Issue	Revision
11	0

The Statement of Use of System Charges

Effective from 1 April 2015

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 statement is published in accordance with the Transmission Licence of National Grid Electricity Transmission plc (National Grid).

This document sets out the annual tariffs for Transmission Network Use of System charges and the parameters used to calculate these; details of the Balancing Services Incentive Scheme which forms part of the Balancing Services Use of System Charges; and fees charged by National Grid in relation to applications for connection, use of system and engineering works.

Further information on the methods by which and principles upon which National Grid derives Use of System charges is set out 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) which is available on our website at:

http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/The-CUSC/

If you require further detail on any of the information contained within this document or have comments on how this document might be improved please contact our **Charging Team**, preferably by email at:

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Schedule 1

Basis of 2015/16 Transmission Network Use of System Charges

The Transmission Network Use of System Charges for 2015/16 found within this document have been calculated using the methodology described in the Statement of Use of System Charging Methodology. Part of the tariff calculation utilises a DC Load Flow (DCLF) Investment Cost Related Pricing (ICRP) transport and tariff model. The following tables provide a summary of some of the parameters utilised to calculate tariffs within this model.

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)
Reference node	ECLA40_WPD
Expansion constant	£ 13.212555 /MWkm
Annuity factor	5.8%
Overhead factor	1.8%
Locational onshore security factor	1.8
Offshore civil engineering discount	£ 0.414208 /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 Ltd	10.20	11.45	20.77	1.00	1.20	2.59
SP Transmission Ltd	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)

			132kV				
2dp	400kV	275kV	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	8.388	5.912	3.950	

Table 1.4 Offshore Local Expansion Factors

Offshore Power Station	Local Expansion Factor (to 2 d.p.)
Robin Rigg East	144.21
Robin Rigg West	144.21
Gunfleet	83.15
Barrow	95.29
Ormonde	71.32
Walney I	61.71
Walney 2	59.00
Sheringham Shoal	43.80
Greater Gabbard & Galloper	43.85, 41.84
Gwynt Y Môr	38.88
Lincs	56.30
London Array	44.48
Thanet	72.45

Further Local Expansion Factors used to calculate Local Circuit Tariffs applicable to generation connecting to offshore transmission infrastructure during 2015/16 will be published in future revisions of this statement following the completion of the tender process relating to the sale of the relating offshore transmission assets.

Schedule of Transmission Network Use of System Wider Zonal Generation Charges (£/kW) in 2015/16

<u>Table 1.5</u>

The following table provides the Wider Zonal Generation TNUoS tariffs applicable from 1 April 2015.

Zone	Zone Name	Tariff
		(£/kW)
1	North Scotland	25.546023
2	East Aberdeenshire	21.084720
3	Western Highlands	23.455451
4	Skye and Lochalsh	28.869531
5	Eastern Grampian and Tayside	22.214915
6	Central Grampian	21.644276
7	Argyll	22.890024
8	The Trossachs	18.031264
9	Stirlingshire and Fife	17.153323
10	South West Scotland	15.825072
11	Lothian and Borders	13.372687
12	Solway and Cheviot	11.621553
13	North East England	8.600036
14	North Lancashire and The Lakes	7.730613
15	South Lancashire, Yorkshire and Humber	6.258567
16	North Midlands and North Wales	4.890027
17	South Lincolnshire and North Norfolk	2.974367
18	Mid Wales and The Midlands	2.089218
19	Anglesey and Snowdon	7.684625
20	Pembrokeshire	5.933831
21	South Wales	3.308849
22	Cotswold	0.207391
23	Central London	-5.212171
24	Essex and Kent	-0.745812
25	Oxfordshire, Surrey and Sussex	-2.553608
26	Somerset and Wessex	-3.944445
27	West Devon and Cornwall	-5.804749

The above tariffs are a combination of a locational element that reflects the cost of providing incremental capacity to generation on an area of the main integrated onshore transmission system, and a non-locational residual element which ensures that the appropriate amount of transmission revenue is recovered from generators. For 2015/16 the generation residual element to two decimal places is £4.81/kW.

Wider Generation charges are levied by reference to the Transmission Licensee's substation to which the party is connected or deemed connected. Transmission Licensee's substations are assigned to a generation zone as shown on the zonal maps.

If a party is unclear from looking at the geographical map which zone the relevant National Grid substation is assigned to, then those parties should refer to the electrical version of the map of Generation Use of System Tariff Zones as at 1 April 2015 for clarification. Confirmation of the zoning of a particular generator can be obtained by contacting National Grid's Revenue Team.

Small Generators' Discount

In accordance with Licence Condition C13 in National Grid's Transmission Licence, small generators connected to the 132kV transmission system are eligible for a reduction in the listed Generation TNUoS tariffs. This discount has been calculated in accordance with direction from the Authority and equates to 25% of the combined generation and demand residual components of the TNUoS tariffs. For 2015/16, this figure has been calculated as $\pounds10.110613$ /kW.

Schedule of Transmission Network Use of System Local Substation Generation Charges (£/kW) in 2015/16

Table 1.6 Onshore Local Substation Tariffs (£/kW)

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 2014, which have been updated from the examples listed in the Statement of Use of System Methodology.

