Issue	Revision
6.0	0

nationalgridESO

The Statement of Use of System Charges
Effective from 1 April 2024

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

Contents

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 2024/25 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:

transmissionconnectioncharging@nationalgrideso.com

Schedule 1

Transmission Network Use of System Charge (TNUoS)

1. Basis of 2024/25 Transmission Network Use of System Charges

The Transmission Network Use of System Charges for 2024/25 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.

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 2024/25 Final TNUoS report here:

https://www.nationalgrideso.com/document/301741/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	17.891453
Annuity factor	4.2%
Overhead factor	1.5%
Locational onshore security factor	1.76
Offshore civil engineering discount	0.708835

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	84.88
Beatrice	7.74
Burbo Bank	27.20
Dudgeon	21.09
East Anglia 1	23.69
Galloper	19.71
Greater Gabbard	50.29, 47.99
Gunfleet	96.35
Gwynt Y Mor	46.46
Hornsea 1A	21.05
Hornsea 1B	20.14
Hornsea 1C	18.42
Hornsea 2A	4.84
Hornsea 2B	4.84
Hornsea 2C	4.84
Humber Gateway	44.41
Lincs	75.67
London Array	53.00
Ormonde	81.66
Race Bank	11.24
Rampion	33.67
Robin Rigg	334.60
Robin Rigg West	334.60
Sheringham Shoal	48.53
Thanet	80.71
Walney 1	70.75
Walney 2	63.50
Walney 3	17.73
Walney 4	21.29
West of Duddon Sands	66.74
Westermost Rough	87.30

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 2024/25 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 2024/25

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 following table provides the Wider Zonal Generation TNUoS tariffs applicable from 1 April 2024.

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	2.99613	20.547337	18.248646	-1.529118	16.985405	35.126161	25.965830
2	East Aberdeenshire	4.13433	11.778569	18.248646	-1.529118	14.616098	29.687785	22.019884
3	Western Highlands	3.230485	20.305204	18.076420	-1.529118	17.054017	35.006690	25.684644
4	Skye and Lochalsh	-1.989329	20.305204	19.870000	-1.529118	12.551635	31.580456	27.478224
5	Eastern Grampian and Tayside	5.853910	15.742151	14.103528	-1.529118	16.263064	30.234933	19.658378
6	Central Grampian	4.942105	15.970825	14.409646	-1.529118	15.565175	29.800752	20.067399
7	Argyll	3.157627	14.100590	20.444992	-1.529118	15.446742	32.648944	25.261140
8	The Trossachs	3.944171	14.100590	11.871885	-1.529118	12.804043	24.862381	16.688033
9	Stirlingshire and Fife	2.474974	13.819136	11.646784	-1.529118	11.132224	22.956992	16.336277
10	South West Scotlands	2.707958	13.364269	11.382199	-1.529118	11.077427	22.584241	15.867002
11	Lothian and Borders	2.408183	13.364269	5.302762	-1.529118	8.345877	16.205029	9.787565
12	Solway and Cheviot	1.636696	8.689987	6.607014	-1.529118	6.226378	13.232082	8.988390
13	North East England	3.319860	6.079623	3.852638	-1.529118	5.763646	10.203097	5.059350
14	North Lancashire and The Lakes	1.255369	6.079623	1.383497	-1.529118	2.711499	5.669465	2.590209
15	South Lancashire, Yorkshire and Humber	4.196041	2.039167	0.341717	-1.529118	3.619277	4.538015	-0.269776
16	North Midlands and North Wales	2.996034	0.468681	0	-1.529118	1.654388	1.818427	-1.318212
17	South Lincolnshire and North Norfolk	1.263625	2.464145	0	-1.529118	0.720165	1.582616	-0.420253
18	Mid Wales and The Midlands	1.291875	4.206973	0	-1.529118	1.445546	2.917987	0.364020
19	Anglesey and Snowdon	4.761625	0.614076	0	-1.529118	3.478137	3.693064	-1.252784
20	Pembrokeshire	8.245736	-8.308040	0	-1.529118	3.393402	0.485588	-5.267736
21	South Wales & Gloucester	3.945510	-8.526868	0	-1.529118	-0.994355	-3.978759	-5.366209
22	Cotswold	3.461436	4.275752	-10.96056	-1.529118	-0.741605	-5.821427	-10.565589
23	Central London	-3.403205	4.275752	-3.548596	-1.529118	-4.641461	-5.274105	-3.153626
24	Essex and Kent	-3.148861	4.275752	0	-1.529118	-2.967678	-1.471165	0.394970

25	Oxfordshire, Surrey and Sussex	-0.703694	-2.203398	0	-1.529118	-3.114171	-3.885361	-2.520647
26	Somerset and Wessex	-1.116080	-4.720325	0	-1.529118	-4.533328	-6.185442	-3.653264
27	West Devon and Cornwall	-0.429420	-9.779349	0	-1.529118	-5.870278	-9.293050	-5.929825

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 2024/25

The below tables show the final Annual Load Factors (ALFs) to be used in the calculation of generator TNUoS tariffs for 2024/25, effective from 1 April 2024.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	41.4739%
ACHRUACH	Onshore_Wind	37.3570%
AFTON	Onshore_Wind	39.1270%
AIKENGALL II	Onshore_Wind	29.8211%
AN SUIDHE	Onshore_Wind	36.4473%
ARECLEOCH	Onshore_Wind	27.0854%
BAD A CHEO	Onshore_Wind	40.9230%
BARROW	Offshore_Wind	37.4187%
BEATRICE	Offshore_Wind	52.6558%
BEAULY CASCADE	Hydro	33.9955%
BEINNEUN	Onshore_Wind	36.8900%
BHLARAIDH	Onshore_Wind	36.1447%
BLACK LAW	Onshore_Wind	23.7472%

