

| Issue | Revision |
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The Statement of Use of System Charges

Effective from 1 April 2012

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

nationalgrid

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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://www.nationalgrid.com/uk/Electricity/Codes/systemcode/contracts/>

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 2012/13 Transmission Network Use of System Charges

The Transmission Network Use of System Charges for 2012/13 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 data published in the October update of the 2010 GB Seven Year Statement |
| Reference node | ECLA40_AQUL |
| Expansion constant | £ 11.723618 /MWkm |
| Annuity factor | 6.6% |
| Overhead factor | 1.8% |
| Locational onshore security factor | 1.8 |
| Offshore civil engineering discount | £ 0.381028 /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 | 22.39 | 22.39 | 22.79 | 1.00 | 1.14 | 2.24 |
| SP Transmission Ltd | 22.39 | 22.39 | 30.22 | 1.00 | 1.14 | 2.80 |
| National Grid Electricity Transmission plc | 22.39 | 22.39 | 30.22 | 1.00 | 1.14 | 2.80 |

Table 1.3 Onshore Local Expansion Factors (All TO Regions)

| | 400kV | 275kV | 132kV | | | |
|-------------------------------|-------|-------|------------------------|------------------------|-------------------------|-------------------------|
| | | | Single Circuit <200MVA | Double Circuit <200MVA | Single Circuit >=200MVA | Double Circuit >=200MVA |
| Cable Expansion Factor | 22.39 | 22.39 | 30.22 | 30.22 | 30.22 | 30.22 |
| OHL Expansion Factor | 1.00 | 1.14 | 10.00 | 8.32 | 7.13 | 4.42 |

Table 1.4 Offshore Local Expansion Factors

| Offshore Power Station | Local Expansion Factor (to 2 d.p.) |
|-------------------------------|---|
| Barrow | 98.56 |
| Gunfleet | 86.23 |
| Robin Rigg East | 149.71 |
| Robin Rigg West | 149.71 |
| Walney I | 63.17 |

Further Local Expansion Factors used to calculate Local Circuit Tariffs applicable to generation connecting to offshore transmission infrastructure during 2012/13 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 2012/13

Table 1.5

The following table provides the Wider Zonal Generation TNUoS tariffs applicable from 1st April 2012.

| Zone | Zone Name | Tariff (£/kW) |
|-------------|---------------------------|----------------------|
| 1 | North Scotland | 21.958097 |
| 2 | Peterhead | 20.113140 |
| 3 | Western Highland & Skye | 22.051017 |
| 4 | Central Highlands | 17.560345 |
| 5 | Argyll | 14.187889 |
| 6 | Stirlingshire | 14.227364 |
| 7 | South Scotland | 12.787463 |
| 8 | Auchencrosh | 10.504012 |
| 9 | Humber & Lancashire | 6.078531 |
| 10 | North East England | 8.426476 |
| 11 | Anglesey | 7.099147 |
| 12 | Dinorwig | 6.355495 |
| 13 | South Yorks & North Wales | 4.605096 |
| 14 | Midlands | 2.392870 |
| 15 | South Wales & Gloucester | 2.031854 |
| 16 | Central London | -13.350709 |
| 17 | South East | 2.324187 |
| 18 | Oxon & South Coast | -1.108129 |
| 19 | Wessex | -1.708422 |
| 20 | Peninsula | -5.676387 |

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 2012/13 the generation residual element to two decimal places is £4.24/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 2012 for clarification. Confirmation of the zoning of a particular generator can be obtained by contacting National Grid's Charging 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 2012/13, this figure has been calculated as £6.767470/kW.

Schedule of Transmission Network Use of System Local Substation Generation Charges (£/kW) in 2012/13

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 1st April 2012, which have been updated from the examples listed in the Statement of Use of System Methodology.

| Sum of TEC at connecting Substation | Connection Type | Local Substation Tariff (£/kW) | | |
|-------------------------------------|-----------------|--------------------------------|----------|----------|
| | | 132kV | 275kV | 400kV |
| <1320 MW | No redundancy | 0.146974 | 0.088868 | 0.071778 |
| <1320 MW | Redundancy | 0.331546 | 0.211917 | 0.170900 |
| >=1320 MW | No redundancy | 0 | 0.283694 | 0.229006 |
| >=1320 MW | Redundancy | 0 | 0.460290 | 0.370283 |

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 1st April 2012:

| Offshore Power Station | Local Substation Tariff (£/kW) |
|------------------------|--------------------------------|
| Barrow | 6.646428 |
| Gunfleet Sands 1 & 2 | 14.384771 |
| Robin Rigg East | -0.381028 |
| Robin Rigg West | -0.381028 |
| Walney 1 | 17.522985 |

Further local substation tariffs applicable to generation connecting to offshore transmission infrastructure during 2012/13 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 2012/13

Table 1.8

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 1st April 2012.

| Substation | Local Circuit Tariff (£/kW) | Substation | Local Circuit Tariff (£/kW) |
|-----------------------|-----------------------------|--------------------|-----------------------------|
| Aigas | 0.575926 | Hadyard Hill | 2.227487 |
| An Suidhe | 1.085495 | Hartlepool | 0.437597 |
| Andershaw | 2.360832 | Hearthstanes | 2.553851 |
| Arecleoch | 0.301431 | Invergarry | -0.547628 |
| Baglan Bay | 0.611830 | Kilbraur | 1.508456 |
| Barrow | 34.778728 | Killingholme | 0.507651 |
| Black Hill | 1.435817 | Kilmorack | 0.172442 |
| Black Law | 2.813009 | Langage | 0.522942 |
| Carraig Gheal | 3.417814 | Leiston | 1.181092 |
| Clyde (North) | 1.627740 | Lochay | 0.281367 |
| Clyde (South) | 1.882402 | London Array | 0.296179 |
| Coryton | 0.274061 | Luichart | 0.895314 |
| Cruachan | 1.353335 | Marchwood | 0.300842 |
| Crystal Rig | 0.565845 | Mark Hill | -0.659823 |
| Culligran | 1.365403 | Millennium Wind | 1.355926 |
| Deanie | 2.243162 | Mossford | 2.949270 |
| Didcot | 0.638757 | Nant | -0.980293 |
| Dinorwig | 4.051087 | Neilston Wind | 0.992241 |
| DunLaw | 0.364023 | Newfield Wind | 3.461047 |
| Edinbane | 5.263905 | Oldbury-on-Severn | 1.458452 |
| Ewe Hill | 2.230067 | Quoich | 1.504005 |
| Fallago | 1.263642 | Rhigos | 0.972770 |
| Farr Windfarm | 1.854147 | | 25.273883 |
| Ffestiniog | 0.207137 | Rocksavage | 0.014033 |
| Finlarig | 0.246196 | Saltend | 0.256803 |
| Foyers | 0.575845 | South Humber Bank | 0.739621 |
| Glendoe | 1.954796 | Spalding | 0.241094 |
| Glenglas | 3.746652 | St Asaph | 0.166488 |
| Glenmoriston | 1.121453 | Teesside | 0.090228 |
| Gordonbush | 3.087293 | Walney I | 35.032171 |
| Griffin Wind | 2.148220 | Whitelee | 1.575232 |
| Gunfleet Sands I & II | 13.207170 | Whitelee Extension | 4.095604 |

