BARROW	Offshore_Wind	38.9808%
BEATRICE	Offshore_Wind	52.1095%
BEAULY CASCADE	Hydro	33.9955%
BEINNEUN	Onshore_Wind	36.2414%
BHLARAI DH	Onshore_Wind	38.1844%
BLACK LAW	Onshore_Wind	23.0469%
BLACKCRAIG WINDFARM	Onshore_Wind	47.0797%
BLACKLAW EXTENSION	Onshore_Wind	31.7893%
BRIMSDOWN	CCGT_CHP	36.7658%
BURBO BANK EXT	Offshore_Wind	45.8737%
CARRAIG GHEAL	Onshore_Wind	45.7276%
CARRINGTON	CCGT_CHP	56.6350%
CLUNIE	Hydro	37.6808%
CLYDE (NORTH)	Onshore_Wind	39.5031%
CLYDE (SOUTH)	Onshore_Wind	35.3199%
CONNAHS QUAY	CCGT_CHP	19.6681%
CONON CASCADE	Hydro	51.9796%
CORBY	CCGT_CHP	1.1514%
CORRIEGARTH	Onshore_Wind	45.0396%
CORRIEMOILLIE	Onshore_Wind	31.3833%
CORYTON	CCGT_CHP	24.5891%
COTTAM DEVELOPMENT CENTRE	CCGT_CHP	58.7220%
COUR	Onshore_Wind	55.5799%
COWES	Gas_Oil	0.1260%
COWLEY	Battery	3.6205%
CROSSDYKES	Onshore_Wind	32.5062%
CRUACHAN	Pumped_Storage	7.6239%
CRYSTAL RIG II	Onshore_Wind	49.0060%
CRYSTAL RIG III	Onshore_Wind	51.4605%
DAMHEAD CREEK	CCGT_CHP	35.1748%
DEESIDE	Reactive_Compensation	2.0130%
DERSALLOCH	Onshore_Wind	34.8754%

Power Station	Technology	Specific ALF
DIDCOT B	CCGT_CHP	48.4530%
DIDCOT GTS	Gas_Oil	0.4348%
DINORWIG	Pumped_Storage	10.3056%
DORENELL	Onshore_Wind	50.4424%
DOUGLAS WEST	Onshore_Wind	39.7272%
DRAX	Coal	48.3682%
DUDGEON	Offshore_Wind	48.6844%
DUNGENESS B	Nuclear	13.2982%
DUNLAW EXTENSION	Onshore_Wind	28.2865%
DUNMAGLASS	Onshore_Wind	47.8583%
EAST ANGLIA 1	Offshore_Wind	43.3009%
EDINBANE WIND	Onshore_Wind	32.7277%
ERROCHTY	Hydro	20.5253%
EWE HILL	Onshore_Wind	31.8983%
FALLAGO	Onshore_Wind	49.4378%
FARR WINDFARM	Onshore_Wind	39.2173%
FASNAKYLE G1 & G3	Hydro	44.5979%
FAWLEY CHP	CCGT_CHP	68.0053%
FFESTINIOG	Pumped_Storage	3.5938%
FINLARIG	Hydro	60.1616%
FOYERS	Pumped_Storage	12.8748%
FREASDAIL	Onshore_Wind	39.3202%
GALAWHISTLE	Onshore_Wind	46.3344%
GALLOPER	Offshore_Wind	53.2737%
GARRY CASCADE	Hydro	57.0831%
GLANDFORD BRIGG	CCGT_CHP	0.5969%
GLEN APP	Onshore_Wind	24.1678%
GLEN KYLLACHY WIND FARM	Onshore_Wind	39.6981%
GLENDOE	Hydro	32.9976%
GLENMORISTON	Hydro	41.6558%
GORDONBUSH	Onshore_Wind	36.8801%
GRAIN	CCGT_CHP	47.2274%
GRANGEMOUTH	CCGT_CHP	58.7659%
GREAT YARMOUTH	CCGT_CHP	47.1331%
GREATER GABBARD	Offshore_Wind	43.8536%
GRIFFIN WIND	Onshore_Wind	26.4163%
GUNFLEET SANDS I	Offshore_Wind	42.4513%
GUNFLEET SANDS II	Offshore_Wind	42.1757%
GWYNT Y MOR	Offshore_Wind	43.2917%
HADYARD HILL	Onshore_Wind	31.5777%
HALSARY WIND FARM	Onshore_Wind	41.5025%
HARESTANES	Onshore_Wind	27.0347%
HARTLEPOOL	Nuclear	80.5555%
HEYSHAM	Nuclear	77.2160%
HINKLEY POINT B	Nuclear	75.2911%
HORNSEA 1A	Offshore_Wind	45.1186%
HORNSEA 1B	Offshore_Wind	52.8447%
HORNSEA 1C	Offshore_Wind	48.5767%
HORNSEA 2A	Offshore_Wind	32.5769%
HORNSEA 2B	Offshore_Wind	36.5196%
HORNSEA 2C	Offshore_Wind	40.8347%
HUMBER GATEWAY	Offshore_Wind	48.2035%
IMMINGHAM	CCGT_CHP	67.7845%
INDIAN QUEENS	Gas_Oil	0.0986%
J G PEARS	CCGT_CHP	43.6097%
KEADBY	CCGT_CHP	31.7940%
KEADBY II CCGT POWER STATION	CCGT_CHP	44.3009%
KEITH HILL	Onshore_Wind	23.6356%