Power Station	Technology	Specific ALF
BLACKCRAIG WINDFARM	Onshore_Wind	44.3226%
BLACKLAW EXTENSION	Onshore_Wind	31.3662%
BRIMSDOWN	CCGT_CHP	48.7822%
BURBO BANK EXT	Offshore_Wind	43.0409%
BUSTLEHOLME	Pumped_Storage	6.0562%
CAPENHURST	Pumped_Storage	6.3625%
CARRAIG GHEAL	Onshore_Wind	45.4153%
CARRINGTON	CCGT_CHP	57.7338%
CLUNIE	Hydro	38.0648%
CLYDE (NORTH)	Onshore_Wind	39.5145%
CLYDE (SOUTH)	Onshore_Wind	33.8021%
CONNAHS QUAY	CCGT_CHP	19.8271%
CONON CASCADE	Hydro	51.8241%
CORBY	CCGT_CHP	0.7779%
CORRIEGARTH	Onshore_Wind	45.9341%
CORRIEMOILLIE	Onshore_Wind	31.1214%
CORYTON	CCGT_CHP	24.5891%
COTTAM DEVELOPMENT CENTRE	CCGT_CHP	58.4828%
COUR	Onshore_Wind	52.9934%
COWES	Gas_Oil	0.1060%
COWLEY	Battery	4.1550%
CREAG RIABHACH WIND FARM	Onshore_Wind	35.5322%
CROSSDYKES	Onshore_Wind	32.5961%
CRUACHAN	Pumped_Storage	7.6239%
CRYSTAL RIG II	Onshore_Wind	47.7090%
CRYSTAL RIG III	Onshore_Wind	50.2966%
CUMBERHEAD WIND FARM	Onshore_Wind	31.9941%
DALQUHANDY WIND FARM	Onshore_Wind	34.4771%
DAMHEAD CREEK	CCGT_CHP	32.5577%
DEESIDE	Reactive_Compensation	2.0130%
DERSALLOCH	Onshore_Wind	33.8151%
DIDCOT B	CCGT_CHP	52.0557%
DIDCOT GTS	Gas_Oil	0.2597%
DINORWIG	Pumped_Storage	9.1890%
DORENELL	Onshore_Wind	50.4424%
DOUGLAS WEST	Onshore_Wind	41.9897%
DRAX	Coal	46.1421%
DUDGEON	Offshore_Wind	48.6844%
DUNGENESS B	Nuclear	0.0000%
DUNLAW EXTENSION	Onshore_Wind	26.7168%
DUNMAGLASS	Onshore_Wind	46.4081%

Power Station	Technology	Specific ALF
EAST ANGLIA 1	Offshore_Wind	49.4849%
EDINBANE WIND	Onshore_Wind	31.6979%
ERROCHTY	Hydro	22.2622%
EWE HILL	Onshore_Wind	31.5856%
FALLAGO	Onshore_Wind	47.6595%
FARR WINDFARM	Onshore_Wind	40.1078%
FASNAKYLE G1 & G3	Hydro	45.4518%
FAWLEY CHP	CCGT_CHP	66.2245%
FFESTINIOG	Pumped_Storage	3.6087%
FINLARIG	Hydro	61.6083%
FOYERS	Pumped_Storage	13.0063%
FREASDAIL	Onshore_Wind	39.7049%
GALAWHISTLE	Onshore_Wind	44.3233%
GALLOPER	Offshore_Wind	52.4426%
GARRY CASCADE	Hydro	55.6437%
GLANDFORD BRIGG	CCGT_CHP	0.2537%
GLEN APP	Onshore_Wind	22.2019%
GLEN KYLLACHY WIND FARM	Onshore_Wind	38.8213%
GLENDOE	Hydro	32.9976%
GLENMORISTON	Hydro	26.8677%
GORDONBUSH	Onshore_Wind	39.0377%
GRAIN	CCGT_CHP	47.2274%
GRANGEMOUTH	CCGT_CHP	55.0245%
GREAT YARMOUTH	CCGT_CHP	43.6912%
GREATER GABBARD	Offshore_Wind	41.6801%
GRIFFIN WIND	Onshore_Wind	25.2508%
GUNFLEET SANDS I	Offshore_Wind	40.1921%
GUNFLEET SANDS II	Offshore_Wind	39.8427%
GWYNT Y MOR	Offshore_Wind	40.7262%
HADYARD HILL	Onshore_Wind	30.9982%
HALSARY WIND FARM	Onshore_Wind	44.9253%
HARESTANES	Onshore_Wind	26.0231%
HARTING RIG WIND FARM	Onshore_Wind	32.1360%
HARTLEPOOL	Nuclear	79.6270%
HEYSHAM	Nuclear	73.6922%
HINKLEY POINT B	Nuclear	57.4041%
HORNSEA 1A	Offshore_Wind	50.6026%
HORNSEA 1B	Offshore_Wind	53.5753%
HORNSEA 1C	Offshore_Wind	50.9696%
HORNSEA 2A	Offshore_Wind	30.6920%
HORNSEA 2B	Offshore_Wind	34.1148%