		Local Substation Tariff (£/k		
Sum of TEC at connecting Substation	Connection Type	132kV	275kV	400kV
<1320 MW	No redundancy	0.179739	0.102822	0.074085
<1320 MW	Redundancy	0.395951	0.244977	0.178168
>=1320 MW	No redundancy	-	0.322393	0.233156
>=1320 MW	Redundancy	-	0.529287	0.386336

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

Table 1.7 Offshore Local Substation Tariffs (£/kW)

The following table provides the Local Substation Generation TNUoS tariffs applicable to generation connecting to offshore transmission infrastructure from 1 April 2014:

Offshore Power Station	Local Substation Tariff (£/kW)
Robin Rigg East	-0.414208
Robin Rigg West	-0.414208
Gunfleet Sands 1 & 2	15.675263
Barrow	7.242928
Ormonde	22.391244
Walney 1	19.324705
Walney 2	19.184162
Sheringham Shoal	21.633823
Greater Gabbard	13.579639
London Array	9.214196
Lincs	13.535832
Thanet	16.474942
Gwynt Y Môr	16.537827

Further local substation tariffs applicable to generation connecting to offshore transmission infrastructure during 2015/16 will be published in future revisions of this statement following the completion of the tender process relating to the sale of the relating offshore transmission assets.

Schedule of Transmission Network Use of System Local Circuit Charges (£/kW) in 2015/16

<u>Table 1.8</u>

The following table provides the Local Circuit Generation TNUoS tariffs applicable to directly connected generation not connected to the main integrated onshore GB Transmission Network from 1 April 2015.

Substation Name	(£/kW)	Substation Name	(£/kW)	Substation Name	(£/kW)
Achruach	3.839934	Didcot	0.225370	Kilmorack	0.176802
Afton	2.080824	Dinorwig	2.152153	Langage	0.589396
Aigas	0.585505	Dumnaglass	3.240647	Lochay	0.327603
An Suidhe	2.734127	Dunlaw Extension	1.310271	Luichart	1.017407
Arecleoch	0.292022	Edinbane	6.128902	Marchwood	0.341907
Baglan Bay	0.664164	Fallago	0.970208	Mark Hill	-0.783834
Black Law	0.895129	Farr Windfarm	2.143727	Millennium Wind	1.455406
Blacklaw Extension	1.965617	Ffestiniogg	0.226870	Mossford	3.549527
Brochloch	1.919139	Finlarig	0.286652	Nant	-1.100208
Carraig Gheal	3.937977	Foyers	0.684073	Neilston	2.135568
Carrington	0.003283	Glendoe	1.646704	Rocksavage	0.015815
Clyde (North)	0.098177	Glenmoriston	1.182403	Saltend	0.298508
Clyde (South)	0.113537	Gordonbush	1.161867	South Humber Bank	0.754716
Corriegarth	2.269208	Griffin Wind	1.674516	Spalding	0.272102
Corriemoillie	2.461327	Hadyard Hill	2.477904	Strathy Wind	4.299193
Coryton	0.050241	Harestanes	4.781432	Whitelee	0.095010
Cruachan	1.591757	Hartlepool	0.530236	Whitelee Extension	0.264128
Crystal Rig	0.365898	Hedon	0.175418		
Culligran	1.551601	Invergarry	1.269646		
Deanie	2.549059	Kilbraur	1.034576		
Dersalloch	1.590028	Killingholme	0.271148		

The above tariffs reflect the cost of transmission circuits between the point of connection and the main interconnected transmission system.

<u>Table 1.9</u>

The following table provides the Local Circuit Generation TNUoS tariffs applicable to generation connecting to offshore transmission infrastructure from 1 April 2015:

Offshore Power Station	Local Circuit Tariff (£/kW)
Robin Rigg East	27.437723
Robin Rigg West	27.437723
Gunfleet Sands 1 & 2	14.391119
Barrow	37.894993
Ormonde	41.712790
Walney 1	38.485100
Walney 2	38.824156
Sheringham Shoal	25.371406
Greater Gabbard	31.204673
London Array	31.383039
Lincs	54.267778
Thanet	30.698705
Gwynt Y Môr	16.291803

Further local circuit tariffs applicable to generation connecting to offshore transmission infrastructure during 2015/16 will be published in future revisions of this statement following the completion of the tender process relating to the sale of the relating offshore transmission assets.

Schedule of Transmission Network Use of System STTEC and LDTEC Charges in 2015/16

<u>Table 1.10</u>

The following table provides the Short Term Transmission Entry Capacity (STTEC) and Limited Duration Transmission Entry Capacity (LDTEC) tariffs applicable to generators from 1 April 2015.

	LDTEC Tariff (£/kW per week)		Short Term	Generation 1	ariff (£/kW)
Power Station	Higher Rate	Lower Rate	28 Day STTEC Period	35 Day STTEC Period	42 Day STTEC Period
Abernedd Power Station	0.186576	0.013644	0.746303	0.932879	1.119455
Aberthaw	0.201502	0.014736	0.806009	1.007511	1.209013
Achruach	0.881952	0.064496	3.527808	4.409760	5.291711
Afton	0.418689	0.030618	1.674755	2.093443	2.512132
Aigas	0.850534	0.062199	3.402137	4.252672	5.103206
An Suidhe	0.823897	0.060251	3.295588	4.119485	4.943382
Arecleoch	0.855584	0.062568	3.422335	4.277919	5.133502
Baglan Bay	0.221444	0.016194	0.885778	1.107222	1.328667
Barking	0.000000	0.000000	0.000000	0.000000	0.000000
Barrow Offshore Wind Farm	2.244791	0.164160	8.979163	11.223954	13.468745
Barry Power Station	0.173715	0.012704	0.694858	0.868573	1.042287
Black Law	0.758497	0.055468	3.033987	3.792483	4.550980
Blacklaw Extension	0.283890	0.020761	1.135560	1.419450	1.703340
BP Grangemouth	0.900549	0.065857	3.602198	4.502747	5.403297
Brigg	0.256726	0.018774	1.026906	1.283632	1.540359
Brochloch	0.410200	0.029998	1.640801	2.051001	2.461201
Carraig Gheal	0.887099	0.064873	3.548397	4.435496	5.322595
Carrington	0.266253	0.019471	1.065010	1.331263	1.597516
CDCL	0.277009	0.020257	1.108036	1.385045	1.662054
Clunie	0.644912	0.047162	2.579649	3.224561	3.869473
Clyde (North)	0.712619	0.052113	2.850474	3.563093	4.275711
Clyde (South)	0.713425	0.052172	2.853700	3.567125	4.280549
Connahs Quay	0.277009	0.020257	1.108036	1.385045	1.662054
Corby	0.109684	0.008021	0.438736	0.548420	0.658104
Corriegarth	0.938929	0.068663	3.755715	4.694644	5.633573
Coryton	0.000000	0.000000	0.000000	0.000000	0.000000
Cottam	0.277009	0.020257	1.108036	1.385045	1.662054
Cour	0.680355	0.049754	2.721421	3.401777	4.082132
Cruachan	1.035607	0.075733	4.142427	5.178034	6.213640
Crystal Rig	0.730630	0.053430	2.922518	3.653148	4.383777
Culligran	0.901254	0.065908	3.605018	4.506272	5.407526