Power Station	Technology	Specific ALF
KEMSLEY	Battery	3.3858%
KENNOXHEAD WIND FARM EXTENSION	Onshore_Wind	33.9531%
KILBRAUR	Onshore_Wind	45.4145%
KILGALLIOCH	Onshore_Wind	41.8391%
KILLIN CASCADE	Hydro	39.1560%
KILLINGHOLME (POWERGEN)	Gas_Oil	1.3869%
KINGS LYNN A	CCGT_CHP	42.7522%
KYPE MUIR	Onshore_Wind	36.8085%
LANGAGE	CCGT_CHP	32.2526%
LINCS WIND FARM	Offshore_Wind	48.6483%
LITTLE BARFORD	CCGT_CHP	46.6809%
LOCHLUICHART	Onshore_Wind	32.4110%
LONDON ARRAY	Offshore_Wind	44.9231%
LYNEMOUTH	Biomass	87.8301%
MARCHWOOD	CCGT_CHP	67.7633%
MARK HILL	Onshore_Wind	29.1978%
MEDWAY	CCGT_CHP	28.1004%
MIDDLE MUIR	Onshore_Wind	38.0361%
MILLENNIUM	Onshore_Wind	51.0024%
MINNYGAP	Onshore_Wind	31.8869%
MORAY EAST POWER STATIONS	Offshore_Wind	42.6115%
NANT	Hydro	34.2570%
NURSLING TERTIARY	Battery	3.4407%
ORMONDE	Offshore_Wind	39.3935%
PEMBROKE	CCGT_CHP	68.0711%
PEN Y CYMOEDD	Onshore_Wind	35.3191%
PETERBOROUGH	CCGT_CHP	0.5902%
PETERHEAD	CCGT_CHP	52.4949%
POGBIE	Onshore_Wind	29.4316%
RACE BANK	Offshore_Wind	46.9331%
RAMPION	Offshore_Wind	41.5034%
RATCLIFFE-ON-SOAR	Coal	14.9703%
ROBIN RIGG EAST	Offshore_Wind	38.2101%
ROBIN RIGG WEST	Offshore_Wind	41.4465%
ROCKSAVAGE	CCGT_CHP	31.0175%
RYE HOUSE	CCGT_CHP	8.7034%
SALTEND	CCGT_CHP	71.8558%
SANQUHAR	Onshore_Wind	53.8253%
SEABANK	CCGT_CHP	29.3215%
SELLAFIELD	CCGT_CHP	4.7119%
SEVERN POWER	CCGT_CHP	25.0221%
SHERINGHAM SHOAL	Offshore_Wind	48.5261%
SHOREHAM	CCGT_CHP	24.2583%
SIZEWELL B	Nuclear	77.6840%
SLOY G2 & G3	Hydro	12.5655%
SOUTH HUMBER BANK	CCGT_CHP	42.0058%
SPALDING	CCGT_CHP	47.1068%
SPALDING ENERGY EXPANSION	CCGT_CHP	6.7784%
STAYTHORPE	CCGT_CHP	55.1719%
STRATHY NORTH & SOUTH	Onshore_Wind	35.9581%
STRONELAIRG	Onshore_Wind	45.3083%
SUTTON BRIDGE	CCGT_CHP	17.6352%
TAYLORS LANE	Gas_Oil	0.3348%
TEES RENEWABLE	Biomass	14.6383%
THANET	Offshore_Wind	37.7919%
TODDLBURN	Onshore_Wind	35.5609%
TORNESS	Nuclear	85.1711%
TRALORG	Onshore_Wind	31.8653%

Power Station	Technology	Specific ALF
TRITON KNOLL OFFSHORE WIND FARM	Offshore_Wind	32.3132%
TWENTYSHILLING WIND FARM	Onshore_Wind	33.3100%
USKMOUTH	Coal	0.0079%
WALNEY 4	Offshore_Wind	52.2874%
WALNEY I	Offshore_Wind	44.1480%
WALNEY II	Offshore_Wind	51.0690%
WALNEY III	Offshore_Wind	53.3709%
WEST BURTON	Coal	7.3043%
WEST BURTON B	CCGT_CHP	55.4763%
WEST OF DUDDON SANDS	Offshore_Wind	50.1171%
WESTERMOST ROUGH	Offshore_Wind	53.9553%
WHITELEE	Onshore_Wind	29.5296%
WHITELEE EXTENSION	Onshore_Wind	26.3097%
WHITESIDE HILL	Onshore_Wind	57.2428%
WILTON	CCGT_CHP	20.4635%
WINDY RIG WIND FARM	Onshore_Wind	34.1924%
WINDY STANDARD II	Onshore_Wind	51.8141%

Table 1.9 Generic Annual Load Factors

Technology	Generic ALF
Battery	1.2391%
Biomass	43.9150%
CCGT_CHP [#]	49.3613%
Coal	17.6627%
Gas_Oil	0.4762%
Hydro	41.6409%
Nuclear	68.2026%
Offshore_Wind	46.9350%
Onshore_Wind	39.4259%
Pumped_Storage	8.5995%
Reactive_Compensation	0.0000%
Solar	10.9000%
Tidal	11.6000%
Wave	2.9000%

These Generic ALFs are calculated in accordance with CUSC 14.15.111.

[#] Includes OCGTs (Open Cycle Gas Turbine generating plant).

*Note: due to no metered data being available the Generic ALF values for Wave, Tidal and Solar technologies are taken from the BEIS publication:

<https://www.gov.uk/government/publications/renewables-obligation-level-calculations-2023-to-2024>

4. Schedule of Transmission Network Use of System Local Substation Generation Charges (£/kW) in 2023/24

The following table provides the Local Substation Generation TNUoS tariffs applicable to all generation directly connected to the onshore GB Transmission Network from 1 April 2023

Table 1.10 Onshore Local Substation Tariffs (£/kW)

Substation Rating	Connection Type	132kV	275kV	400kV
<1320 MW	No redundancy	0.163811	0.081909	0.056497
<1320 MW	Redundancy	0.345168	0.175316	0.124485
>=1320 MW	No redundancy		0.240647	0.171334
>=1320 MW	Redundancy		0.362133	0.260462

The above tariffs reflect the cost of the transmission substation equipment provided to facilitate generation connecting to an onshore substation.

The following table provides the Local Substation Generation TNUoS tariffs applicable to generation connecting to offshore transmission infrastructure from 1 April 2023.

Table 1.11 Offshore Local Substation Tariffs (£/kW)

Offshore Generator	Local Substation (£/kW)	Offshore Generator	Local Substation (£/kW)
Barrow	10.258673	Ormonde	31.540966
Beatrice	8.398974	Race Bank	11.555007
Burbo Bank	13.045517	Rampion	9.439328
Dudgeon	19.081129	Robin Rigg	-0.692284
Galloper	19.532116	Robin Rigg West	-0.692284
Greater Gabbard	19.114039	Sheringham Shoal	29.509024
Gunfleet	22.325054	Thanet	22.533848
Gwynt y mor	24.497892	Walney 1	27.241862
Hornsea 1A	8.719458	Walney 2	25.344557
Hornsea 1B	8.719458	Walney 3	11.869367
Hornsea 1C	8.719458	Walney 4	11.869367
Humber Gateway	14.417146	West of Duddon Sands	10.615060
Lincs	20.014443	Westermost Rough	21.583947
London Array	13.582228		

Further local substation tariffs applicable to generation connecting to offshore transmission infrastructure during 2023/24 will be published in future revisions of this statement following the completion of asset transfer.

5. Schedule of Transmission Network Use of System Local Circuit Charges (£/kW) in 2023/24

Where a transmission-connected generator is not directly connected to the Main Interconnected Transmission System (MITS) nodes, the onshore local circuit tariffs reflect the cost and flows on circuits between its connection and the MITS nodes. Local circuit tariffs can change as a result of system power flows and TNUoS parameters. Depending on the topology, onshore local circuits with circuit redundancy had tariff changes as a result of CMP357, which changed with the security factor from 1.8 to 1.76. Onshore local circuit tariffs are listed in the table below.