Power Station	Technology	Specific ALF
HORNSEA 2C	Offshore_Wind	41.6736%
HUMBER GATEWAY	Offshore_Wind	46.9575%
IMMINGHAM	CCGT_CHP	61.7818%
INDIAN QUEENS	Gas_Oil	0.2349%
J G PEARS	CCGT_CHP	41.6480%
KEADBY	CCGT_CHP	30.5692%
KEADBY II CCGT POWER STATION	CCGT_CHP	34.2881%
KEITH HILL	Onshore_Wind	22.4433%
KEMSLEY	Battery	3.9661%
KENNOXHEAD WIND FARM EXTENSION	Onshore_Wind	30.4066%
KILBRAUR	Onshore_Wind	42.9826%
KILGALLIOCH	Onshore_Wind	41.8768%
KILLIN CASCADE	Hydro	40.5277%
KILLINGHOLME (POWERGEN)	Gas_Oil	1.3869%
KINGS LYNN A	CCGT_CHP	41.3867%
KYPE MUIR	Onshore_Wind	37.8111%
LANGAGE	CCGT_CHP	30.4074%
LINCS WIND FARM	Offshore_Wind	46.4550%
LITTLE BARFORD	CCGT_CHP	38.1756%
LOCHLUICHART	Onshore_Wind	31.2260%
LONDON ARRAY	Offshore_Wind	43.2302%
LYNEMOUTH	Biomass	87.8301%
MARCHWOOD	CCGT_CHP	69.5856%
MARK HILL	Onshore_Wind	27.5750%
MEDWAY	CCGT_CHP	25.3456%
MIDDLE MUIR	Onshore_Wind	40.0396%
MILLENNIUM	Onshore_Wind	47.3271%
MINNYGAP	Onshore_Wind	31.9506%
MORAY EAST POWER STATIONS	Offshore_Wind	42.8232%
NANT	Hydro	33.2829%
NURSLING TERTIARY	Battery	3.1078%
ORMONDE	Offshore_Wind	37.1258%
PEMBROKE	CCGT_CHP	70.4510%
PEN Y CYMOEDD	Onshore_Wind	34.5269%
PETERBOROUGH	CCGT_CHP	0.7084%
PETERHEAD	CCGT_CHP	50.3573%
POGBIE	Onshore_Wind	29.6459%
RACE BANK	Offshore_Wind	47.5596%
RAMPION	Offshore_Wind	40.4028%
RATCLIFFE-ON-SOAR	Coal	15.0442%
ROBIN RIGG EAST	Offshore_Wind	37.7784%

Power Station	Technology	Specific ALF
ROBIN RIGG WEST	Offshore_Wind	41.0016%
ROCKSAVAGE	CCGT_CHP	30.5310%
RYE HOUSE	CCGT_CHP	8.7034%
SALTEND	CCGT_CHP	69.9391%
SANDY KNOWE WIND FARM	Onshore_Wind	32.1206%
SANQUHAR	Onshore_Wind	53.3836%
SEABANK	CCGT_CHP	29.3215%
SEAGREEN 1	Offshore_Wind	35.9983%
SELLAFIELD	CCGT_CHP	1.9974%
SEVERN POWER	CCGT_CHP	11.8349%
SHERINGHAM SHOAL	Offshore_Wind	44.7406%
SHOREHAM	CCGT_CHP	24.2583%
SIZEWELL B	Nuclear	81.5650%
SLOY G2 & G3	Hydro	12.9692%
SOUTH HUMBER BANK	CCGT_CHP	43.3955%
SOUTH KYLE WIND FARM	Onshore_Wind	27.4422%
SPALDING	CCGT_CHP	45.7123%
SPALDING ENERGY EXPANSION	CCGT_CHP	2.8347%
STAYTHORPE	CCGT_CHP	57.8916%
STRATHY NORTH & SOUTH	Onshore_Wind	35.1420%
STRONELAIRG	Onshore_Wind	43.4539%
SUTTON BRIDGE	CCGT_CHP	8.8068%
TAYLORS LANE	Gas_Oil	0.2645%
TEES RENEWABLE	Biomass	3.2999%
THANET	Offshore_Wind	36.7787%
TODDLEBURN	Onshore_Wind	33.8916%
TORNESS	Nuclear	79.2709%
TRALORG	Onshore_Wind	48.0283%
TRITON KNOLL OFFSHORE WIND FARM	Offshore_Wind	36.3058%
TWENTYSHILLING WIND FARM	Onshore_Wind	36.2882%
USKMOUTH	Coal	0.0036%
WALNEY 4	Offshore_Wind	50.1018%
WALNEY I	Offshore_Wind	42.1070%
WALNEY II	Offshore_Wind	48.7808%
WALNEY III	Offshore_Wind	51.2341%
WEST BURTON	Coal	4.1264%
WEST BURTON B	CCGT_CHP	54.1901%
WEST OF DUDDON SANDS	Offshore_Wind	49.4783%
WESTERMOST ROUGH	Offshore_Wind	51.7268%
WHITELEE	Onshore_Wind	29.1061%
WHITELEE EXTENSION	Onshore_Wind	26.0401%

Power Station	Technology	Specific ALF
WHITESIDE HILL	Onshore_Wind	56.4039%
WILTON	CCGT_CHP	20.9548%
WINDY RIG WIND FARM	Onshore_Wind	38.5341%
WINDY STANDARD II	Onshore_Wind	50.5403%