	LDTEC Tariff (£/kW per week)		Short Term Generation Tariff (£/kW)		
Power Station	Higher Rate	Lower Rate	28 Day STTEC Period	35 Day STTEC Period	42 Day STTEC Period
Damhead Creek	0.000000	0.000000	0.000000	0.000000	0.000000
Deanie	0.953621	0.069738	3.814484	4.768105	5.721726
Deeside	0.277009	0.020257	1.108036	1.385045	1.662054
Dersalloch	0.392922	0.028734	1.571687	1.964609	2.357531
Didcot	0.000000	0.000000	0.000000	0.000000	0.000000
Dinorwig	0.528672	0.038661	2.114686	2.643358	3.172029
Drax	0.348857	0.025512	1.395430	1.744287	2.093144
Dumnaglass	0.989929	0.072393	3.959717	4.949646	5.939576
Dungeness B	0.000000	0.000000	0.000000	0.000000	0.000000
Dunlaw Extension	0.249484	0.018245	0.997938	1.247422	1.496906
Edinbane	1.316047	0.096242	5.264187	6.580234	7.896281
Eggborough	0.348857	0.025512	1.395430	1.744287	2.093144
Enfield	0.000000	0.000000	0.000000	0.000000	0.000000
Errochty	0.644912	0.047162	2.579649	3.224561	3.869473
Fallago	0.762356	0.055751	3.049423	3.811779	4.574135
Farr Windfarm	0.932341	0.068181	3.729364	4.661705	5.594046
Fasnakyle G1 & G2	1.236809	0.090447	4.947237	6.184047	7.420856
Fawley	0.000000	0.000000	0.000000	0.000000	0.000000
Ferrybridge C	0.341436	0.024969	1.365744	1.707180	2.048616
Ffestiniogg	0.274035	0.020040	1.096141	1.370176	1.644212
Fiddlers Ferry	0.356362	0.026061	1.425449	1.781812	2.138174
Finlarig	0.630003	0.046072	2.520011	3.150014	3.780017
Foyers	1.382478	0.101100	5.529913	6.912391	8.294869
Glendoe	0.796492	0.058247	3.185969	3.982461	4.778954
Glenmoriston	0.772116	0.056464	3.088466	3.860582	4.632699
Gordonbush	1.407562	0.102934	5.630250	7.037812	8.445374
Grain	0.000000	0.000000	0.000000	0.000000	0.000000
Great Yarmouth	0.109684	0.008021	0.438736	0.548420	0.658104
Greater Gabbard Offshore Wind Farm	2.460860	0.179961	9.843441	12.304302	14.765162
Griffin Wind	1.274983	0.093239	5.099930	6.374913	7.649895
Gunfleet Sands II Offshore Wind Farm	1.157362	0.084637	4.629447	5.786809	6.944171
Gunfleet Sands Offshore Wind Farm	1.157362	0.084637	4.629447	5.786809	6.944171
Bodelwyddan	1.980282	0.144817	7.921128	9.901410	11.881692
Hadyard Hill	0.970343	0.070960	3.881370	4.851713	5.822055
Harelaw	0.180695	0.013214	0.722781	0.903476	1.084171
Harestanes	0.870593	0.063666	3.482372	4.352965	5.223558
Hartlepool	0.492201	0.035994	1.968802	2.461003	2.953203
Heysham Power Station	0.426140	0.031163	1.704559	2.130699	2.556839
Hinkley Point B	0.000000	0.000000	0.000000	0.000000	0.000000