Table 1.12 Onshore Local Circuit Tariffs

Substation Name	(£/kW)	Substation Name	(£/kW)	Substation Name	(£/kW)
Aberdeen Bay	2.902034	Dumnaglass	0.968386	Langage	-0.375074
Achruach	4.779480	Dunhill	1.594208	Lochay	0.416560
Aigas	0.744492	Dunlaw Extension	1.685580	Luichart	0.641683
An Suidhe	-1.068738	Edinbane	7.793870	Marchwood	0.425506
Arecleoch	2.645559	Enoch Hill	1.669108	Mark Hill	0.996676
Beinneun Wind Farm	1.499498	Ewe Hill	1.692970	Middle Muir	2.615649
Bhlaraidh Wind Farm	0.734958	Fallago	-0.073578	Middleton	0.167453
Black Hill	1.728519	Farr	3.968392	Millennium Wind	1.868744
Black Law	1.989073	Fernocho	5.007516	Mossford	3.208094
BlackCraig Wind Farm	6.615841	Ffestiniog	0.281594	Nant	2.857146
BlackLaw Extension	4.218087	Finlarig	0.364490	Necton	-0.425691
Broken Cross	1.214600	Foyers	0.326024	Rhigos	0.117344
Clyde (North)	0.124836	Galawhistle	1.162128	Rocksavage	0.020105
Clyde (South)	0.144367	Glen Kyllachy	0.520700	Saltend	-0.002284
Corriegarth	2.777066	Glendoe	2.093849	Sandy Knowe	3.589189
Corriemoillie	1.855154	Glenglass	5.278109	South Humber Bank	-0.206681
Coryton	0.049691	Gordonbush	0.011052	Spalding	0.304901
CREAG RIABHACH	3.818465	Griffin Wind	10.799672	Strathbrora	-0.115199
Cruachan	2.032133	Hadyard Hill	3.150753	Strathy Wind	1.932256
Culligran	1.972922	Harestanes	2.660776	Stronelairg	1.222997
Cumberhead Collector	0.795543	Hartlepool	0.670932	Wester Dod	0.387343
Deanie	3.241230	Invergarry	0.416560	Whitelee	0.120809
Dersalloch	2.742000	Kennoxhead	4.554787	Whitelee Extension	0.335850
Dinorwig	2.670461	Kilgallioch	1.198025		
Dorenell	2.335836	Kilmorack	0.224810		
Douglas North	0.781050	Kype Muir	1.688418		

The following table provides the Local Circuit Generation TNUoS tariffs applicable to generation connecting to offshore transmission infrastructure from 1 April 2023.

Table 1.13 Offshore Local Circuit Tariffs

Offshore Generator	Local Circuit (£/kW)	Offshore Generator	Local Circuit (£/kW)
Barrow	54.196042	Ormonde	58.956904
Beatrice	23.028560	Race Bank	32.093562
Burbo Bank	25.212986	Rampion	24.692880
Dudgeon	29.938585	Robin Rigg	39.295488
Galloper	30.892051	Robin Rigg West	39.295488
Greater Gabbard	44.231809	Sheringham Shoal	34.754460
Gunfleet	20.587704	Thanet	42.217215
Gwynt y mor	24.220627	Walney 1	54.463409
Hornsea 1A	30.850803	Walney 2	51.578699
Hornsea 1B	30.850803	Walney 3	24.046627
Hornsea 1C	30.850803	Walney 4	24.046627
Humber Gateway	33.077894	West of Duddon Sands	52.914686
Lincs	78.709959	Westermost Rough	36.733135
London Array	46.568255		

Further local circuit tariffs applicable to generation connecting to offshore transmission infrastructure during 2023/24 will be published in future revisions of this statement following the completion of asset transfer.

6. Transmission Network Use of System STTEC and LDTEC Charges in 2023/24

Short-Term Transmission Entry Capacity (STTEC) can be arranged in 4, 5 or 6 week blocks, with the tariff for the applicable duration applying. The STTEC tariff is calculated in accordance with CUSC paragraph 14.16.3 as follows:

$$\text{STTEC Tariff (in £/kW)} = \frac{\text{FT} \times 0.9 \times \text{STTEC Period (in days)}}{120}$$

Where FT = Final annual TNUoS Tariff (wider + local circuit + local substation tariffs) for the generator (in £/kW)

The Limited Duration Transmission Entry Capacity (LDTEC) tariff is applied at two rates during the year. The higher LDTEC rate applies to the first 17 weeks of access within a charging year (whether consecutive or not), and the lower LDTEC rate applies to any subsequent access within the year. The LDTEC tariff is calculated in accordance with CUSC paragraph 14.16.6 as follows:

$$\text{Initial 17 weeks (higher rate): LDTEC Tariff (in £/kW/week)} = \frac{\text{FT} \times 0.9 \times 7}{120}$$

$$\text{Remaining weeks (lower rate): LDTEC Tariff (in £/kW/week)} = \frac{\text{FT} \times 0.1075 \times 7}{(316 - 120)}$$

Where FT = Final annual TNUoS Tariff (wider + local circuit + local substation tariffs) for the generator (in £/kW)

If you would like us to calculate an STTEC Tariff or LDTEC Tariff for you, please contact us at:

tnuos.queries@nationalgrideso.com

To make an application for STTEC or LDTEC, please complete [CUSC](#) Exhibit P (for STTEC) or Exhibit S (for LDTEC) and submit your application to:

transmissionconnections@nationalgrideso.com

7. Schedule of Pre-Asset Transfer Related Embedded Transmission Use of System Charges in 2023/24

The following table provides the Pre-Asset Transfer Related Embedded Transmission Use of System (ETUoS) tariffs applicable to embedded transmission connected offshore generation from 1 April 2023. The relating charge is used to recover the element of the Offshore Transmission Operator's Revenue that relates to distribution charges paid in the development of the offshore transmission network¹.

Table 1.15 Pre-Asset Transfer ETUoS Tariff (£/kW)

Offshore Generator	ETUoS
Barrow	1.345762
Gunfleet	3.847960
Ormonde	0.469837
Robin Rigg	12.590025
Robin Rigg West	12.590025
Sheringham Shoal	0.755460
Thanet	1.016317

Please note that in addition to the charges listed above, any enduring distribution charges made to NGENSO will be passed through to the relating generator in the form of an ETUoS charge².

Further Pre-Asset Transfer Related ETUoS tariffs applicable to generation connecting to offshore transmission infrastructure during 2023/24 will be published in future revisions of this statement following the completion of asset transfer.