Table 1.9 Generic Annual Load Factors

Technology	Generic ALF
Battery	1.6301%
Biomass	45.5650%
CCGT_CHP	49.4274%
Coal	16.3291%
Gas_Oil	0.4504%
Hydro	40.4462%
Nuclear	61.9265%
Offshore_Wind	46.7794%
Onshore_Wind	38.6821%
Pumped_Storage	8.3570%
Reactive_Compensation	0.0000%
Solar	10.9000%
Tidal	12.6000%
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-2024-to-2025

4. Schedule of Transmission Network Use of System Local Substation Generation Charges (£/kW) in 2024/25

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 2024

Table 1.10 Onshore Local Substation Tariffs (£/kW)

Substation Rating	Connection Type	132kV	275kV	400kV
<1320 MW	No redundancy	0.174450	0.087229	0.060166
<1320 MW	Redundancy	0.367586	0.186703	0.132570
>=1320 MW	No redundancy		0.256277	0.182462
>=1320 MW	Redundancy		0.385653	0.277379

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 2024.

Table 1.11 Offshore Local Substation Tariffs (£/kW)

Offshore Generator	Local Substation (£/kW)	Offshore Generator	Local Substation (£/kW)
Barrow	11.252890	Lincs	21.787874
Beatrice	9.143187	London Array	14.785717
Burbo Bank	14.201448	Ormonde	34.597753
Dudgeon	20.771862	Race Bank	12.578868
East Anglia 1	12.296008	Rampion	10.275724
Galloper	21.262810	Robin Rigg	-0.759377
Greater Gabbard	20.966472	Robin Rigg West	-0.759377
Gunfleet	24.488681	Sheringham Shoal	32.368885
Gwynt y mor	26.668592	Thanet	24.717711
Hornsea 1A	9.492068	Walney 1	29.882002
Hornsea 1B	9.492068	Walney 2	27.800820
Hornsea 1C	9.492068	Walney 3	12.921083
Hornsea 2A	10.866250	Walney 4	12.921083
Hornsea 2B	10.866250	West of Duddon Sands	11.555635
Hornsea 2C	10.866250	Westermost Rough	23.496449
Humber Gateway	15.694615		

Further local substation tariffs applicable to generation connecting to offshore transmission infrastructure during 2024/25 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 2024/25

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)
Aberarder	1.663557	Dunhill	1.741283	Lochay	0.369679
Aberdeen Bay	3.253177	Dunlaw Extension	1.696117	Luichart	0.684968
Achruach	-3.012829	Dunmaglass	1.056667	Marchwood	-0.287364
Aigas	0.821868	Edinbane	8.315968	Mark Hill	1.072131
An Suidhe	-1.120900	Enoch Hill	1.615924	Middle Muir	2.772594
Arecleoch	2.920527	Ewe Hill	1.692310	Middleton	0.174111
Ayrshire Grid Collector	0.164288	Fallago	-0.070945	Millennium South	0.528866
Beinneun Wind Farm	1.640514	Farr	4.226137	Millennium Wind	1.906385
Benbrack	0.885177	Fernoch	5.208303	Mossford	3.639452
Bhlaraidh Wind Farm	0.740386	Ffestiniogg	0.264173	Nant	-1.511005
Black Hill	1.865660	Fife Grid Services	0.184443	Necton	0.531832
Black Law	2.033236	Finlarig	0.369679	Rhigos	0.128077
BlackCraig Wind Farm	6.306177	Foyers	0.339651	Rocksavage	-0.017841
BlackLaw Extension	4.422820	Galawhistle	1.269233	Saltend	-0.018858
Broken Cross	1.292604	Glen Kyllachy	0.554519	Sandy Knowe	3.911476
Clyde (North)	0.128656	Glendoe	2.229843	Sanquhar II	8.407555
Clyde (South)	0.150098	Glenglass	5.563530	Shepherds Rig	0.094278
Corriegarth	2.957434	Gordonbush	-0.091222	South Humber Bank	-0.215606
Corriemoillie	1.928831	Griffin Wind	11.520518	Spalding	0.324630
Coryton	0.053484	Hadyard Hill	3.327113	Strathbrora	-0.207902
Creag Riabhach	4.066472	Harestanes	2.772594	Strathy Wind	1.942483
Cruachan	2.164215	Hartlepool	0.036918	Stronelairg	1.299770
Culligran	2.101062	Invergarry	0.369679	Wester Dod	0.423078
Cumberhead Collector	0.846155	Kennoxhead	4.943037	Whitelee	0.128656
Cumberhead West	4.484188	Kergord	59.436040	Whitelee Extension	0.364524
Deanie	3.451745	Kilgallioch	1.286557		
Dersalloch	2.724961	Kilmorack	0.150076		
Dinorwig	2.865274	Kype Muir	1.798080		
Dorenell	2.487547	Langage	-0.390760		
Douglas North	0.739359	Limekilns	2.155514		

The following table provides the Local Circuit Generation TNUoS tariffs applicable to generation connecting to offshore transmission infrastructure from 1 April 2024.