	LDTEC Tariff (£/kW per week)		Short Term Generation Tariff (£/kW)		
Power Station	Higher	Lower Rate	28 Day STTEC Period	35 Day STTEC Period	42 Day STTEC Period
Humber Gateway Offshore Wind Farm	0 337784	0.024702	1 351137	1 688921	2 026705
Hunterston	0.834706	0.061041	3 338823	4 173529	5 008234
Immingham	0.337929	0.024712	1 351714	1 689643	2 027571
Indian Queens	0.000000	0.000000	0.000000	0.000000	0.000000
	0.776697	0.056799	3.106787	3.883484	4.660180
Ironbridge	0.119038	0.008705	0.476151	0.595189	0.714227
Killingholme	0.363093	0.026553	1.452371	1.815463	2.178556
Killingholme	0.363093	0.026553	1.452371	1.815463	2.178556
Kilmorack	0.829077	0.060630	3.316310	4.145387	4.974465
Langage	0.000000	0.000000	0.000000	0.000000	0.000000
Lincs Offshore Wind Farm	3.715844	0.271737	14.863375	18.579219	22.295063
Little Barford	0.119038	0.008705	0.476151	0.595189	0.714227
Littlebrook	0.000000	0.000000	0.000000	0.000000	0.000000
Lochay	0.632153	0.046229	2.528611	3.160764	3.792916
Corriemoillie	0.960366	0.070231	3.841465	4.801831	5.762197
London Array Stages 1- 4	2.092200	0.153001	8.368799	10.460999	12.553198
Longannet	0.928337	0.067889	3.713348	4.641685	5.570022
Luichart	0.873209	0.063857	3.492837	4.366046	5.239255
Marchwood	0.000000	0.000000	0.000000	0.000000	0.000000
Mark Hill	0.795063	0.058142	3.180253	3.975316	4.770379
Medway Power Station	0.000000	0.000000	0.000000	0.000000	0.000000
Millennium Wind	0.786449	0.057512	3.145796	3.932246	4.718695
Mossford	1.006145	0.073579	4.024582	5.030727	6.036873
Nant	0.622594	0.045530	2.490378	3.112972	3.735567
Ormonde Offshore Wind Farm	3.771319	0.275794	15.085276	18.856595	22.627914
Orrin	0.819795	0.059951	3.279181	4.098977	4.918772
Pembroke Power Station	0.331809	0.024265	1.327235	1.659044	1.990853
Peterborough	0.156154	0.011419	0.624617	0.780771	0.936926
Peterhead	1.119809	0.081891	4.479236	5.599045	6.718854
Pogbie Wind Farm	0.180695	0.013214	0.722781	0.903476	1.084171
Rampion	0.000000	0.000000	0.000000	0.000000	0.000000
Ratcliffe on Soar	0.129967	0.009504	0.519866	0.649833	0.779800
Robin Rigg East	1.498059	0.109552	5.992236	7.490295	8.988353
Robin Rigg West	1.498059	0.109552	5.992236	7.490295	8.988353
Rocksavage	0.261446	0.019119	1.045785	1.307231	1.568677
Rugeley	0.119038	0.008705	0.476151	0.595189	0.714227
Rye House	0.000000	0.000000	0.000000	0.000000	0.000000
Saltend	0.357108	0.026115	1.428431	1.785539	2.142646
Seabank	0.020242	0.001480	0.080967	0.101209	0.121451

	LDTEC Tariff (£/kW per week)		Short Term Generation Tariff (£/kW		
Power Station	Higher Rate	Lower Rate	28 Day STTEC Period	35 Day STTEC Period	42 Day STTEC Period
Sellafield	0.405857	0.029680	1.623429	2.029286	2.435143
Severn Power	0.186576	0.013644	0.746303	0.932879	1.119455
Sheringham Shoal	2.577458	0.188488	10.309834	12.887292	15.464751
Shoreham	0.000000	0.000000	0.000000	0.000000	0.000000
Sizewell B	0.119038	0.008705	0.476151	0.595189	0.714227
Sloy G2 and G3	0.425270	0.031100	1.701082	2.126352	2.551623
South Humber Bank	0.377551	0.027610	1.510205	1.887756	2.265307
Spalding	0.179793	0.013148	0.719174	0.898967	1.078761
Staythorpe C	0.277009	0.020257	1.108036	1.385045	1.662054
Strath Brora Wind, Brora	1.400880	0.102445	5.603518	7.004398	8.405278
Strathy Wind	1.045503	0.076457	4.182012	5.227515	6.273018
Sutton Bridge	0.165508	0.012103	0.662032	0.827540	0.993049
Taylors Lane	0.000000	0.000000	0.000000	0.000000	0.000000
Thanet Offshore Windfarm	2.437461	0.178250	9.749845	12.187307	14.624768
Toddleburn Wind Farm	0.180695	0.013214	0.722781	0.903476	1.084171
Torness	0.711420	0.052026	2.845680	3.557099	4.268519
Walney I Offshore Wind Farm	3.440872	0.251628	13.763488	17.204360	20.645232
Walney II Offshore Wind Farm	3.451294	0.252391	13.805175	17.256469	20.707763
West Burton A	0.277009	0.020257	1.108036	1.385045	1.662054
West Burton B	0.277009	0.020257	1.108036	1.385045	1.662054
West of Duddon Sands Offshore Wind Farm	0.405857	0.029680	1.623429	2.029286	2.435143
Westermost Rough Offshore Wind Farm	0.337784	0.024702	1.351137	1.688921	2.026705
Whitelee	0.841202	0.061517	3.364810	4.206012	5.047215
Whitelee Extension	0.850081	0.062166	3.400325	4.250406	5.100487
Wilton	0.464363	0.033959	1.857453	2.321816	2.786179
Wylfa	0.412797	0.030188	1.651187	2.063983	2.476780

The above tariffs apply to levels of STTEC or LDTEC access that is agreed during the charging year.

STTEC can be arranged in 4, 5, or 6 week blocks, with the tariff for applicable duration applying.

The 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.

Further LDTEC and STTEC tariffs applicable to generation connecting to offshore transmission infrastructure during 2015/16 will be published in future revisions of this

statement following the completion of the tender process relating to the sale of the relating offshore transmission assets.

Schedule of Pre-Asset Transfer Related Embedded Transmission Use of System Charges in 2015/16

<u>Table 1.11</u>

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 2015. The relating charge is used to recover the element of the Offshore Transmission Operator's Revenue that relates to distribution charges paid during in the development of the offshore transmission network.

Offshore Power Station	Pre-Asset Transfer ETUoS Tariff (£/kW)
Robin Rigg East	8.504214
Robin Rigg West	8.504214
Gunfleet Sands 1 & 2	2.689783
Barrow	0.940985
Ormonde	0.332416
Sheringham Shoal	0.551499
Thanet	0.739026

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

Further Pre-Asset Transfer Related ETUoS tariffs applicable to generation connecting to offshore transmission infrastructure during 2015/16 will be published in future revisions of this statement following the completion of the tender process relating to the sale of the relating offshore transmission assets.