¹ Please note that this is defined in CUSC section 14 as ETUoS_{OFTO}

² Please note that this is defined in CUSC section 14 as ETUoS_{DNO}

8. Schedule of Transmission Network Use of System Half hourly (HH) Demand Tariffs (£/kW) and Non half Hourly (NHH) Demand Tariffs (p/kWh) for 2023/24

There are two types of demand, Half-Hourly metered (HH) and Non-Half-Hourly metered (NHH). The following table provides the Zonal Demand tariffs for Half Hourly metered demand, Energy Consumption TNUoS tariffs for non-Half-Hourly metered demand and the tariffs for Embedded Export (EET) which are applicable from 1 April 2023.

Table 1.16 Zonal Demand and Energy Consumption TNUoS Tariffs

Zone	Zone Name	HH Demand Tariff (£/kW)	NHH Demand Tariff (p/kWh)	Embedded Export Tariff (£/kW)
1	Northern Scotland	-	-	-
2	Southern Scotland	-	-	-
3	Northern	-	-	-
4	North West	-	-	-
5	Yorkshire	-	-	-
6	N Wales & Mersey	-	-	0.410283
7	East Midlands	-	-	2.051847
8	Midlands	3.046892	0.400584	5.594200
9	Eastern	0.272515	0.037686	2.819823
10	South Wales	6.689801	0.794120	9.237109
11	South East	2.928529	0.402166	5.475837
12	London	4.374542	0.489298	6.921850
13	Southern	5.290615	0.703544	7.837923
14	South Western	7.645707	1.079091	10.193015

A demand User's zone will be determined by the GSP Group to which the User is deemed to be connected.

The Demand Tariff is applied to the demand User's average half-hourly metered demand over the three Triad periods, as described in the Statement of Use of Charging Methodology.

Demand Tariffs are a combination of a locational element that reflects the cost of providing incremental capacity to demand on an area of the main integrated onshore transmission system, and a non-locational residual element will now be charged in the form of a set of daily charges per site across the banding categories and thresholds. This ensures that the appropriate amount of transmission revenue is recovered from demand Users.

In the case of parties liable for both generation and demand charges, the demand tariff zone applicable in respect of that party's demand will be that in which the Transmission Licensee's substation to which the party is connected is geographically located. For example, if a power station were connected at a Transmission Licensee's substation that is geographically located within demand zone 1, it would pay the zone 1 demand tariff.

The NHH demand tariff is based on the annual energy consumption during the period 16:00 hrs to 19:00 hrs (i.e. settlement periods 33 to 38 inclusive) over the relevant charging year.

Following the approval and implementation of CMP343 and CMP381, the residual element of demand charges will be calculated on a £/Site/Day methodology with sites allocated into a band.

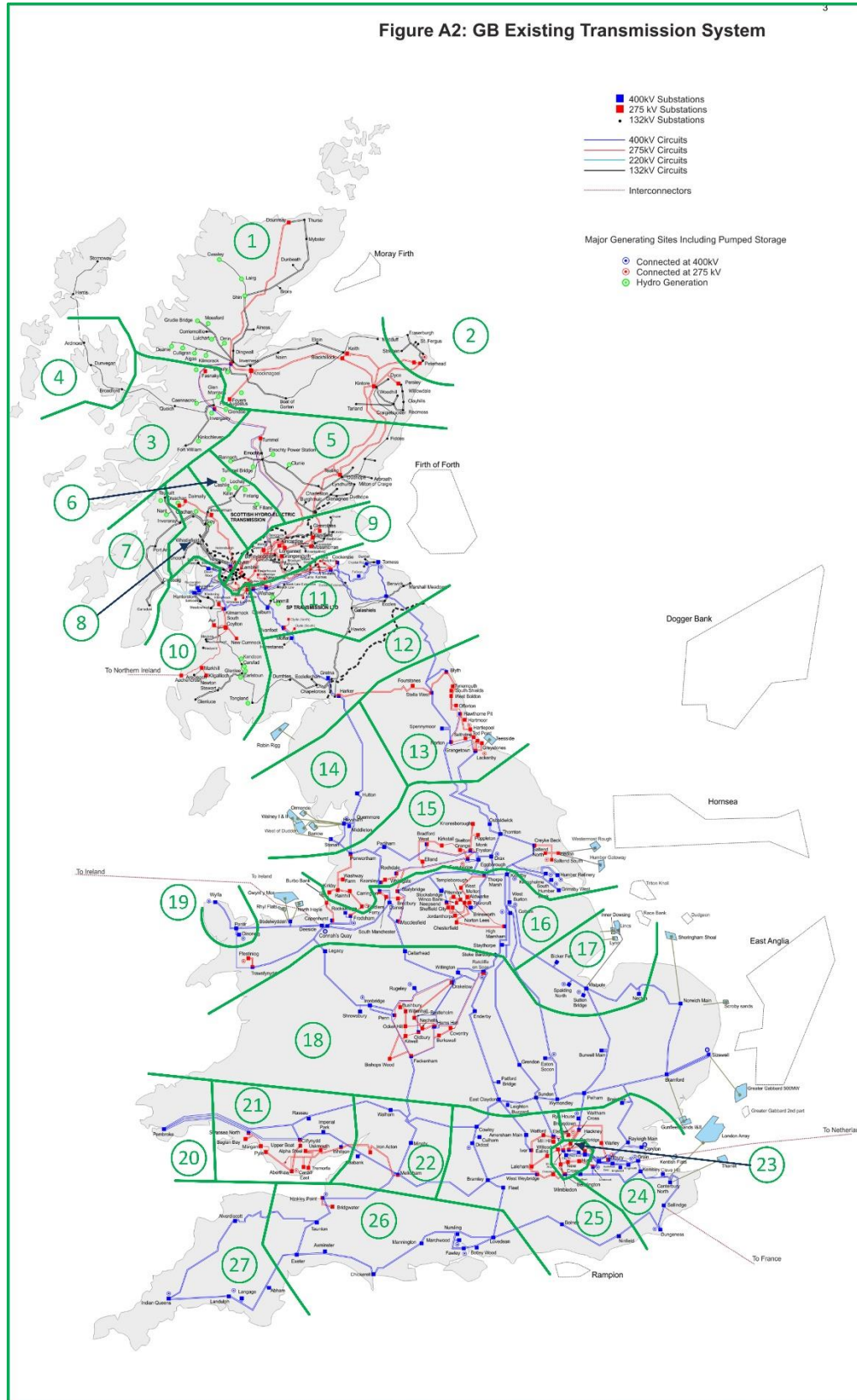
The following table provides the demand residual banded tariffs across each of the banding criteria which are applicable to Final Demand Sites from 1 April 2023.