Table 1.13 Offshore Local Circuit Tariffs

Offshore Generator	Local Circuit (£/kW)	Offshore Generator	Local Circuit (£/kW)
Barrow	59.448440	Lincs	85.684260
Beatrice	25.069066	London Array	50.694557
Burbo Bank	27.447048	Ormonde	64.670699
Dudgeon	32.591371	Race Bank	34.937295
East Anglia 1	51.892416	Rampion	26.880857
Galloper	33.629321	Robin Rigg	43.103802
Greater Gabbard	48.518525	Robin Rigg West	43.103802
Gunfleet	22.582957	Sheringham Shoal	38.122682
Gwynt y mor	26.366759	Thanet	46.308687
Hornsea 1A	33.584419	Walney 1	59.741719
Hornsea 1B	33.584419	Walney 2	56.577438
Hornsea 1C	33.584419	Walney 3	26.177340
Hornsea 2A	36.707817	Walney 4	26.177340
Hornsea 2B	36.707817	West of Duddon Sands	57.603329
Hornsea 2C	36.707817	Westermost Rough	39.987970
Humber Gateway	36.008846		

Further local circuit tariffs applicable to generation connecting to offshore transmission infrastructure during 2024/25 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 2024/25

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 2024/25

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 2024. 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 network[1].

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

Offshore Generator	ETUoS
Barrow	1.476186
Gunfleet	4.220884
Ormonde	0.515371
Robin Rigg	13.810184
Robin Rigg West	13.810184
Sheringham Shoal	0.828675
Thanet	1.114813

Please note that in addition to the charges listed above, any enduring distribution charges made to NGESO will be passed through to the relating generator in the form of an ETUoS charge[2].

Further Pre-Asset Transfer Related ETUoS tariffs applicable to generation connecting to offshore transmission infrastructure during 2024/25 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 2024/25

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 2024.

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	-	-	-
7	East Midlands	-	-	2.565717
8	Midlands	2.373139	0.312657	5.085893
9	Eastern	0.825367	0.113949	3.538121
10	South Wales	4.503509	0.533793	7.216263
11	South East	3.859199	0.538522	6.571953
12	London	5.732674	0.644217	8.445428
13	Southern	6.869732	0.903934	9.582486
14	South Western	8.198917	1.129620	10.911671

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.

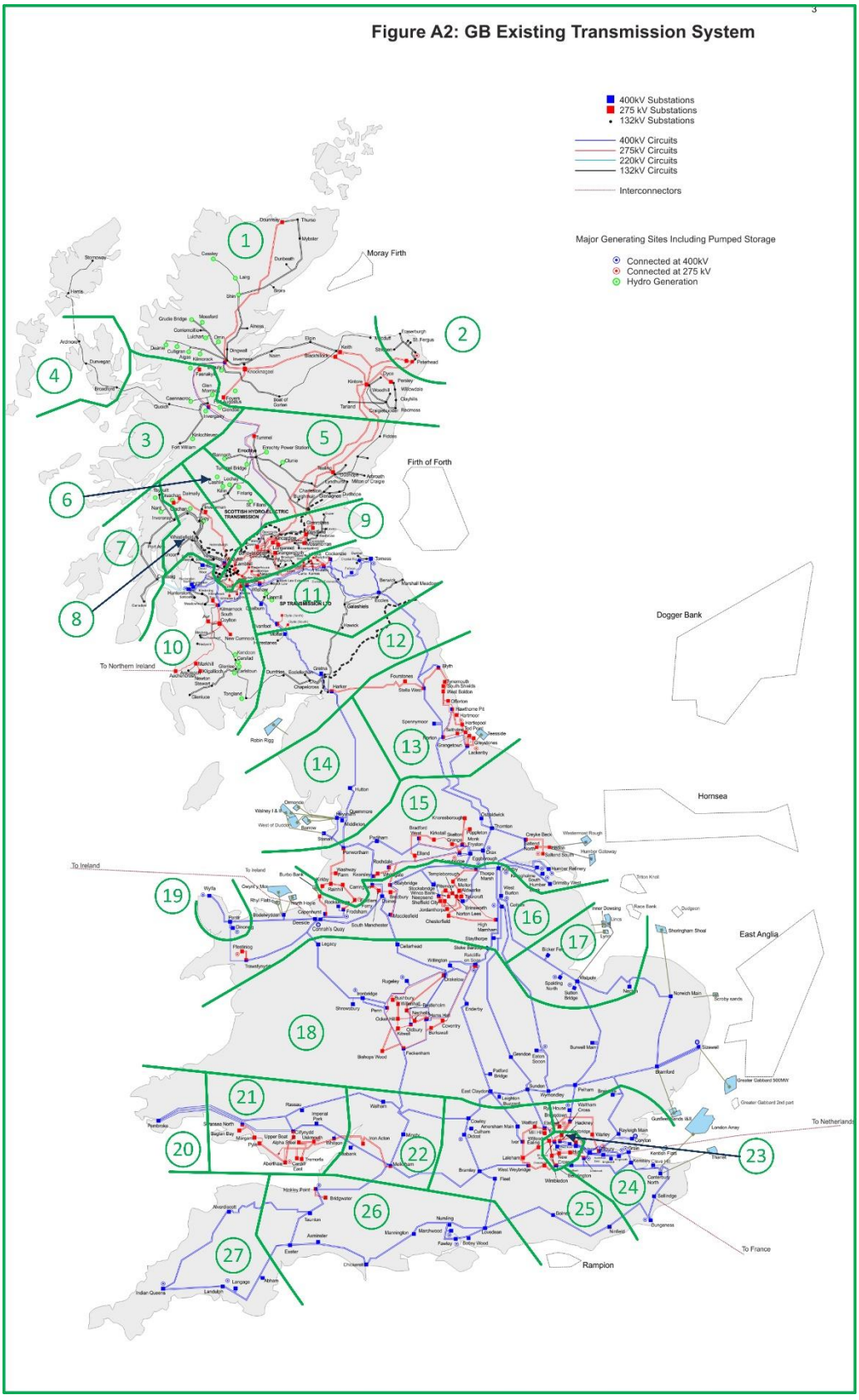
The following table provides the demand residual banded tariffs across each of the banding criteria which are applicable to Final Demand Sites from 1 April 2024. Calculated on a £/Site/Day