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

Table 1.9

The following table provides the Local Circuit Generation TNUoS tariffs applicable to generation connecting to offshore transmission infrastructure from 1st April 2012:

| Offshore Power Station | Local Circuit Tariff (£/kW) |
|-------------------------------|------------------------------------|
| Barrow | 34.778728 |
| Gunfleet Sands 1 & 2 | 13.207170 |
| Robin Rigg East | 25.273883 |
| Robin Rigg West | 25.273883 |
| Walney 1 | 35.032171 |

Further local circuit tariffs applicable to generation connecting to offshore transmission infrastructure during 2012/13 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 2012/13

Table 1.10

The following table provides the Short Term Transmission Entry Capacity (STTEC) and Limited Duration Transmission Entry Capacity (LDTEC) tariffs applicable to generators from 1st April 2012.

| Power Station | LDTEC tariff (£/kW per week) | | Short Term Generation Tariff (£/kW) | | |
|---------------------------|------------------------------|------------|-------------------------------------|----------------------|----------------------|
| | Higher rate | Lower rate | 28 Days STTEC Period | 35 Days STTEC Period | 42 Days STTEC Period |
| Aberthaw | 0.130838 | 0.009568 | 0.523350 | 0.654188 | 0.785025 |
| Aigas | 1.190752 | 0.087079 | 4.763009 | 5.953762 | 7.144514 |
| An Suidhe | 0.809569 | 0.059203 | 3.238275 | 4.047844 | 4.857413 |
| Arcleloch | 0.575002 | 0.042049 | 2.300008 | 2.875009 | 3.450011 |
| Baglan Bay | 0.149919 | 0.010963 | 0.599676 | 0.749595 | 0.899514 |
| Barking | 0.133145 | 0.009737 | 0.532582 | 0.665727 | 0.798873 |
| Barrow | 2.493944 | 0.182380 | 9.975774 | 12.469718 | 14.963661 |
| Barry | 0.106672 | 0.007801 | 0.426689 | 0.533362 | 0.640034 |
| Black Law | 0.902336 | 0.065987 | 3.609343 | 4.511679 | 5.414014 |
| Brimsgate | 0.133145 | 0.009737 | 0.532582 | 0.665727 | 0.798873 |
| Clunie | 0.929634 | 0.067983 | 3.718537 | 4.648171 | 5.577805 |
| Clyde (North) | 0.761464 | 0.055685 | 3.045855 | 3.807319 | 4.568782 |
| Clyde (South) | 0.774833 | 0.056663 | 3.099334 | 3.874167 | 4.649001 |
| Cockenzie | 0.682467 | 0.049908 | 2.729870 | 3.412337 | 4.094805 |
| Connahs Quay | 0.261207 | 0.019102 | 1.044830 | 1.306037 | 1.567244 |
| Corby | 0.125626 | 0.009187 | 0.502503 | 0.628128 | 0.753754 |
| Coryton | 0.145380 | 0.010632 | 0.581521 | 0.726901 | 0.872282 |
| Cottam | 0.261207 | 0.019102 | 1.044830 | 1.306037 | 1.567244 |
| Cottam Development Centre | 0.261207 | 0.019102 | 1.044830 | 1.306037 | 1.567244 |
| Cowes | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Cruachan | 0.820580 | 0.060008 | 3.282319 | 4.102899 | 4.923479 |
| Crystal Rig | 0.680314 | 0.049751 | 2.721256 | 3.401570 | 4.081884 |
| Culligran | 1.232200 | 0.090110 | 4.928800 | 6.160999 | 7.393199 |
| Damhead Creek | 0.141460 | 0.010345 | 0.565839 | 0.707298 | 0.848758 |
| Deanie | 1.278282 | 0.093480 | 5.113129 | 6.391411 | 7.669693 |
| Deeside | 0.261207 | 0.019102 | 1.044830 | 1.306037 | 1.567244 |
| Derwent | 0.125626 | 0.009187 | 0.502503 | 0.628128 | 0.753754 |
| Didcot | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Didcot B | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Didcot GTs | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Dinorwig | 0.558368 | 0.040833 | 2.233473 | 2.791842 | 3.350210 |
| Drax | 0.338563 | 0.024759 | 1.354251 | 1.692814 | 2.031376 |
| Dungeness B | 0.130992 | 0.009579 | 0.523968 | 0.654960 | 0.785952 |
| Dunlaw Extension | 0.698169 | 0.051057 | 2.792677 | 3.490846 | 4.189015 |
| Edinbane Wind | 1.441750 | 0.105434 | 5.766998 | 7.208748 | 8.650497 |
| Eggborough | 0.338563 | 0.024759 | 1.354251 | 1.692814 | 2.031376 |
| Errochty | 0.929634 | 0.067983 | 3.718537 | 4.648171 | 5.577805 |
| Fallago | 0.746655 | 0.054602 | 2.986621 | 3.733276 | 4.479932 |
| Farr Windfarm | 1.257859 | 0.091986 | 5.031436 | 6.289295 | 7.547154 |