Table 1 Non-Locational demand residual banded charges

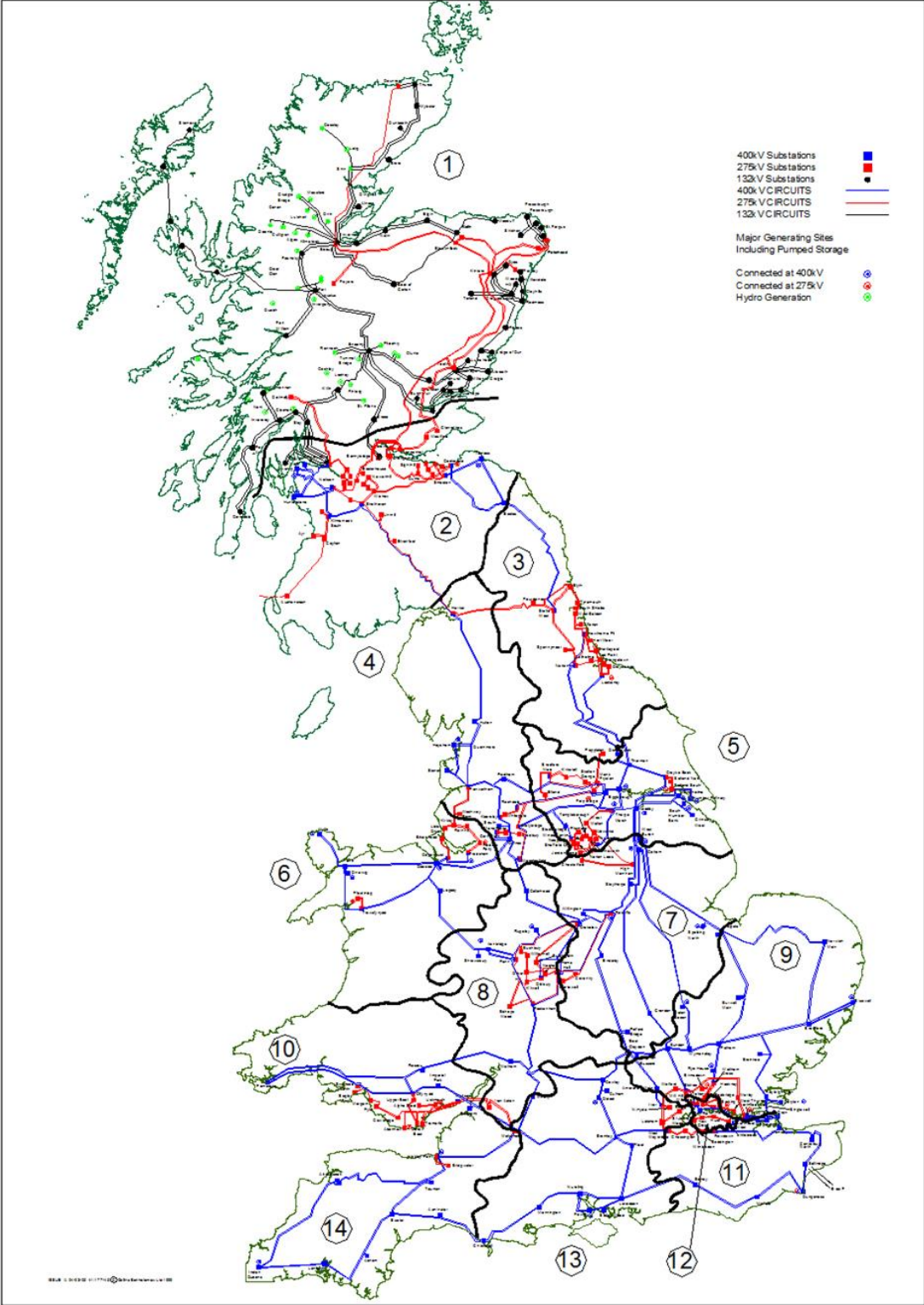
Band	2023/24 Final
Metered Demand	£/Site/Day
Domestic	0.119264
LV_NoMIC_1	0.060904
LV_NoMIC_2	0.277168
LV_NoMIC_3	0.660956
LV_NoMIC_4	2.052237
LV1	3.315495
LV2	6.087156
LV3	9.906854
LV4	22.316402
HV1	17.268078
HV2	55.583289
HV3	109.135702
HV4	276.988323
EHV1	130.702271
EHV2	642.651221
EHV3	1,295.790976
EHV4	3,528.818626
T-Demand1	402.035899
T-Demand2	1,678.272958
T-Demand3	4,550.996601
T-Demand4	11,722.399177
Unmetered Demand	p/kWh
Unmetered	1.247484

9. Zonal Maps Applicable for 2023/24

Generation Use of System Tariff Zones (Geographical map as at 1 April 2023)



Demand Use of System Tariff Zones (Geographical map as at 1 April 2023)





Schedule 2

Application Fees

10. Application Fees for Connection and Use of System Agreements

Application fees are payable in respect of applications for new connection agreements, certain use of system agreements and for modifications to existing agreements. The fees are based on reasonable costs incurred by National Grid Electricity System Operator including where appropriate, charges from the Transmission Owners (TO's) in accordance with their charging statements. The application process and options available are detailed in the Statement of the Use of System Charging Methodology which is included in Section 14 of the Connection and Use of System Code (CUSC).

The application fee is dependent upon size, type and location of the applicant's scheme.

Users can opt for a variable price application and pay an advance of the Engineering Charges based on the fixed prices shown, which will be reconciled once the actual costs have been calculated using the charge out rates contained in Schedule 4.

Alternatively, onshore Users can opt to pay a fixed price application fee in respect of New and Modified Bilateral Agreements. In some circumstances, where a given application is expected to involve significant costs over and above those normally expected (e.g. substantial system studies, special surveys, investigations, or where a Transmission Owner varies the application fee charged to NGENSO from the standard fee published in their charging statements) to process an offer of terms, NGENSO reserves the right to remove the option for a fixed price application fee.

There are six zones based on the Boundary of Influence map defined in Schedule 4 of the STC (SO-TO Code). Zone NGET1 maps to where NGET is host and there are no affected TOs, NGET2 maps to where NGET is the host TO and SPT is an affected TO, SPT1 is where SPT is the host TO and NGET is an affected TO, SPT2 maps to where SPT is the host TO and there are no affected TOs, SPT3 maps to where SPT is host TO and SHET is an affected TO and SHET1 is where SHET is the host TO and there are no affected TOs.