Table 1.17 Non-Locational demand residual banded charges

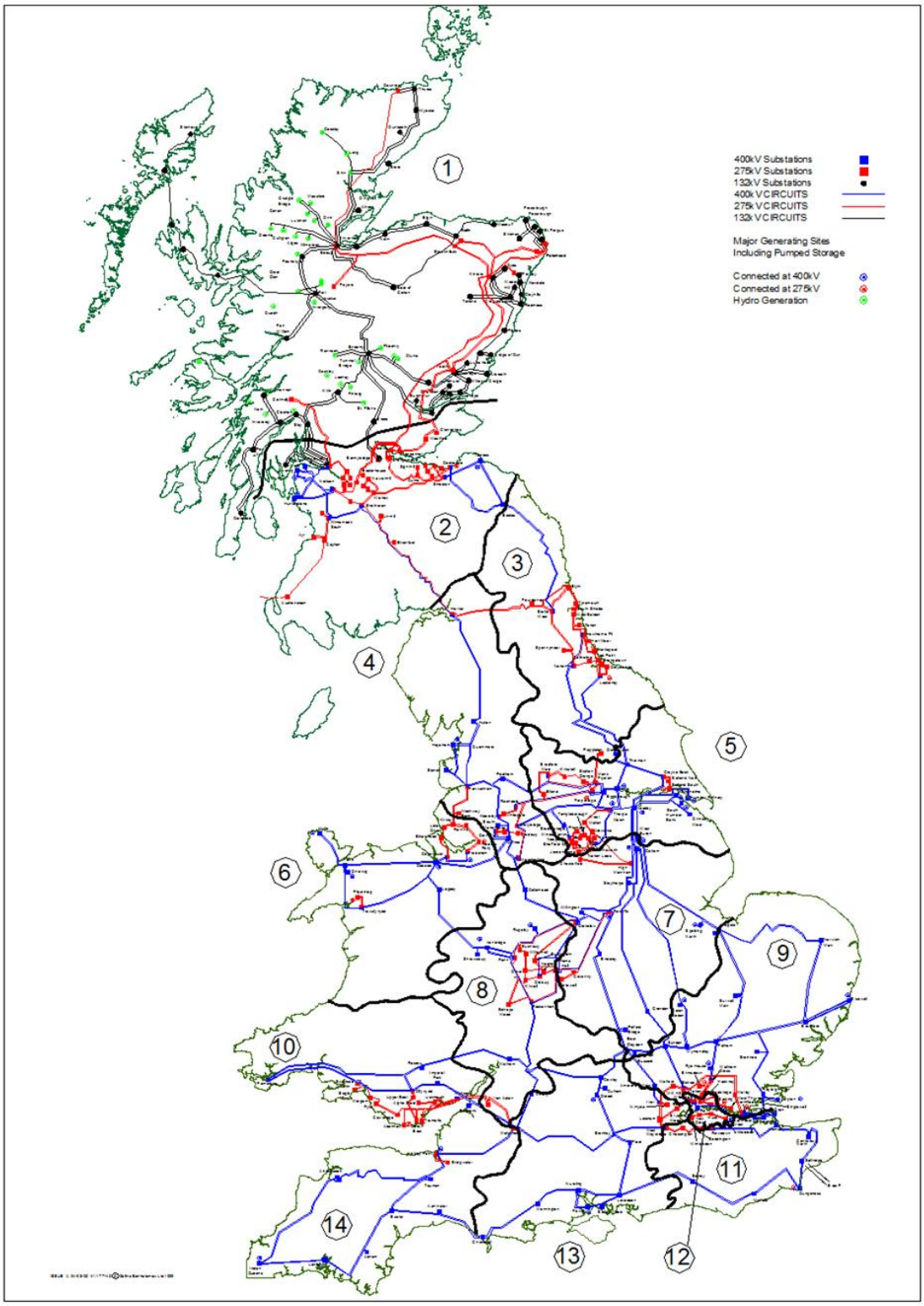
	Band	Percentile	Threshold (kWh/MWh or kVA)		2024/25 Final Tariffs
			Lower (>)	Upper (≤)	
	Metered Demand				**£/Site/Day**
	Domestic				0.104586
kWh	LV_NoMIC_1	≤ 40%	-	3,571	0.069796
	LV_NoMIC_2	40 - 70%	3,571	12,553	0.253213
	LV_NoMIC_3	70 - 85%	12,553	25,279	0.584795
	LV_NoMIC_4	> 85%	25,279	∞	1.741054
kVA	LV1	≤ 40%	-	80	3.129643
	LV2	40 - 70%	80	150	5.323905
	LV3	70 - 85%	150	231	8.488176
	LV4	> 85%	231	∞	19.793806
	HV1	≤ 40%	-	422	16.455194
	HV2	40 - 70%	422	1,000	49.655569
	HV3	70 - 85%	1,000	1,800	95.286086
	HV4	> 85%	1,800	∞	243.634626
	EHV1	≤ 40%	-	5,000	132.851337
	EHV2	40 - 70%	5,000	12,000	668.538064
	EHV3	70 - 85%	12,000	21,500	1,255.850294
	EHV4	> 85%	21,500	∞	3,520.063002
MWh	T-Demand1	≤ 40%	-	33,548	397.072685
	T-Demand2	40 - 70%	33,548	73,936	1,611.510222
	T-Demand3	70 - 93%	73,936	189,873	3,754.664746
	T-Demand4	> 93%	189,873	∞	11,958.120683
	Unmetered Demand				**p/kWh**
	Unmetered				1.188571