Schedule of Transmission Network Use of System Demand Charges (£/kW) and Energy Consumption Charges (p/kWh) for 2015/16

<u>Table 1.12</u>

The following table provides the Zonal Demand and Energy Consumption TNUoS tariffs applicable from 1 April 2015.

Demand Zone	Zone Area	Demand Tariff (£/kW)	Energy Consumption Tariff (p/kWh)
1	Northern Scotland	23.469195	3.388532
2	Southern Scotland	26.789320	3.559740
3	Northern	32.617844	4.283661
4	North West	35.683316	4.874799
5	Yorkshire	36.287690	5.185476
6	N Wales & Mersey	35.620770	5.679363
7	East Midlands	39.066214	5.234958
8	Midlands	39.629994	5.487374
9	Eastern	41.176427	5.539798
10	South Wales	37.608777	5.245539
11	South East	43.738784	5.808134
12	London	46.237472	6.011081
13	Southern	44.786928	6.088292
14	South Western	43.979049	5.807268

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 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 which ensures that the appropriate amount of transmission revenue is recovered from demand Users. For 2015/16 the demand residual element to two decimal places is £35.63/kW.

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 energy consumption 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 financial year.

Small Generators Discount

In accordance with Standard Licence Condition C13 governing the adjustments to use of system charges for the small generators discount, a unit amount of £0.350890/kW to the demand tariff and 0.0479293p/kWh to the energy consumption tariff has been included on a non-discriminatory and non-locational basis.

Standard Licence Condition C13 requires the small generators discount mechanism to be revenue neutral over the period of its operation so that the net effect on revenue of the licence condition is zero. It will therefore be necessary to manage any under or over recovery associated with the small generators discount separately from the under/over recovery mechanism within National Grid's main revenue restriction. National Grid calculates the unit amount added to the demand tariffs using a forecast of the total discount payable to eligible generators, and a forecast of the demand charging base. If either of these factors outturns differently from the original forecast then an under/over recovery would occur. The amount of any under/over recovery would be added to the revenue recovery used to derive the unit amount in subsequent years.

Zonal Maps Applicable for 2015/16

Generation Use of System Tariff Zones (Geographical map as at 1 April 2015)





Demand Use of System Tariff Zones (Geographical map as at 1 April 2015)

Schedule 2

Detail of the External Incentive Scheme for the Balancing Services Use of System Charges for 2015/16

The Balancing Services Use of System (BSUoS) Charges for 2015/16 calculated in accordance with the methodology described in the Statement of Use of System Charging Methodology are made up of External BSUoS Charges and Internal BSUoS Charges. The External BSUoS Charges includes External Costs and an Incentive Scheme. Included here are details of how the Incentive outlined in the Transmission Licence is accommodated into BSUoS Charges.

External Incentive Structure and Payments for 2015/16

The forecast External incentive payment for the duration of the External incentive scheme (FYIncpayEXT_d) is calculated as the difference between the External Scheme target (M_t) and the forecast Balancing cost (FBC) subject to sharing factors (SF_t) and a cap/collar (CB_t).

$$FYIncpayEXT_{d} = SF_{t} * (M_{t} - FBC_{d}) + CB_{t}$$

The relevant value of the External incentive payment (FYIncPayEXT_d) is calculated by reference to the table below by the selection and application of the appropriate selection factors and offset dependent upon the value of the forecast Balancing Services cost (FBC) and the Incentive Target Cost (ITC).

Table 2.1: BSIS for 2015/16

Forecast Balancing Cost (FBC) £m	M _t £m	SF _t £m	CB _t £m
Тс	be confirmed		

In respect of each Settlement Day d, the forecast ince calculated as follows:

t (FBC_d) will be

$$FBC_{d} = \frac{\sum_{k=1}^{d} IBC_{k}}{\sum_{k=1}^{d} PFT_{k}} * NDS$$

Where:

NDS: Number of days in Scheme

The Daily Incentivised Balancing Cost for a Settlement Day (IBC_d) is calculated as follows:

$$IBC_{d} = \sum_{j \in d} CSOBM_{jd} + BSCCV_{jd} + BSCCA_{d} - OM_{d} - RT_{d} - BSFS_{d}$$

Wind Forecast Incentive (RFIIR)

The wind forecast incentive is an incentive scheme on the performance of National Grid with regards to its level of accuracy in forecasting the levels of wind generation on the system at the day ahead stage. {To be updated}

Schedule 3

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 based on reasonable costs incurred by National Grid including where appropriate, charges from the Transmission Owners (TO's) in accordance with their charging statements. The application process and options available are set out 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 as shown on the map and tables on the next page. 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 3. 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 National Grid from the standard fee published in their charging statements) to process an offer of terms, National Grid reserves the right to remove the option for a fixed price application fee.

The map divides GB into three zones based on the Boundary of Influence map defined in Schedule 4 of the STC (SO-TO Code). Zone A maps onto the area NGC South, Zone B maps to NGC North and SPT South, and Zone C maps to SPT North, SHETL South and SHETL North.

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 and are capped at £400,000 + VAT.

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).



Entry Application Fees for New Bilateral Agreements

- 1. New Onshore Application Fee = Base + (MW * Rate)
- 2. TEC Increase¹ = Base + (TEC Increase * Rate)
- 3. New Offshore Application Fee = Number of offshore Connection Sites * Fee

¹ The base value and Rate used are the values associated with the change in TEC not the resulting total TEC being applied for.

<u>Table 3.1</u>

This table details the adjustments applicable for certain scenarios to be taken into consideration when calculating the value of an Entry Application Fee.