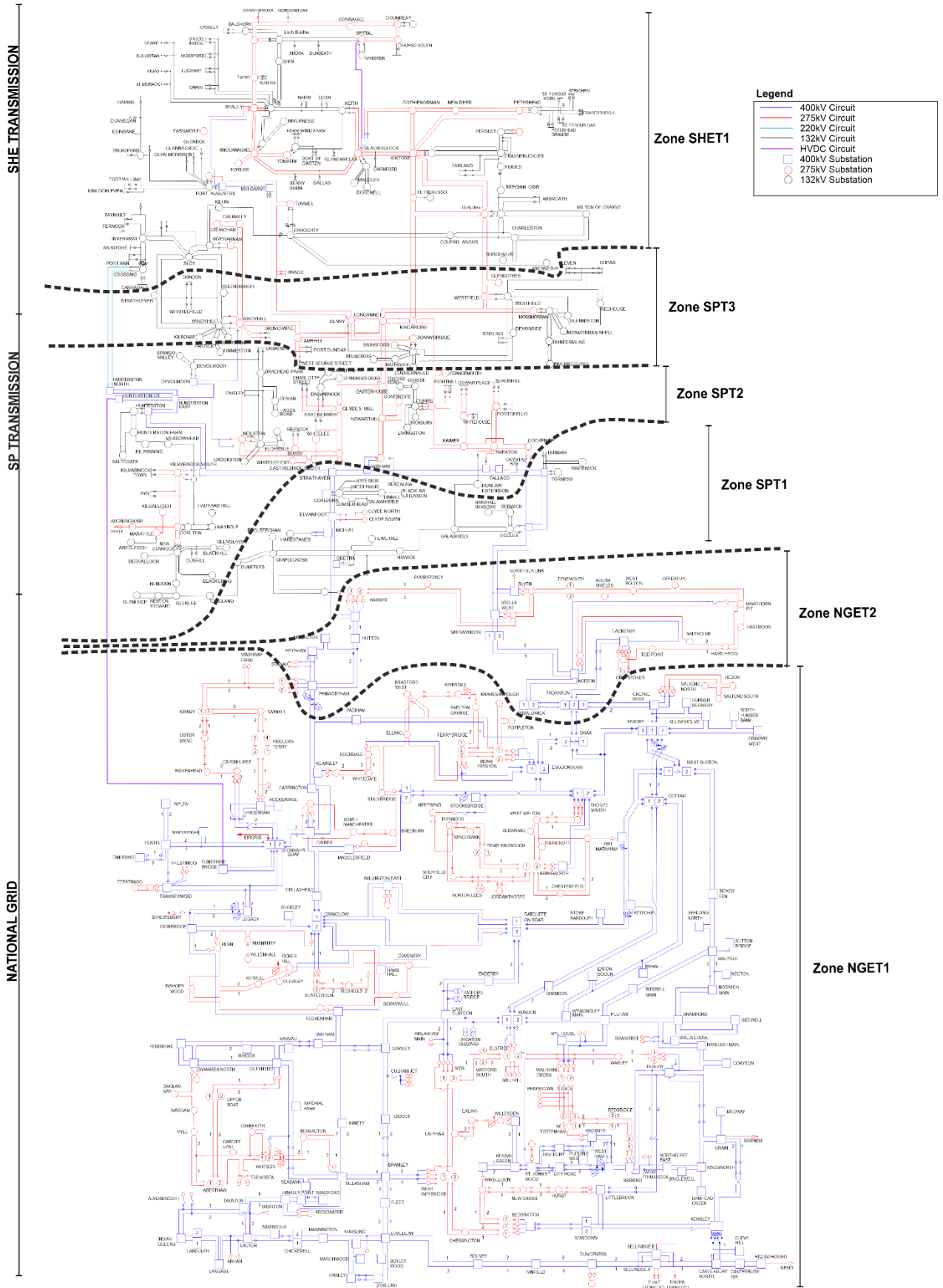
The application fees indicated will be reviewed on an annual basis and reflect any changes to the Boundaries of Influence. It should be noted that the zone to which a particular user is applying is determined by the location of the connection to the National Electricity Transmission System and not by the geographical location of the User's plant and equipment.

All application fees are subject to VAT.

11. Reconciliation and Refunding of Application Fees for Connection and Use of System Agreements

Application Fees will be reconciled and / or refunded in accordance with Section 14 of the Connection and Use of System Code (CUSC).

Application Fees Zonal Map



12. Application Fees for New Bilateral Agreements and Modifications to existing Bilateral Agreements

We have worked closely with the onshore TOs to review the application fees. We have simplified the application fees by removing the rate per MW and reducing the number of fee types. We have also included a fee for storage and aligned the MW bandings with the SQSS. All modification applications are 75% of the new application fee.

Table 2.1 Application Fees

Application Type	Capacity	SHET1	SPT3	SPT2	SPT1	NGET2	NGET 1
		SHET Host SPT affected	SPT Host SHET affected	SPT Host	SPT Host NGET affected	NGET Host SPT affected	NGET Host
New Onshore Application (Entry) / TEC change / Storage	<100MW	£29,100	£48,050	£43,050	£55,050	£38,100	£29,500
	100MW-249MW	£29,100	£48,050	£43,050	£62,150	£52,300	£43,750
	250MW-1800MW	£36,600	£48,050	£43,050	£77,050	£89,600	£73,500
	>1800MW	£56,950	£106,650	£96,650	£154,700	£143,050	£121,600
New Onshore Supply Point (Exit) or New Onshore Modification Application to Existing Supply Point (Exit) / Storage	<=100MW	£44,300	£53,600	£38,600	£53,050	£48,200	£35,350
	>100MW	£58,250	£69,700	£54,700	£73,550	£70,950	£44,100
New Offshore Application (Indicative Fee Only)	-	£98,850	£104,200	£59,200	£89,800	£115,050	£77,550
Statement of Works (Exit)	-	£1,700	£1,700	£1,200	£2,650	£4,100	£3,550
Project Progression (Exit)	-	£10,200	£11,700	£9,450	£17,900	£22,550	£20,400
New Onshore Application BEGA/BELLA	-	£21,300	£26,000	£20,000	£24,300	£17,900	£14,150
Mod App Admin Change	-	£7,300	£7,300	£2,300	£2,300	£5,100	£3,450

Application Type	Fraction of New Application Fee
Modification Application (Entry, Offshore and Exit)	0.75

If applying for a combination of changes after making an initial application and this is prior to the completion of works associated to the initial application, such as a change to works or completion date that also includes a TEC Change, the Application Fee will be the higher of the TEC Change Fee or Modification Application Fee.