| Power Station | LDTEC tariff (£/kW per week) | | Short Term Generation Tariff (£/kW) | | |
|-------------------------|------------------------------|------------|-------------------------------------|----------------------|----------------------|
| | Higher rate | Lower rate | 28 Days STTEC Period | 35 Days STTEC Period | 42 Days STTEC Period |
| Fasnakyle G1 & G3 | 1.165395 | 0.085224 | 4.661578 | 5.826973 | 6.992367 |
| Fawley | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Fawley CHP | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Ferrybridge B | 0.343288 | 0.025104 | 1.373152 | 1.716441 | 2.059729 |
| Ffestiniog | 0.257308 | 0.018817 | 1.029231 | 1.286539 | 1.543847 |
| Fiddlers Ferry | 0.343288 | 0.025104 | 1.373152 | 1.716441 | 2.059729 |
| Fife | 0.764343 | 0.055896 | 3.057371 | 3.821714 | 4.586057 |
| Finlarig | 0.942560 | 0.068929 | 3.770238 | 4.712798 | 5.655357 |
| Foyers | 1.187698 | 0.086855 | 4.750790 | 5.938488 | 7.126185 |
| Glandford Brigg | 0.241768 | 0.017680 | 0.967070 | 1.208838 | 1.450605 |
| Glendoe | 1.268021 | 0.092729 | 5.072085 | 6.340107 | 7.608128 |
| Glenmoriston | 1.224271 | 0.089530 | 4.897083 | 6.121354 | 7.345625 |
| Gordonbush | 1.319549 | 0.096498 | 5.278194 | 6.597743 | 7.917291 |
| Grain | 0.141460 | 0.010345 | 0.565839 | 0.707298 | 0.848758 |
| Grangemouth | 0.746937 | 0.054623 | 2.987746 | 3.734683 | 4.481620 |
| Great Yarmouth | 0.125626 | 0.009187 | 0.502503 | 0.628128 | 0.753754 |
| Greater Gabbard | 0.187633 | 0.013721 | 0.750532 | 0.938165 | 1.125798 |
| Griffin Wind Farm | 1.052106 | 0.076940 | 4.208423 | 5.260529 | 6.312635 |
| Gunfleet Sands I | 1.574203 | 0.115120 | 6.296810 | 7.871013 | 9.445215 |
| Gunfleet Sands II | 1.574203 | 0.115120 | 6.296810 | 7.871013 | 9.445215 |
| Gwynt Y Mor | 0.259480 | 0.018976 | 1.037922 | 1.297402 | 1.556882 |
| Hadyard Hill | 0.796001 | 0.058211 | 3.184004 | 3.980005 | 4.776006 |
| Hartlepool | 0.476489 | 0.034845 | 1.905958 | 2.382447 | 2.858937 |
| Heysham | 0.338563 | 0.024759 | 1.354251 | 1.692814 | 2.031376 |
| Hinkley Point B | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Hunterston | 0.675110 | 0.049370 | 2.700441 | 3.375551 | 4.050661 |
| Immingham | 0.328095 | 0.023993 | 1.312381 | 1.640476 | 1.968571 |
| Indian Queens | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Invergarry | 1.136644 | 0.083122 | 4.546576 | 5.683220 | 6.819864 |
| Ironbridge | 0.134598 | 0.009843 | 0.538392 | 0.672990 | 0.807588 |
| Keadby | 0.250740 | 0.018336 | 1.002959 | 1.253699 | 1.504439 |
| Kilbraur | 1.236660 | 0.090436 | 4.946638 | 6.183298 | 7.419958 |
| Killingholme (NP) | 0.365214 | 0.026708 | 1.460858 | 1.826072 | 2.191286 |
| Killingholme (Powergen) | 0.365214 | 0.026708 | 1.460858 | 1.826072 | 2.191286 |
| Kilmorack | 1.169569 | 0.085530 | 4.678278 | 5.847847 | 7.017417 |
| Kings Lynn A | 0.241768 | 0.017680 | 0.967070 | 1.208838 | 1.450605 |
| Kingsnorth | 0.141460 | 0.010345 | 0.565839 | 0.707298 | 0.848758 |
| Langage | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Lincs Wind Farm | 0.241768 | 0.017680 | 0.967070 | 1.208838 | 1.450605 |
| Little Barford | 0.134598 | 0.009843 | 0.538392 | 0.672990 | 0.807588 |
| Littlebrook D | 0.130992 | 0.009579 | 0.523968 | 0.654960 | 0.785952 |
| Lochay | 0.944406 | 0.069064 | 3.777624 | 4.722030 | 5.666436 |
| London Array | 0.137569 | 0.010060 | 0.550277 | 0.687846 | 0.825415 |
| Longannet | 0.771102 | 0.056390 | 3.084407 | 3.855509 | 4.626611 |
| Luichart | 1.207520 | 0.088305 | 4.830081 | 6.037601 | 7.245121 |
| Marchwood | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Mark Hill | 0.521485 | 0.038136 | 2.085942 | 2.607427 | 3.128913 |

| Power Station | LDTEC tariff (£/kW per week) | | Short Term Generation Tariff (£/kW) | | |
|--------------------|------------------------------|------------|-------------------------------------|----------------------|----------------------|
| | Higher rate | Lower rate | 28 Days STTEC Period | 35 Days STTEC Period | 42 Days STTEC Period |
| Medway | 0.141460 | 0.010345 | 0.565839 | 0.707298 | 0.848758 |
| Millennium Wind | 1.236581 | 0.090430 | 4.946323 | 6.182903 | 7.419484 |
| Mossford | 1.315353 | 0.096191 | 5.261412 | 6.576765 | 7.892117 |
| Nant | 0.701115 | 0.051272 | 2.804460 | 3.505575 | 4.206690 |
| Oldbury-on-Severn | 0.190957 | 0.013965 | 0.763829 | 0.954786 | 1.145743 |
| Ormonde | 0.319123 | 0.023337 | 1.276492 | 1.595614 | 1.914737 |
| Orrin | 1.160516 | 0.084868 | 4.642065 | 5.802581 | 6.963097 |
| Pembroke | 0.126112 | 0.009222 | 0.504449 | 0.630561 | 0.756673 |
| Peterborough | 0.241768 | 0.017680 | 0.967070 | 1.208838 | 1.450605 |
| Peterhead | 1.067065 | 0.078034 | 4.268262 | 5.335327 | 6.402393 |
| Quoich | 1.244355 | 0.090999 | 4.977419 | 6.221774 | 7.466129 |
| Ratcliffe-on-Soar | 0.145066 | 0.010609 | 0.580262 | 0.725328 | 0.870393 |
| Robin Rigg East | 1.625998 | 0.118908 | 6.503991 | 8.129989 | 9.755987 |
| Robin Rigg West | 1.625998 | 0.118908 | 6.503991 | 8.129989 | 9.755987 |
| Rocksavage | 0.246273 | 0.018010 | 0.985090 | 1.231363 | 1.477636 |
| Roosecote | 0.319123 | 0.023337 | 1.276492 | 1.595614 | 1.914737 |
| Rugeley B | 0.134598 | 0.009843 | 0.538392 | 0.672990 | 0.807588 |
| Rye House | 0.130992 | 0.009579 | 0.523968 | 0.654960 | 0.785952 |
| Saltend | 0.343731 | 0.025137 | 1.374923 | 1.718653 | 2.062384 |
| Seabank | 0.115645 | 0.008457 | 0.462578 | 0.578223 | 0.693868 |
| Sellafield | 0.319123 | 0.023337 | 1.276492 | 1.595614 | 1.914737 |
| Severn Power | 0.117798 | 0.008614 | 0.471192 | 0.588990 | 0.706788 |
| Sheringham Shoal | 0.125626 | 0.009187 | 0.502503 | 0.628128 | 0.753754 |
| Shoreham | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Shotton | 0.241768 | 0.017680 | 0.967070 | 1.208838 | 1.450605 |
| Sizewell B | 0.134598 | 0.009843 | 0.538392 | 0.672990 | 0.807588 |
| Sloy G2 & G3 | 0.752580 | 0.055036 | 3.010321 | 3.762902 | 4.515482 |
| South Humber Bank | 0.366925 | 0.026833 | 1.467701 | 1.834626 | 2.201551 |
| Spalding | 0.263397 | 0.019262 | 1.053589 | 1.316986 | 1.580383 |
| Staythorpe | 0.261207 | 0.019102 | 1.044830 | 1.306037 | 1.567244 |
| Sutton Bridge | 0.250740 | 0.018336 | 1.002959 | 1.253699 | 1.504439 |
| Taylors Lane | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Teesside | 0.471292 | 0.034465 | 1.885169 | 2.356461 | 2.827753 |
| Thanet | 0.122020 | 0.008923 | 0.488079 | 0.610099 | 0.732119 |
| Tilbury B | 0.133145 | 0.009737 | 0.532582 | 0.665727 | 0.798873 |
| Toddleburn | 0.698169 | 0.051057 | 2.792677 | 3.490846 | 4.189015 |
| Torness | 0.680314 | 0.049751 | 2.721256 | 3.40157 | 4.081884 |
| Uskmouth | 0.124079 | 0.009074 | 0.496314 | 0.620393 | 0.744471 |
| Walney I | 3.078269 | 0.225111 | 12.313074 | 15.391343 | 18.469611 |
| Walney II | 0.319123 | 0.023337 | 1.276492 | 1.595614 | 1.914737 |
| West Burton | 0.261207 | 0.019102 | 1.04483 | 1.306037 | 1.567244 |
| West Burton B | 0.261207 | 0.019102 | 1.04483 | 1.306037 | 1.567244 |
| Whitelee | 0.758707 | 0.055484 | 3.034828 | 3.793535 | 4.552242 |
| Whitelee Extension | 0.891027 | 0.06516 | 3.564106 | 4.455133 | 5.34616 |
| Wilton | 0.471292 | 0.034465 | 1.885169 | 2.356461 | 2.827753 |
| Wylfa | 0.381677 | 0.027912 | 1.52671 | 1.908387 | 2.290065 |