9. Zonal Maps Applicable for 2024/25

Generation Use of System Tariff Zones (Geographical map as at 1 April 2024)



Demand Use of System Tariff Zones (Geographical map as at 1 April 2024)



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 NGESO from the standard fee published in their charging statements) to process an offer of terms, NGESO 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.

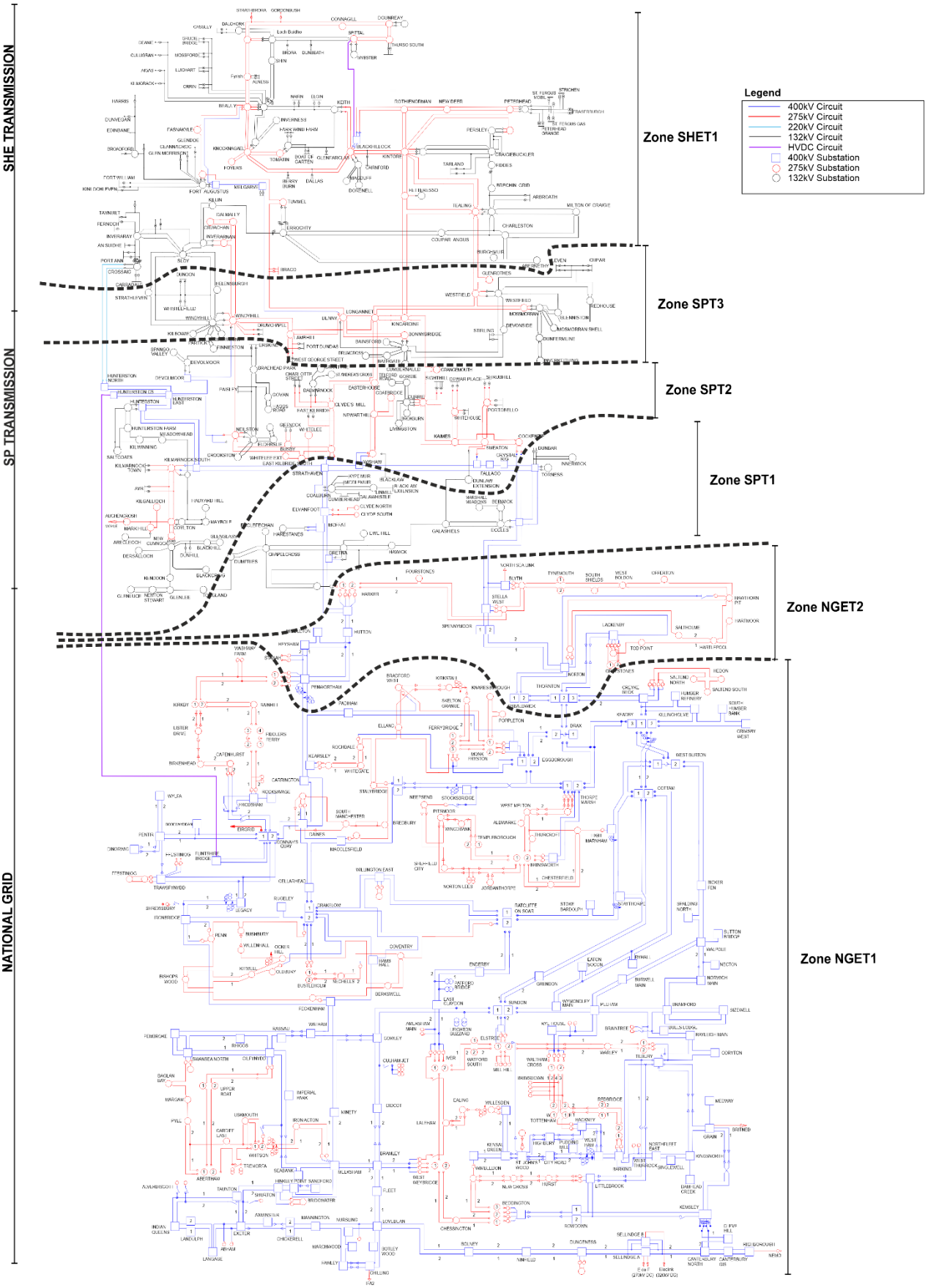
The application fees indicated will be reviewed on an annual basis and reflect any changes to the Boundaries of Influence. It should be noted that the zone to which a particular user is applying is determined by the location of the connection to the National Electricity Transmission System and not by 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 Host	SPT Host	SPT Host	NGET Host	NGET Host
		SPT affected	SHET affected		NGET affected	SPT affected	
New Onshore Application (Entry)	<100MW	£34,700.00	£ 51,250.00	£44,550.00	£ 57,350.00	£ 40,250.00	£ 31,400.00
	100MW-249MW	£34,700.00	£ 51,250.00	£44,550.00	£ 64,900.00	£ 55,400.00	£ 46,550.00
	250MW-1800MW	£42,450.00	£ 51,250.00	£44,550.00	£ 80,750.00	£ 94,800.00	£ 78,200.00
	>1800MW	£58,000.00	£109,800.00	£99,800.00	£161,550.00	£151,500.00	£129,400.00
TEC Change	<100MW	£26,700.00	£50,550.00	£44,550.00	£57,350.00	£40,250.00	£31,400.00
	100MW-249MW	£26,700.00	£50,550.00	£44,550.00	£64,900.00	£55,400.00	£46,550.00
	250MW-1800MW	£34,450.00	£50,550.00	£44,550.00	£80,750.00	£94,800.00	£78,200.00
	>1800MW	£40,000.00	£105,800.00	£99,800.00	£161,550.00	£151,500.00	£129,400.00
New Onshore Supply Point (Exit) or New Onshore Modification Application to Existing Supply Point (Exit)	<=100MW	£45,150.00	£ 55,000.00	£40,000.00	£ 55,400.00	£ 50,900.00	£ 37,600.00
	>100MW	£59,500.00	£ 71,600.00	£56,600.00	£ 76,650.00	£ 74,600.00	£ 46,950.00
New Offshore Application (Indicative Fee Only)	-	£101,050.00	£106,550.00	£61,550.00	£ 94,150.00	£121,200.00	£ 82,500.00
Statement of Works (Exit)	-	£ 1,800.00	£1,800.00	£ 1,300.00	£ 2,800.00	£4,350.00	£3,800.00
Project Progression (Exit)	-	£10,500.00	£ 12,150.00	£ 9,900.00	£ 18,850.00	£ 23,900.00	£ 21,700.00
New Onshore Application BEGA/BELLA	-	£21,750.00	£ 26,800.00	£20,800.00	£ 25,400.00	£ 18,950.00	£ 15,050.00
Storage	-	£47,950.00	£ 54,750.00	£44,550.00			
Mod App Admin Change	-	£ 7,400.00	£7,400.00	£ 2,400.00	£ 2,400.00	£ 5,400.00	£ 3,750.00
Appendix G		£ 6,000.00					