Table 2.2 Other Application Fees

Application Type	NGET1	NGET2	SPT1	SPT2	SPT3	SHET1
TEC Exchange Request (no system works)	£10,000	£10,000	£10,000	£10,000	£10,000	£10,000
Request for STTEC or LDDTEC	£10,000					
Reactive Only Service Provider	£11,163	£11,163	£37,540	£37,540	£37,540	-
Suppliers and Interconnector Users	£5,000					
Novate a bilateral agreement	£3,000					

Table 2.3 Limited Duration TEC Request Fees

	Duration of LDTEC (t)	£
Basic request fee for duration t (applicable to all requests for LDTEC Offers)	t ≤ 3 months	£10,000
	3 months < t ≤ 6 months	£15,000
	6 months < t ≤ 9 months	£20,000
	t > 9 months	£30,000
Additional fee for rolling assessment (applicable to a request for an LDTEC Indicative Block Offer)	t ≤ 3 months	£1,000
	3 months < t ≤ 6 months	£1,500
	6 months < t ≤ 9 months	£2,000
	t > 9 months	£3,000
Additional fee for combined applications (applicable to a combined request for an LDTEC Block Offer and an LDTEC Indicative Block Offer)	t ≤ 3 months	£5,000
	3 months < t ≤ 6 months	£7,500
	6 months < t ≤ 9 months	£10,000
	t > 9 months	£15,000

Table 2.4 Temporary TEC Exchange Rate Request Fees

Duration of Temporary Exchange period (t)	£
t ≤ 3 months	£15,000
3 months < t ≤ 6 months	£25,000
6 months < t ≤ 9 months	£30,000
t > 9 months	£45,000

13. Examples

1. Entry Application Fee for a New Bilateral Agreement onshore, 300MW Generator wishing to connect to the transmission system in Zone NGET1.
Application Fee = £73,500
2. Entry Application Fee for a New Bilateral Agreement offshore, 2000MW Generator wishing to connect to the transmission system in Zone SPT1 Two Connection Sites.
Application Fee = $2 * £89,800 = £179,600$
3. Entry Application Fee for a Modification to an existing Bilateral Agreement Offshore, 2000MW Generator in Zone SPT1 seeking to alter a commissioning date where there are 2 affected transmission interface sites. This would be a Modification.
Application Fee = $2 * (0.75 * £89,800) = £134,700$
4. Entry Application Fee for a Modification to an existing Bilateral Agreement, 300MW Generator in Zone NGET2 seeking to alter commissioning date. This would be a Modification.
Application Fee = $0.75 * £89,600 = £67,200.00$
5. Entry Application Fee for an embedded generator (BEGA/ BELLA), 300MW embedded generator requesting a BEGA in Zone NGET2.
Application Fee = £17,900
6. Entry Application Fee for a TEC Increase 400MW generator in Zone SPT3 wishes to increase TEC by 20MW to 420MW.
Application Fee = £48,050
7. Entry Application Fee for a change to completion date, 500MW generator in Zone NGET2 wishes to change their completion date by moving it back by 12 months.
Application Fee = $0.75 * £89,600 = £67,200$
8. Entry Application Fee to decrease TEC
600MW generator in Zone SHET1 wishes to decrease TEC by 100MW to 500MW.
Application Fee = £29,100

Table 2.5 Bilateral Agreement Types

Bilateral Agreement Type	Description
Bilateral Connection Agreement	In respect of Connection Sites of Users.
Bilateral Embedded Licence Exemptible Large Power Station Agreement (BELLA)	For generators that own or are responsible for embedded exemptible large power stations (another party may be responsible for the output under the CUSC and BSC).
Bilateral Embedded Generation Agreement (BEGA)	For generators and BSC parties with embedded power stations, excluding those which are exempt (unless they otherwise choose to be), who are responsible for the output onto a Distribution System.
Construction Agreement	In respect of parties that are applying for new or modified agreements up until the time of commissioning.

The definitions provided below have been extracted from the Grid Code and are provided for ease of reference within this document.



Schedule 3

Charge-Out Rates

14. Charge-Out Rates for Engineering Charges for Variable Price Applications

Appropriately qualified staff will be appointed to process applications and feasibility studies and carry out work in relation to the development of the National Electricity Transmission System. Travel, subsistence and computing costs will also be charged on an actual basis. It should be noted that these rates only apply to work carried out by the Transmission Licensee's in relation to licensed transmission activities. Different rates may apply when asked to quote for other work.

Table 3.1 Charge-Out Rates

	£/day			
	NGESO	NGET	SPT	SHET
Senior Management; Legal	£996	£959	£1,050	£1,114
Departmental Management	£862	£895	£890	£782
Senior members of staff (Engineering; Commercial)	£753	£840	£770	£690
Standard (Engineering; Commercial)	£659	£708	£630	£539
Support staff; junior staff	£595	£593	£390	£397



Schedule 4

Connection Charges

15. Non-Capital Components applicable for Maintenance and Transmission Running Costs in Connection Charges for 2023/24

The following sections set out the components of connection charges and the parameters used to set the charges.

Connection charges are made up of capital and non-capital components. The non-capital component of the connection charge is divided into two parts, as set out below.

Part A: Site Specific Maintenance Charges

Site-specific maintenance charges are calculated each year based on the forecast total site-specific maintenance for GB divided by the total Gross Asset Value (GAV) of the transmission licensees' GB connection assets, to arrive at a percentage of total GAV. For 2023/24 this will be 0.34%.

Part B: Transmission Running Costs

The Transmission Running Cost (TRC) factor is calculated at the beginning of each price control to reflect the proportion of the Transmission Running Costs (e.g. rates, operation, indirect overheads) incurred by the transmission licensees that should be attributed to connection assets.

The TRC factor is calculated by taking a proportion of the forecast Transmission Running Costs for the transmission licensees (based on operational expenditure figures from the latest price control) that corresponds with the proportion of the transmission licensees' total connection assets as a function of their total business GAV. This cost factor is therefore expressed as a percentage of an asset's GAV and will be fixed for the entirety of the price control period. For 2021/22 to 2025/26 this will be 1.06%.

To illustrate the calculation, the following example uses the average operating expenditure from the published price control and the connection assets of each transmission licensee expressed as a percentage of their total system GAV to arrive at a GB TRC of 1.06%:

Connection assets as a percentage of total system GAV for each TO:

SP Transmission plc	12.9%
Scottish Hydro Electricity Transmission plc	8.49%
National Grid Electricity Transmission plc	12.23%

Published current price control average annual operating expenditure (£m):

SP Transmission plc	79.56
Scottish Hydro Electric Transmission plc	108.21
National Grid Electricity Transmission plc	430.14

Total GB Connection GAV = £5.04bn

Gross GB TRC Factor =

$(12.23\% \times £430.14m + 8.49\% \times £79.56m + 12.9\% \times £108.21m) / £5.04bn = 1.43\%$

$$\begin{aligned} \text{Net GB TRC Factor} &= \text{Gross GB TRC Factor} - \text{Site Specific Maintenance Factor}^* \\ &= 1.43\% - 0.37\% = 1.06\% \end{aligned}$$

* Note – the Site-Specific Maintenance Factor used to calculate the TRC Factor is that which applies for the first year of the price control period.