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 2012/13 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 2012/13

Table 1.11

The following table provides the Pre-Asset Transfer Related Embedded Transmission Use of System (ETUoS) tariffs applicable to embedded transmission connected offshore generation from 1st April 2012. 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) |
|-------------------------------|---|
| Barrow | 0.863603 |
| Gunfleet Sands 1 & 2 | 2.468496 |
| Robin Rigg East | 8.007618 |
| Robin Rigg West | 8.007618 |

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 2012/13 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 2012/13

Table 1.12

The following table provides the Zonal Demand and Energy Consumption TNUoS tariffs applicable from 1st April 2012.

| Demand Zone | Zone Area | Demand Tariff (£/kW) | Energy Consumption Tariff (p/kWh) |
|-------------|-------------------|----------------------|-----------------------------------|
| 1 | Northern Scotland | 10.741418 | 1.481661 |
| 2 | Southern Scotland | 16.001744 | 2.260958 |
| 3 | Northern | 19.662769 | 2.720973 |
| 4 | North West | 22.838742 | 3.310579 |
| 5 | Yorkshire | 23.180244 | 3.216258 |
| 6 | N Wales & Mersey | 23.639502 | 3.392395 |
| 7 | East Midlands | 25.451532 | 3.602558 |
| 8 | Midlands | 27.358246 | 3.936288 |
| 9 | Eastern | 25.952047 | 3.633328 |
| 10 | South Wales | 25.257265 | 3.368021 |
| 11 | South East | 28.248124 | 3.987297 |
| 12 | London | 31.174616 | 4.169758 |
| 13 | Southern | 30.613447 | 4.343659 |
| 14 | South Western | 31.062748 | 4.226735 |

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 2012/13 the demand residual element to two decimal places is £22.83/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.

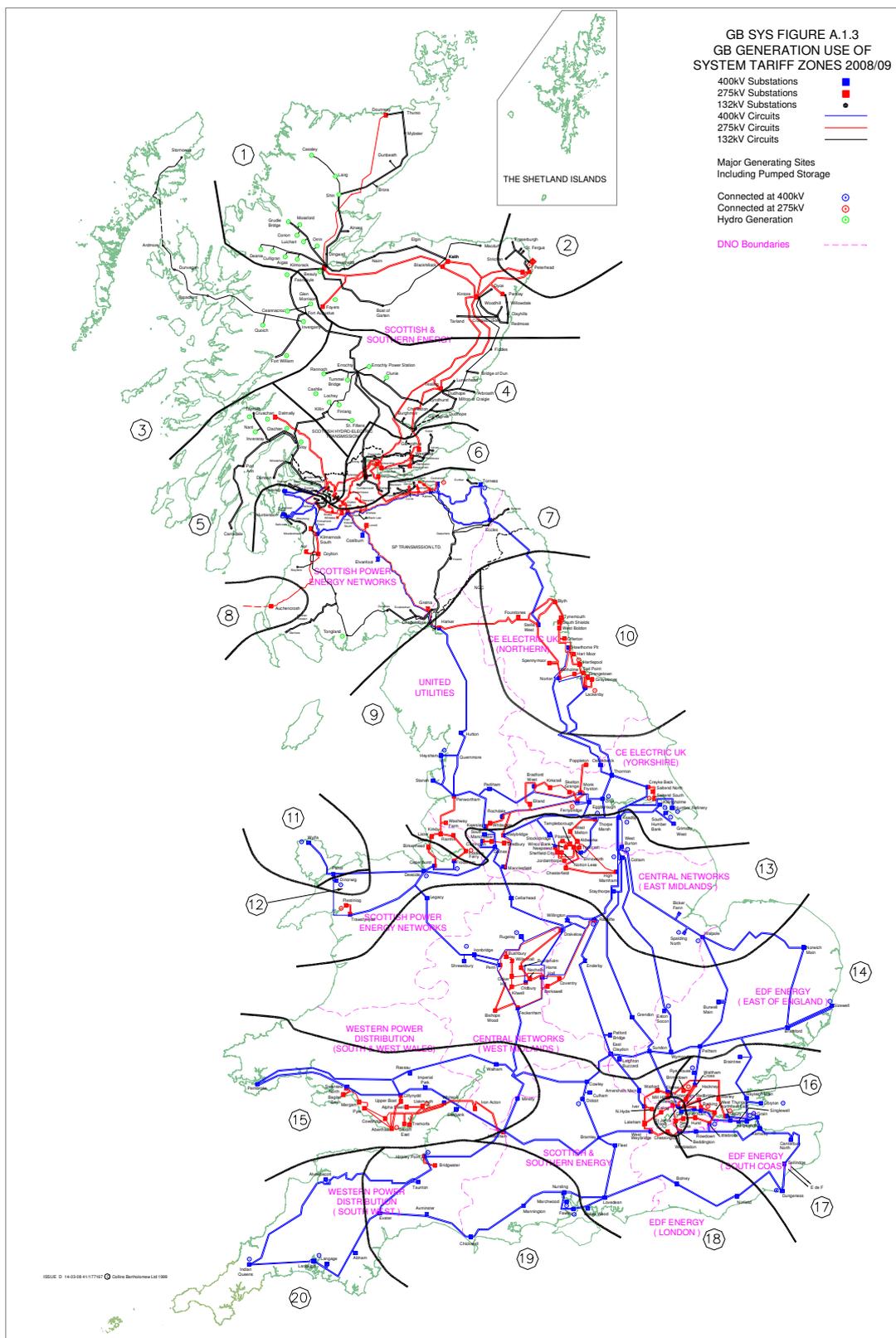
Small Generators Discount

In accordance with Standard Licence Condition C13 governing the adjustments to use of system charges for the small generators discount, a unit amount of £0.166615/kW to the demand tariff and 0.023366p/kWh to the energy consumption tariff has been included on a non-discriminatory and non-locational basis.