Other Entry Fees	Fraction of New Application Fee		
Onshore Modification Application (applicable for any change prior to completion excluding TEC increases and those options listed in this table)	0.75		
Offshore Modification Application – number of affected transmission interface sites	0.75		
Request for Design Variation in addition to standard offer	1.5		
Embedded Generation New Application (BELLA/BEGA)*	0.3		
Embedded Generation Modification Application	0.2		
Entry Fees (cont.)		Zone B	Zone C
TEC Exchange Request (no system works)	£10,000	£10,000	£17,000
Request for STTEC or SNSTF	£10,000		
Directly Connected Reactive Only Service Provider	£20,000	£21,000	£22,000
Suppliers and Interconnector Users	£5,000		
Assign, transfer or novate a bilateral agreement or minor admin changes	£3,000		

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.

*Where the developer requests national Grid to identify the transmission reinforcement works and the works at the GSP (mod notice process), the application fee will be indicative only.

<u>Table 3.2</u>

Lim (LD	ited Duration TEC TEC)	Duration of LDTEC (t)	Zone	£ (£'000)	Agreement Type (as Table C)
		t <= 3 months		10 + VAT	
	Basic request fee for duration t	3 months < t <= 6 months		15 + VAT	
	(applicable to all requests for LDTEC Offers)	6 months < t <= 9 months		20 + VAT	
		t > 9 months		30 + VAT	
		t <= 3 months		1 + VAT	
Additional fee for rolling assessment (applicable to a request for an LDTEC Indicative Block Offer)	rolling assessment	3 months < t <= 6 months	A 11	1.5 + VAT	Bilateral Connection
	request for an LDTEC Indicative Block Offer)	6 months < t <= 9 months	All	2 + VAT	Agreement / BEGA
		t > 9 months		3 + VAT	
	Additional fee for	t <= 3 months		5 + VAT	
(; c	applications (applicable to a	3 months < t <= 6 months		7.5 + VAT	
	combined request for an LDTEC Block Offer and an LDTEC	6 months < t <= 9 months		10 + VAT	
	Indicative Block Offer)	t > 9 months		15 + VAT	

<u>Table 3.3</u>

Ten	nporary TEC Exchange Rate Request Fees	Duration of Temporary Exchange period (t)	£
		t <= 3 months	15,000
¹⁵ Apj Exc	Application for for Tomporary TEC	3 months < t <= 6 months	25,000
	Exchange Rate Requests	6 months < t <= 9 months	30,000
		t > 9 months	45,000
		+	

Exit Application Fees for New Bilateral Agreements and Modifications to existing Bilateral Agreements

<u>Table 3.4</u>

Exit Fees	Zone A	Zone B		Zone C	
		<100MW	>100MW	<100MW	>100MW
New Supply Point	£37,000	£41,000	£52,000	£38,000	£60,000
Modification Application	£28,000	£31,000	£39,000	£29,000	£45,000

Table 3.5

Exit Fees (cont.)	Zone A	Zone B	Zone C
Statement of Works at existing supply point	£2,750	£3,000	£1,000
Modification Application following request for Statement of Works (project progression)	£7,500	£8,500	£4,500
Complex project progression *	£15,000	£16,500	£17,200

* Complex fees apply where significant network assessment is identified at Statement of Works stage.

Examples

1. Entry Application Fee for a New Bilateral Agreement onshore

300MW Generator wishing to connect to the transmission system in Zone A Application Fee = $\pounds 25,000 + (300 * 55) = \pounds 41,500$

2. Entry Application Fee for a New Bilateral Agreement offshore

2000MW Generator wishing to connect to the transmission system in Zone B Two Connection Sites Application Fee = $2 * \pounds72,000 = \pounds144,000$

3. Entry Application Fee for a Modification to an existing Bilateral Agreement offshore

2000MW Generator in Zone B seeking to alter a commissioning date where there are 2 affected transmission interface sites

This would be a Modification Application Fee = $0.75 * (2 * \pounds72,000) = \pounds108,000$

4. Entry Application Fee for a Modification to an existing Bilateral Agreement

300MW Generator in Zone A seeking to alter commissioning date This would be a Modification Application Fee = $0.75 * (\pounds 25,000 + (300 * 55)) = \pounds 31,125$

5. Entry Application Fee for an embedded generator (BEGA/ BELLA)

300MW embedded generator requesting a BEGA in Zone A Fee = $0.3 * (\pounds 25,000 + (300 * 55)) = \pounds 12,450$

6. Entry Application Fee for a TEC Increase

400MW generator in Zone A wishes to increase TEC by 20MW to 420MW Application Fee = \pounds 15,000 + (20 * 100) = \pounds 17,000

7. Entry Application Fee for a change to completion date

500MW generator in Zone B wishes to change their completion date by moving it back by 12 months

Application Fee = $0.75 * (\pounds 40,000 + (500 * 90)) = \pounds 63,750$

8. Entry Application Fee for a Decrease TEC

600MW generator in Zone C wishes to decrease TEC by 100MW to 500MW Application Fee = 0.75 * (£55,000 + (100 * 125)) = £50,625

<u>Table 3.6</u>

Bilateral Agreement Types

Bilateral Agreement Type	Description
Bilateral Connection Agreement	In respect of Connection Sites of Users.
Bilateral Embedded Licence Exemptable 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.