16. Transmission Owner Rate of Return

Rate of return (RoR) is aligned to the pre-tax cost of capital in the price control of the Relevant Transmission Licensee. For 2023/24 this will be as per the table below.

Table 4.1 Rate of Return

Transmission Owner	Revaluation Type	Rate of Return
National Grid Electricity Transmission plc	TOPI	4.00%
National Grid Electricity Transmission plc	MEA	5.50%
SP Transmission plc	TOPI	4.00%
Scottish Hydro Electric Transmission plc	TOPI	3.21%

17. Illustrative Connection Asset Charges

An indication of First Year Connection Asset Charges for new connection assets using estimates of Gross Asset Values and examples of connection charges are outlined in Appendix A.



A

Appendix A: Examples of Connection Charge Calculations

The following examples of connection charge calculations are intended as general illustrations.

Example 1

This example illustrates the method of calculating the first-year connection charge for a given asset value. This method of calculation is applicable to indicative price agreements for new connections, utilising the TOPI method of charging, and assuming:

- i) the asset is commissioned on 1 April 2023
- ii) there is no inflation from year to year i.e. GAV remains constant
- iii) the site-specific maintenance charge component remains constant throughout the 40 years at 0.34% of GAV
- iv) the Transmission Running Cost component remains constant throughout the 40 years at 1.06% of GAV
- v) the asset is depreciated over 40 years
- vi) the rate of return is TO specific and aligned to the pre-tax cost of capital in the price control period for 2021-2025 for the 40-year asset life.
- vii) the asset is terminated at the end of its 40-year life

For the purpose of this example, the asset on which charges are based has a Gross Asset Value of £3,000,000 as of the 1st April 2023.

Charge	Calculation	
Site Specific Maintenance Charge (0.34% of GAV)	3,000,000 x 0.34%	£10,200
Transmission Running Cost (1.06% of GAV)	3,000,000 x 1.06%	£31,800
Capital charge (40-year depreciation 2.5% of GAV)	3,000,000 x 2.5%	£75,000
Return on mid-year NAV (4.00% of NAV)	2,962,500 x 4.00%	£118,500
TOTAL		£235,500.00

The first-year charge of £235,500.00 would reduce in subsequent years as the NAV of the asset is reduced on a straight-line basis, assuming a zero rate of inflation.

This illustration reflects the annual connection charge over time (assuming no inflation):

Year	Charge
1	£235,500.00
2	£232,500.00
10	£208,500.00
40	£118,500.00

Example 2

The previous example assumes that the asset is commissioned on 1 April 2023. If it is assumed that the asset is commissioned on 1 July 2023, the first year charge would equal 9/12th of the first year annual connection charge i.e. £163,515.94

This gives the following annual charges over time:

Year	Charge
1	£176,625.00 connection charge for period July 2023 to March 2024
2	£232,500.00
10	£208,500.00
40	£118,500.00

Example 3

In the case of a firm price agreement, there will be two elements in the connection charge, a finance component and a running cost component. These encompass the four elements set out in the examples above. Using exactly the same assumptions as those in example 1 above, the total annual connection charges will be the same as those presented. These charges will not change as a result of the adoption of a different charging methodology by National Grid Electricity System Operator, providing that the connection boundary does not change.

Example 4

If a User has chosen a 20-year depreciation period for their Post Vesting connection assets and subsequently remains connected at the site beyond the twentieth year their charges are calculated as follows.

For years 1-20 the charge is as calculated above, except the capital charge will be 5% of GAV

For years 21-40 the NAV will be zero and the asset will be fully depreciated so there will be no rate of return or depreciation element to the charge. They will pay a connection charge based on the following formula:

$$\text{Annual Connection Charge}_n = \text{SSF}_n (\text{TOPIGAV}_n) + \text{TC}_n (\text{GAV}_n)$$

One off Charges

To provide or modify a connection, the Transmission Owner may need to carry out works on the transmission system which, although directly attributable to the connection, may not give rise to additional Connection Assets.

Where connection requirements lead to additional capital assets over those normally required, the capital value is paid for as a One-Off Charge. These capital assets require maintenance on a regular basis as is the case with connection assets. This is called “One-Off Assets - Site Specific Annual Maintenance” (OAMF) and “One-Off Assets Running Cost” (OARC). This OAMF and OARC is applicable to NGET Connections Only.

OAMF is a percentage factor applied to the reindexed One-Off capital asset values to recover a reasonable proportion of NGET’s maintenance costs on an annual basis. The current OAMF factor is **0.39%**.

OARC is a percentage factor applied to the reindexed One-Off capital asset values to recover a reasonable proportion of NGET’s business running costs. The current OARC factor is **0.92%**. This is calculated at the beginning of each price control.

One-Off Asset maintenance charges will be applied annually on a 1/12th monthly basis and applied pro-rata for the first month and first partial year following commissioning. Other payment terms can be agreed.

Example

One-off charge of £100,000 for assets attributable to the connection.

Charge	Calculation	
One-Off Assets - Site Specific Annual Maintenance (0.39% of One-off charge)	£100,000 x 0.36%	£390
One-Off Assets Running Cost (0.92% of One-off charge)	£100,000 x 0.92%	£920
Annual Charge		£1,310

Index to the Statement of Use of System Charges Revisions

Issue	Description	Modifications
10.1	2014/15 Publication	-
11.0	2015/16 Publication	-
12.0	2016/17 Publication	CMP213 Transmit Application fee tables
13.0	2017/18 Publication	-
14.0	2018/19 Publication	Change introduced by CMP264/265 to demand TNUoS tariffs.
1.0	2019/20 Publication	Document transferred to NGESO Section on Balancing Services removed following changes to incentive mechanism.
2.0	2020/21 Publication	Updated format for application fees with new zones
3.0	2021/22 Publication	Change introduced by the start of RIIO-2 price control parameter reset and several code modifications: Impacting TNUoS tariffs: CMP317/327, CMP324/325, CMP353, CMP355/356, CMP357 Impacting connection charges: CMP306 Application fee review
3.1	2021/22 Publication	Updated to reflect Affected TO Costs for SHET1
3.2	2021/22 Publication	Hornsea 1 Offshore tariffs added Added novation app fee in "Other Application Fees"
4.0	2022/23 Publication	Updated as part of annual review
4.1	2022/23 Publication	Replaced LDTEC/STTEC table with information on how to calculate tariffs.
5.0	2023/24 Publication	Document updated to reflect 2023/24 charges