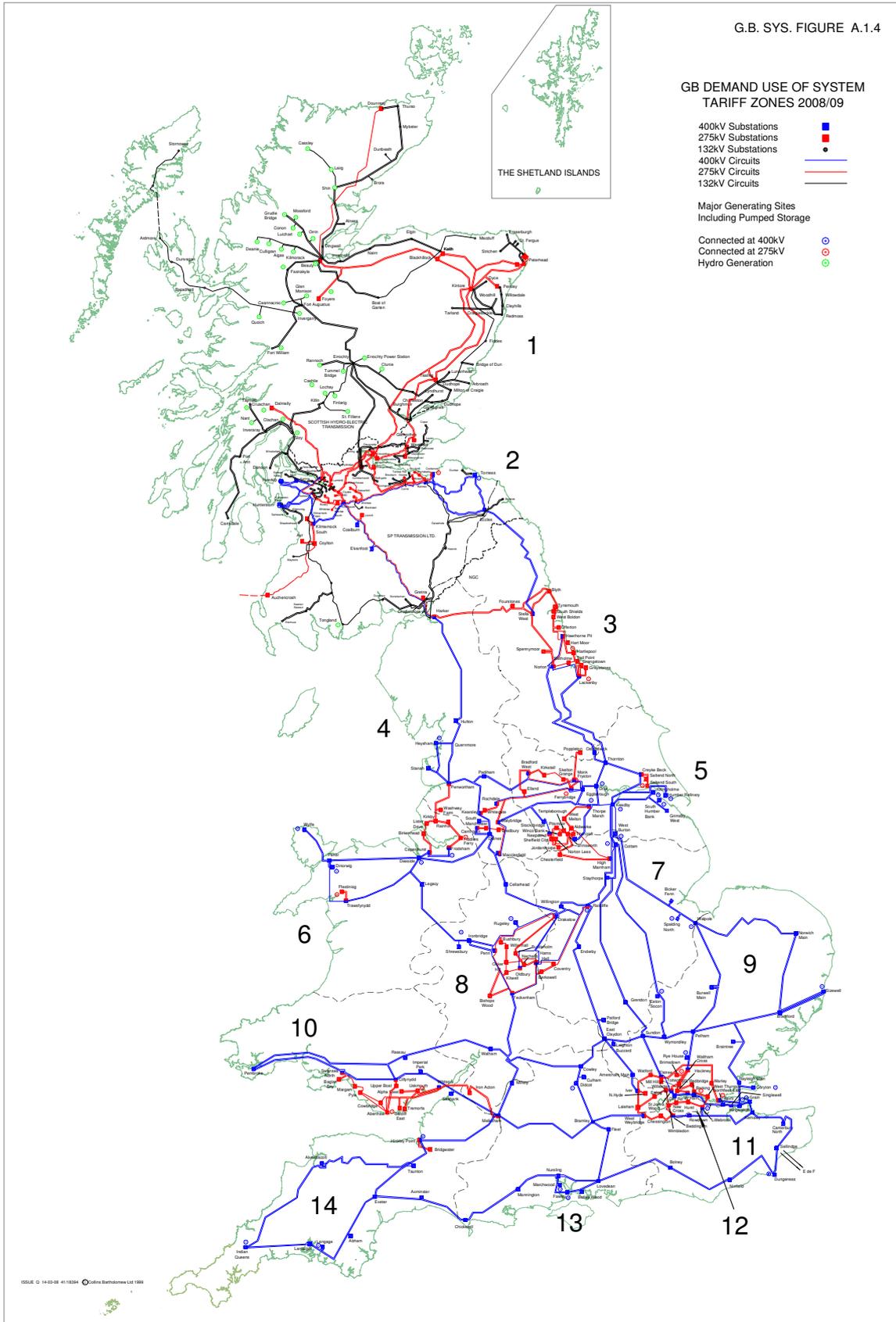
Standard Licence Condition C13 requires the small generators discount mechanism to be revenue neutral over the period of its operation so that the net effect on revenue of the licence condition is zero. It will therefore be necessary to manage any under or over recovery associated with the small generators 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 2012/13

Generation Use of System Tariff Zones (Geographical map as at 1 April 2008)



Demand Use of System Tariff Zones (Geographical map as at 1 April 2008)



Schedule 2

Detail of the Incentive Schemes (External and Internal) for the Balancing Services Use of System Charges for 2012/13

The Balancing Services Use of System (BSUoS) Charges for 2012/13 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. The Internal BSUoS Charges includes Internal BSUoS Costs and an Incentive Scheme. These Incentive Schemes vary in their structure and duration as determined by updates to the Transmission Licence¹.

Included here are details of how the Incentives outlined in the Transmission Licence are accommodated into BSUoS Charges.

External Incentive Structure and Payments for 2012/13

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).