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	£11,876	£11,876	£38,680	£38,680	£38,680	-
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 = £78,200.00

2. Entry Application Fee for a New Bilateral Agreement offshore,
   2000MW Generator wishing to connect to the transmission system in Zone SPT1 for Two Connection Sites.
   Application Fee = 2 * £94,150.00 = £188,300.00

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 * £94,150.00) = £141,225.00

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 * £74,600.00, = £55,950.00

5. Entry Application Fee for an embedded generator (BEGA/ BELLA),
   300MW embedded generator requesting a BEGA in Zone NGET2.
   Application Fee = £18,950.00

6. Entry Application Fee for a TEC Increase 400MW generator in Zone SPT3 wishes to increase TEC by 20MW to 420MW.
   Application Fee = £50,550.00

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 * £74,600.00, = £55,950.00

8. Entry Application Fee to decrease TEC
   600MW generator in Zone SHET1 wishes to decrease TEC by 100MW to 500MW.
   Application Fee = £34,450.00

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	£1,088	£976	£1,080	£1,338
Departmental Management	£880	£872	£920	£908
Senior members of staff (Engineering; Commercial)	£772	£805	£790	£698
Standard (Engineering; Commercial)	£688	£686	£650	£557
Support staff; junior staff	£618	£625	£400	£422

Schedule 4

Connection Charges

15. Non-Capital Components applicable for Maintenance and Transmission Running Costs in Connection Charges for 2024/25

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 2024/25 this will be 0.38%.

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% x £430.14m + 8.49% x £79.56m + 12.9% x £108.21m) / £5.04bn = 1.43%

Net GB TRC Factor = Gross GB TRC Factor – Site Specific Maintenance Factor*

= 1.43% - 0.37% = 1.06%

* 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 2024/25 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	4.28%
National Grid Electricity Transmission plc	MEA	5.78%
SP Transmission plc	TOPI	4.28%
Scottish Hydro Electric Transmission plc	TOPI	3.62%

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 2024

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 0.38% 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 of April 2024.

Charge	**Calculation**	
Site Specific Maintenance Charge (0.34% of GAV)	3,000,000 x 0.38%	£11,400
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		£236,700.00

The first-year charge of £236,700.00 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	£236,700.00
2	£233,700.00
10	£209,700.00
40	£119,700.00

Example 2

The previous example assumes that the asset is commissioned on 1 April 2024. If it is assumed that the asset is commissioned on 1 July 2024, the first-year charge would equal 9/12th of the first year annual connection charge i.e. £177,525.00

This gives the following annual charges over time:

Year	Charge
1	£177,525.00 connection charge for period July 2024 to March 2025
2	£233,700.00
10	£209,700.00
40	£119,700.00

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:

$$\text{Annual Connection Charge}_n = SSF_n\,(TOPIGAV_n) + TC_n\,(GAV_n)$$

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 0.35%.

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 (0.35% of One-off charge)	£100,000 x 0.35%	£350
One-Off Assets Running Cost (0.92% of One-off charge)	£100,000 x 0.92%	£920
Annual Charge		**£1,300**

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
6.0	2024/25 Publication	Document updated to reflect 2024/25 charges