<u>Table 3.7</u>

Generator Types

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

Type of Plant	Definition
Embedded	Having a direct connection to a User System or the System of any other User to which Customers and/or Power Stations are connected, such connection being either a direct connection or a connection via a busbar of another User or of a Transmission Licensee (but with no other connection to the National Electricity Transmission System).
Small Power Station	A Power Station in NGET's Transmission Area with a Registered Capacity of less than 50MW, a Power Station in SPT's Transmission Area with a Registered Capacity of less than 30MW or a Power Station in SHE T's Transmission Area with a Registered Capacity of less than 10 MW.
Medium Power Station	A Power Station in NGET's Transmission Area with a Registered Capacity of 50MW or more, but less than 100MW.
Large Power Station	A Power Station in NGET's Transmission Area with a Registered Capacity of 100MW or more or a Power Station in SPT's Transmission Area with a Registered Capacity of 30 MW or more; or a Power Station in SHE T's Transmission Area with a Registered Capacity of 10 MW or more.

Schedule 4

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 4.1

		£/day	
	National Grid	SPT	SHE T
Section Manager Internal Solicitor	1000	1007	947
Principal Power System Engineer	795	770	797
Senior Power System Engineer Project Manager Account Manager Senior Wayleave Officer	645	643	664
Power System Design Engineer Draughtsman	510	541	530
Graduate Engineer	435	430	448
Administrative Support	345	340	350

Schedule 5

Non-Capital Components applicable for Maintenance and Transmission Running Costs in Connection Charges for 2015/16

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 will be calculated each year based on the forecast total site specific maintenance for GB divided by the total GAV of the transmission licensees GB connection assets, to arrive at a percentage of total GAV. For 2015/16 this will be 0.55%.

Part B: Transmission Running Costs

The Transmission Running Cost (TRC) factor is calculated at the beginning of each price control to reflect the appropriate amount of other Transmission Running Costs (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 2013/14 to 2020/21 this will be 1.47%.

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 1.47%:

Example:

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

Scottish Power Transmission Ltd	18.6%
Scottish Hydro Transmission Ltd	7.5%
National Grid	16.3%

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

Scottish Power Transmission Ltd	43.4
Scottish Hydro Transmission Ltd	33.1
National Grid	317.1

Total GB Connection GAV = £3.38bn GB TRC Factor = (18.6% x £43.4m + 7.5% x £33.1m + 16.3% x £317.1m) / £3.38bn GB TRC Factor = 1.84% Net GB TRC Factor = Gross GB TRC Factor – Site Specific Maintenance Factor*

Net GB TRC Factor = 1.84% - 0.37% = 1.47%

* 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 or in this example, is the 2013/14 Site Specific Maintenance Factor of 0.37%.

Illustrative Connection Asset Charges

An indication of First Year Connection Asset Charges for new connection assets using estimates of Gross Asset Values are outlined in Appendix 1. Additional examples of connection charge calculations are included in Appendix 2 of this Statement to provide some general illustrations of how connection charge calculations are applied.

Appendix 1: Illustrative Connection Asset Charges

2015/16 First Year Connection Charges based on the RPI Method (6% rate of return)

The following table provides an indication of typical charges for new connection assets. Before using the table, it is important to read through the notes below as they explain the assumptions used in calculating the figures.

Calculation of Gross Asset Value (GAV)

The GAV figures in the following table were calculated using the following assumptions:

- Each asset is new
- The GAV includes estimated costs of construction, engineering and Liquidated Damages premiums.
- The GAV does not include Interest During Construction but does include a 5% risk factor to compensate for this.

For details of the Calculation of the Gross Asset Value, see Chapter 2 of The Statement of the Connection Charging Methodology (Section 14 Part I of the Connection and Use of System Code).

Calculation of first year connection charge

The first year connection charges in the following table were calculated using the following assumptions:

- The assets are new
- The assets are depreciated over 40 years
- The rate of return is assumed to be 6% for RPI indexation
- The connection charges include maintenance costs at the 2015/16 rate of 0.55% of the GAV
- The connection charges include Transmission Running Costs at the 2015/16 rate of 1.47% of the GAV

For details of the Basic Annual Connection Charge Formula, see Chapter 2 of The Statement of the Connection Charging Methodology (Section 14 Part I of the Connection and Use of System Code).

Please note that the actual charges will depend on the specific assets at a site. Charges applicable to specific works will be detailed in the User's Bilateral Connection Agreement. Agreement specific GAVs and NAVs for each User will be made available on request.

Notes on Assets

Common exclusions

VAT and Inflation, costs associated with planning, site complexities such as ecology, environmental, archeology, contamination, land purchase and management, Site access including road crossings,rivers,etc.,

Notes and Assumptions

<u>Transformers</u>

• Plant: SGT Cost was provided by NG Internal Procurement. SGT transportation to site, installation and commissioning, Design, Project management and preliminaries

are also included in the SGT costs. SGT equipment cost depends on the specification, site specific requirements, no. of units ordered, metal prices, forex and various other conditions driven by the market.

- Civil: nominal base sizes, good ground condition, no contamination, shallow/ deep bund, Firewall (generic brick wall) on one side with standard height of 8m.
- The protection, control, cabling, auxiliary systems, earthing are based on various assumptions and varies based on site specifications and requirements.

Exclusions

- Plant: Bay protection, control and SCADA system, below ground earthing, auxilliary supplies such as AC/DC system (all considered under part of the Bay Costs)
- Civil: Trenching/Ducting and pilling, Noise enclosure, access works, oil containment drainage

Single/Double Bus

Assumptions

- Plant:The bay is considered from NG standard bay drawing 41/177344 and indicative prices provided for protection, cabling, auxiliary systems, earthing are based on various assumptions. The design costs, Project management and preliminaries are also included. Air insulated switchgear is assumed and costs will vary if Gas insulated switchgear is needed.
- Civil: Nominal base sizes, dimensions of concrete footings, good ground condition,

Exclusions

• Civil: Trenching / Ducting and piling

<u>Cable</u>

Assumptions - All based on 1 circuit of 1 cable per phase, 100m straight, flat and unimpeded route within substation environment.