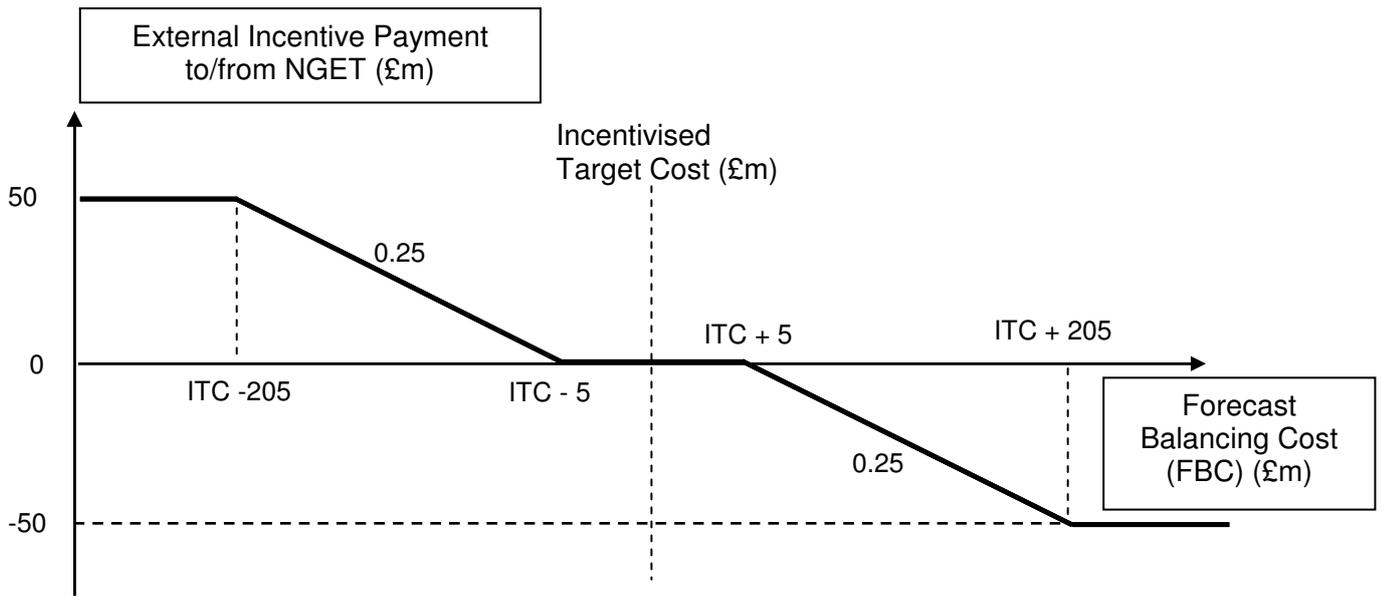
$$FYIncPayEXT_d = SF_t * (M_t - FBC_d) + CB_t$$

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). The Incentivised Target Cost (ITC) is for the period 2011/13 covering a two year period.

Table 2.1: BSIS for 2012/13

| Forecast Balancing Cost (FBC) £m | M_t £m | SF_t £m | CB_t £m |
|--|------------------------------|--------------|--------------|
| FBC < (Incentive Target Cost – 205) | 0 | 0 | 50 |
| (Incentive Target Cost – 205) <= FBC < (Incentive Target Cost – 5) | Incentive Target Cost – 5 | 25% | 0 |
| (Incentive Target Cost – 5) <=FBC< (Incentive Target Cost + 5) | FBC | 0 | 0 |
| (Incentive Target Cost + 5) <= FBC < (Incentive Target Cost + 205) | Incentive Target Cost + 5 | 25% | 0 |
| FBC >= (Incentive Target Cost + 205) | 0 | 0 | 50 |

¹ Special Condition AA5A Part 2 (i), Part 2 (ii) and Schedule A to Special Condition AA5A



In respect of each Settlement Day d , the forecast incentivised Balancing Cost (FBC_d) will be calculated as follows:

$$FBC_d = \frac{\sum_{k=1}^d IBC_k}{\sum_{k=1}^d PFT_k} * NDS$$

Where:

NDS: Number of days in Scheme

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

$$IBC_d = \sum_{j \in d} (CSOBM_{jd} + BSCCV_{jd} + NIA_{jd} + TLIC_{jd}) + BSCCA_d - OM_d - RT_d$$

Internal Incentive Structure and Payments for 2012/13

National Grid Daily Internal incentive payments ($IncPayINT_d$) are calculated by comparing the Daily Incentivised internal operating costs ($FSOINT_d$) against the Daily Internal Scheme Target ($PTint$) to set the Sharing Factor ($SFint$), as per the formula below:

$$FYIncPayINT_d = (PTint - FSOINT_d) * SFint$$

Table 2.2

The table below shows the respective values of these variables for 2012/13. Further details in relation to the values below can be obtained from Special Condition AA5A part 2(ii) of National Grid's Transmission Licence.

| FSOINT_d (£) | PTint (£) | SFint |
|------------------------------------|------------------|--------------|
| FSOINT _d < £67,364,364 | £67,364,364 | 0.25 |
| FSOINT _d => £67,364,364 | £67,364,364 | 0.25 |

Table 2.3

The table below summarises the annual SO Internal cost variables for Financial Year 2012/13 as set out in the Transmission Licence.

| Internal SO Cost Variable | Annual Cost Target (£m) |
|----------------------------------|--------------------------------|
| CSOC* | 115.844 |
| CSOOC [†] | - |
| CSOCEC [†] | - |
| NC* | 1.301 |
| NSOC [†] | - |
| BI [†] | - |
| T [†] | - |
| P [†] | - |
| ON | - |
| IAT, IONT | |

[* in 2012/13 prices]

[†] This term was removed in 2012/13

Where

$$NC = (NSOC + BI + T + P + ON)$$

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 NGC 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 and the Statement of the Connection Charging Methodology.

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.

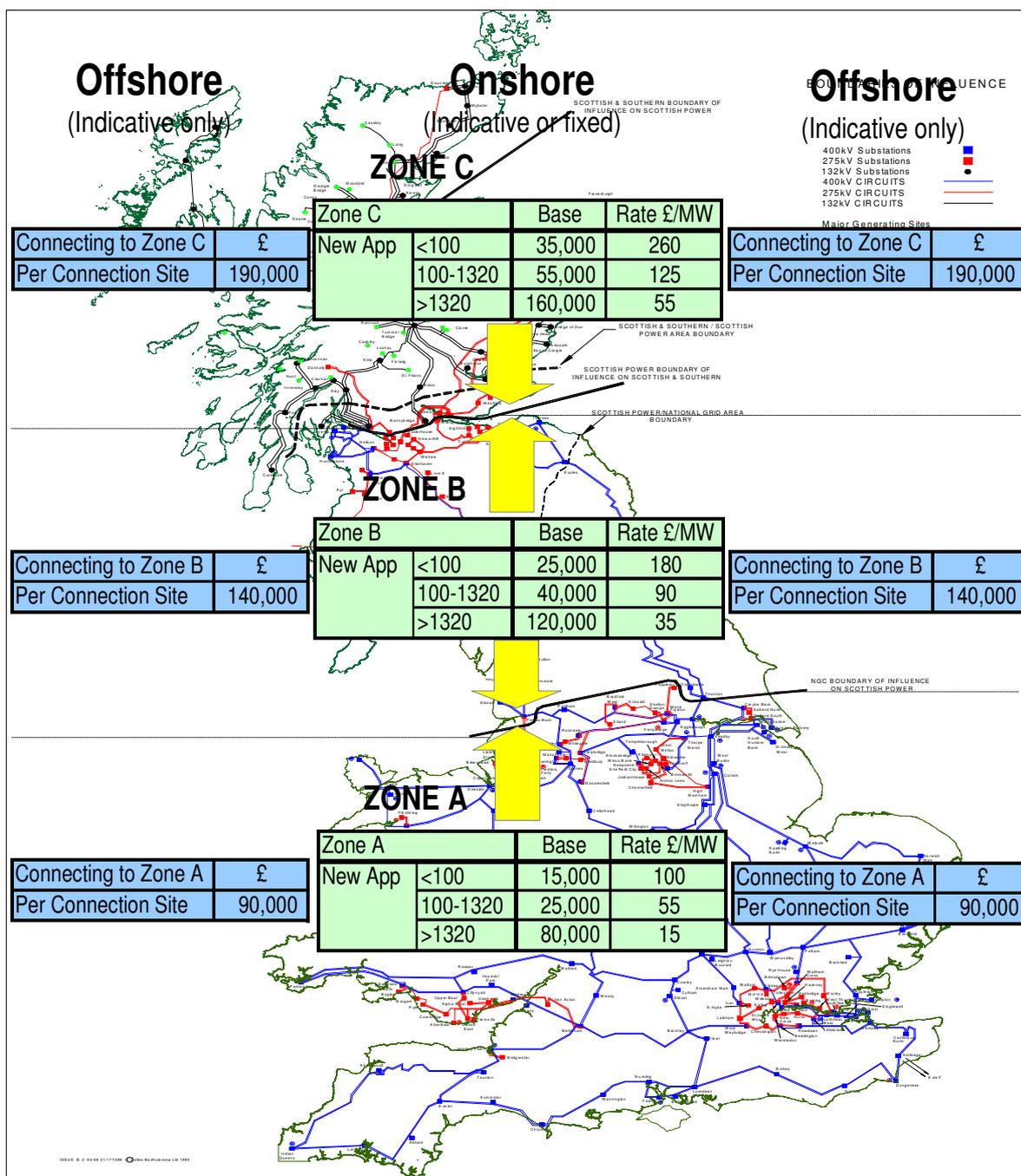
The application fees indicated will be reviewed on an annual basis and reflect any changes to the Boundaries of Influence. It should be noted that the zone to which a particular user is applying is determined by the location of the connection to the National Electricity Transmission System and not by 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 Chapter 7 of The Statement of the Use of System Charging Methodology.

Entry Application Fees for New Bilateral Agreements



1. New Onshore Application Fee = Base + (MW * Rate)
2. TEC Increase² = Base + (TEC Increase * Rate)
3. New Offshore Application Fee = Number of offshore Connection Sites * Fee

² The base value and Rate used are the values associated with the change in TEC not the resulting total TEC being applied for.

Table 4.1

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 | | |
|---|--|---------|---------|
| Modification Application (applicable for any change prior to completion excluding TEC increases and those options listed in this table) | 0.75 | | |
| Request for Design Variation in addition to standard offer | 1.5 | | |
| Embedded Generation New Application | 0.3 | | |
| Embedded Generation Modification Application | 0.2 | | |
| Entry Fees (cont.) | Zone A | 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 | £2,000 | | |
| Assign, transfer or novate a bilateral agreement or minor admin changes | £2,000 | | |

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.

Table 4.2

| Limited Duration TEC (LDTEC) | | Duration of LDTEC (t) | Zone | £ (£'000) | Agreement Type (as Table C) |
|------------------------------|--|-------------------------|------|-----------|---------------------------------------|
| 14 | Basic request fee for duration t (applicable to all requests for LDTEC Offers) | t ≤ 3 months | All | 10 + VAT | Bilateral Connection Agreement / BEGA |
| | | 3 months < t ≤ 6 months | | 15 + VAT | |
| | | 6 months < t ≤ 9 months | | 20 + VAT | |
| | | t > 9 months | | 30 + VAT | |
| | Additional fee for rolling assessment (applicable to a request for an LDTEC Indicative Block Offer) | t ≤ 3 months | | 1 + VAT | |
| | | 3 months < t ≤ 6 months | | 1.5 + VAT | |
| | | 6 months < t ≤ 9 months | | 2 + VAT | |
| | | t > 9 months | | 3 + VAT | |
| | 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 + VAT | |
| | | 3 months < t ≤ 6 months | | 7.5 + VAT | |
| | | 6 months < t ≤ 9 months | | 10 + VAT | |
| | | t > 9 months | | 15 + VAT | |

Table 4.3

| Temporary TEC Exchange Rate Request Fees | | Duration of Temporary Exchange period (t) | £ |
|--|---|---|--------|
| 15 | Application fee for Temporary TEC Exchange Rate Requests | t ≤ 3 months | 15,000 |
| | | 3 months < t ≤ 6 months | 25,000 |
| | | 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

Table 4.4

| Exit Fees | Zone A | Zone B | | Zone C | |
|--------------------------|---------|---------|---------|---------|---------|
| | | <100MW | >100MW | <100MW | >100MW |
| New Supply Point | £50,000 | £28,000 | £55,000 | £39,000 | £60,000 |
| Modification Application | £38,000 | £21,000 | £41,000 | £29,000 | £45,000 |

Table 4.5

| Exit Fees (cont.) | Zone A | Zone B | Zone C |
|---|---------|---------|---------|
| Statement of Works at existing supply point | £5,000 | £6,000 | £8,000 |
| Modification Application after Request for Statement of Works | £13,000 | £15,000 | £17,000 |

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 = £25,000 + (300 * 55) = £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 * £140,000 = £280,000

3. 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 * (£25,000 + (300 * 55)) = £31,125

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

300MW embedded generator requesting a BEGA in Zone A

$$\text{Fee} = 0.3 * (\text{£}25,000 + (300 * 55)) = \text{£}12,450$$

5. Entry Application Fee for a TEC Increase

400MW generator in Zone A wishes to increase TEC by 20MW to 420MW

$$\text{Application Fee} = \text{£}15,000 + (20 * 100) = \text{£}17,000$$

6. 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

$$\text{Application Fee} = 0.75 * (\text{£}40,000 + (500 * 90)) = \text{£}63,750$$

7. Entry Application Fee for a Decrease TEC

600MW generator in Zone C wishes to decrease TEC by 100MW to 500MW

$$\text{Application Fee} = 0.75 * (\text{£}55,000 + (100 * 125)) = \text{£}50,625$$

Table 4.6

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 exemptable 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. |

Table 4.7

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 SHETL'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 SHETL'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 5.1

| | £/day | | |
|---|-------|-----|-------|
| | NGC | SPT | SHETL |
| Section Manager Internal Solicitor | 940 | 790 | 875 |
| Principal Power System Engineer | 745 | 660 | 735 |
| Senior Power System Engineer Project Manager Account Manager Senior Wayleave Officer | 605 | 550 | 615 |
| Power System Design Engineer Draughtsman | 480 | 440 | 490 |
| Graduate Engineer | 405 | 370 | 410 |
| Administrative Support | 325 | 290 | 325 |

Schedule 5

Non-Capital Components applicable for Maintenance and Transmission Running Costs in Connection Charges for 2012/13

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 2012/13 this will be 0.51%.

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 2012/13 this will be 1.45%.