- Standard AIS CI3 terminations on steel AIS supports, c/w SVL's, anti-touch shrouds, corona rings, arc horns and solar protection as required.
- XLPE Lead/Ali sheathed cable supply, Install, commission with High Voltage AC & Sheath Testing
- Earth Continuity Cable (ECC) & Link Boxes supply, Install & Connection included
- DTS c/w terminations into Fibre Optic Terminal boxes on AIS support on 400 & 275kV only
- PD Monitoring/Testing on 400 & 275kV only
- Full Design Verification & Assurance to NG Standards and Specifications
- Cable Installed in new precast concrete troughs, flat formation, secured in CBS, with cleats to prevent movement under fault conditions, 5T/11T loading standard concrete lids,
- Connection & Modifications to earth mat
- P&C Duct (1 x 90mm) Included (Max 100m excluding cable(s))
- Excavation Waste disposal, Site Establishment / prelims, security & Access costs Included
- Standalone project(s) with its own design/project team
- Water Management (if required)
- Costs do not allow for any small quantity/MOQ surcharge that may be levied by cable supplier

Exclusions

- Civils: Piling
- Plant: Oil works, pilot cabling (within substation scope)

	Illustrative	e Connectio	n Asset Cha	arges			
	£000's						
	400)kV	275	ōkV	132	2kV	
	GAV	Charge	GAV	Charge	GAV	Charge	
Double Busbar Bay	2599	271	2134	223	1260	132	
Single Busbar Bay	2278	238	1817	190	1138	119	
Transformer Cables 100m							
(incl. Cable sealing ends)							
120MVA			2214	231	1288	135	
180MVA	2399	251	2214	231	1303	136	
240MVA	2401	251	2225	232	1312	137	
750MVA	2476	259	2300	240			
Transformers							
45MVA 132/66kV					1949	204	
90MVA 132/33kV					1949	204	
120MVA 275/33kV			3981	416			
180MVA 275/66kV			4192	438			
180MVA 275/132kV			4410	461			
240MVA 275/132kV			4410	461			
240MVA 400/132kV	5044	527					

Connection Examples

Example 1

KEY



		SCHEDULE FOR NEW			
		275/132kV		400/132kV	
	Ref	Description	First Year Charges (£000s)	Description	First Year Charges (£000s)
Existing Transmission Assets (infrastructure)	A	2 x 180MVA	921	2 x 240MVA	1054
New Transmission Assets (infrastructure)	в	2 x 100m 180MVA	462	2 x 100m 240MVA	502
New connection assets wholly charged to custome Customer	С	2 x 132kV Double Busbar Transformer Bays	264	2 x 132kV Double Busbar Transformer Bays	264
	_	Total	1647	Total	1820

Example 2



		SCHEDULE FOR NEW CONNECTION			
		275/132kV		400/132kV	
KEY	Ref	Description	First Year Charges (£000s)	Description	First Year Charges (£000s)
Existing Transmission Assets (infrastructure)	А	2 x 275kV Double Busbar Transformer Bays	446	2 x 400kV Double Busbar Transformer Bays	542
New Transmission Assets (infrastructure)	в	2 x 180MVA	921	2 x 240MVA	1054
New connection assets wholly charged to	с	2 x 100m 180MVA	462	2 x 100m 240MVA	502
Customer	D	2 x 132kV Double Busbar Transformer Bays	264	2 x 132kV Double Busbar Transformer Bays	264
		Total	2093	Total	2362

Example 3



			SCHEDULE FOR NEW			
			275/132kV		400/132kV	
KEY:	Evicting Transmission Assets (infrastructure)	Ref	Description	First Year Charges (£000s)	Description	First Year Charges (£000s)
	New Transmission Assets (infrastructure)	A	2 x 100m 180MVA	462	2 x 100m 240MVA	502
	Existing connection assets wholly charged to another user	B C	2 x 180MVA 2 x 100m 180MVA	921 462	2 x 240MVA 2 x 100m 240MVA	1054 502
	Customer Other Users Assets	D	2 x 132kV Double Busbar Transformer Bays	264	2 x 132kV Double Busbar Transformer Bays	264
			Total	2109	Total	2322

Appendix 2: 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 RPI method of charging, and assuming:

- i) the asset is commissioned on 1 April 2015
- 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 0.55% of GAV
- iv) the Transmission Running Cost component remains constant throughout the 40 years at 1.47% of GAV
- v) the asset is depreciated over 40 years
- vi) the rate of return charge remains constant at 6% for the 40 year life of the asset
- 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 on 1 April 2015.

Charge	Calculation	
Site Specific Maintenance Charge (0.58% of GAV)	3,000,000 x 0.55%	£16,500
Transmission Running Cost (1.47% of GAV)	3,000,000 x 1.47%	£44,100
Capital charge (40 year depreciation 2.5% of GAV)	3,000,000 x 2.5%	£75,000
Return on mid-year NAV (6%)	2,962,500 x 6%	£177,750
TOTAL	_	£313,350

The first year charge of £313,350 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 gives the following annual charges over time (assuming no inflation):

Year	Charge
1	£313,350
2	£308,850
10	£272,850
40	£137,850

Based on this example, charges of this form would be payable until 31 March 2055.

Example 2

The previous example assumes that the asset is commissioned on 1 April 2015. If it is assumed that the asset is commissioned on 1 July 2015, the first year charge would equal 9/12th of the first year annual connection charge i.e. £235,012.50

This gives the following annual charges over time:

Year Charge

1	£235,012.50 (connection charge for period July 2015 to March 2016)
2	£309,750
10	£273,750
40	£138,750

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, 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 21-40 they will pay a connection charge based on the following formula:

Annual Connection Charge_n = SSF_n (RPIGAV_n)+ TC_n (GAV_n)

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.

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10.1	2014/15 Publication	-