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 1.45%:

Example:

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

| | |
|---------------------------------|-------|
| Scottish Power Transmission Ltd | 15.1% |
| Scottish Hydro Transmission Ltd | 8.6% |
| National Grid | 12.5% |

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

| | |
|---------------------------------|-------|
| Scottish Power Transmission Ltd | 29.1 |
| Scottish Hydro Transmission Ltd | 11.3 |
| National Grid | 295.2 |

Total GB Connection GAV = £2.12bn

GB TRC Factor = $(15.1\% \times £29.1m + 8.6\% \times £11.3m + 12.5\% \times £295.2m) / £2.12bn$

GB TRC Factor = 1.99%

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

Net GB TRC Factor = 1.99% - 0.54% = 1.45%

* 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 2007/8 Site Specific Maintenance Factor of 0.54%.

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

2012/13 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, Interest During Construction and Liquidated Damages premiums

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 2012/13 rate of 0.51% of the GAV
- The connection charges include Transmission Running Costs at the 2012/13 rate of 1.45% 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

The charges for Double and Single Busbar Bays include electrical and civil costs.

Transformer cable ratings are based on winter soil conditions.

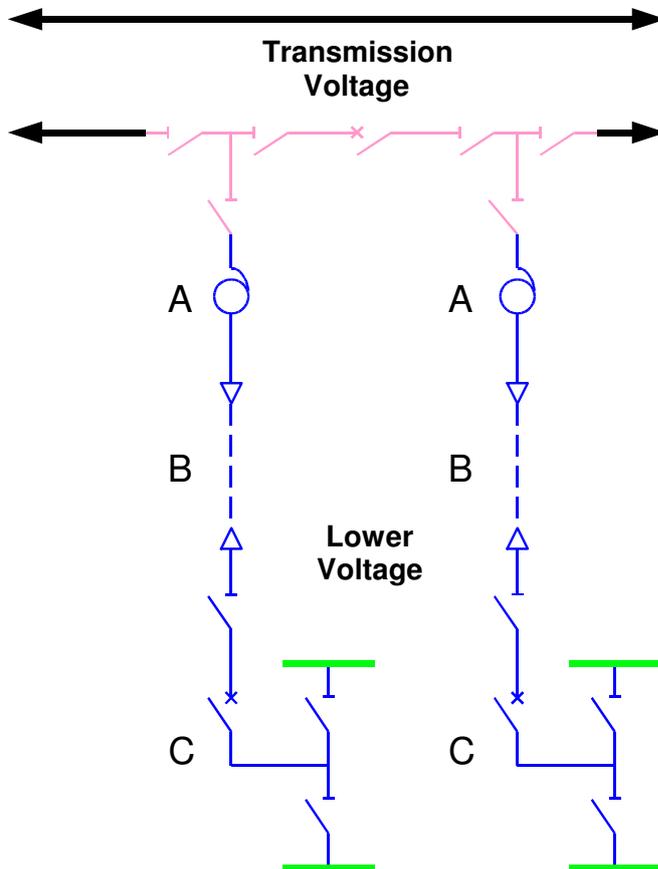
In this example, transformer charges include civil costs of plinth and noise enclosure and estimated transport costs, but not costs of oil dump tank and fire trap moat. Transport costs do not include hiring heavy load sea transportation or roll-on roll-off ships.

| | £000's | | | | | |
|---|--------|--------|-------|--------|-------|--------|
| | 400kV | | 275kV | | 132kV | |
| | GAV | Charge | GAV | Charge | GAV | Charge |
| Double Busbar Bay | 2490 | 259 | 2040 | 212 | 680 | 71 |
| Single Busbar Bay | 1980 | 206 | | | 500 | 52 |
| Transformer Cables 100m (incl. Cable sealing ends) | | | | | | |
| 120MVA | | | 1080 | 112 | 350 | 36 |
| 180MVA | 1650 | 171 | 1080 | 112 | 360 | 37 |
| 240MVA | 1690 | 176 | 1090 | 113 | 390 | 41 |
| 750MVA | 1710 | 178 | 1260 | 131 | | |
| Transformers | | | | | | |
| 45MVA 132/66kV | | | | | 1219 | 127 |
| 90MVA 132/33kV | | | | | 1173 | 122 |
| 120MVA 275/33kV | | | 2617 | 272 | | |
| 180MVA 275/66kV | | | 2688 | 279 | | |
| 180MVA 275/132kV | | | 2760 | 287 | | |
| 240MVA 275/132kV | | | 2832 | 294 | | |
| 240MVA 400/132kV | 3626 | 377 | | | | |

Connection Examples

Example 1

**NEW SUPERGRID CONNECTION
SINGLE SWITCH MESH TYPE**



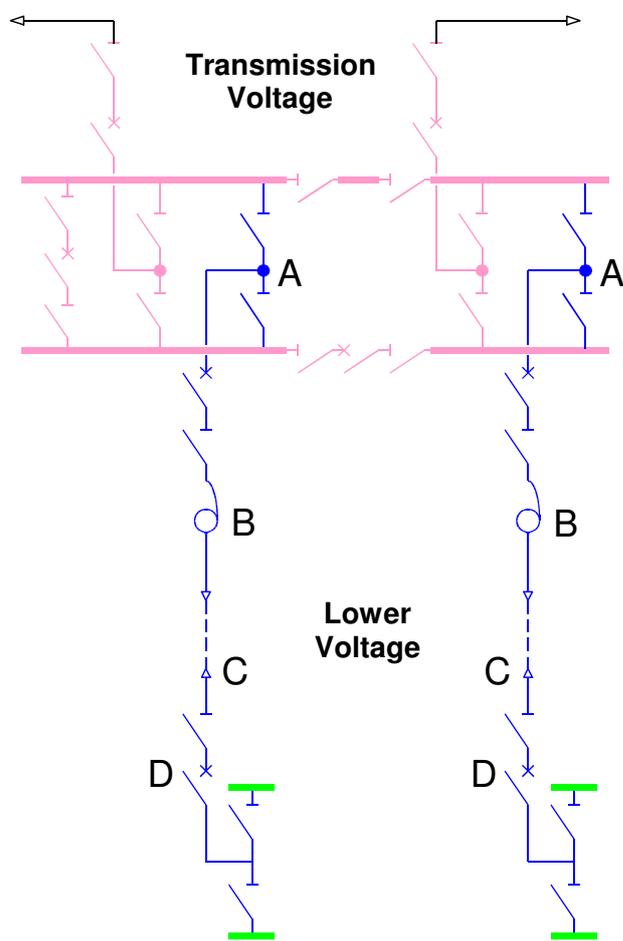
KEY:

- Existing Transmission Assets (infrastructure)
- New Transmission Assets (infrastructure)
- New connection assets wholly charged to customer
- Customer Assets

| SCHEDULE FOR NEW CONNECTION | | | | |
|-----------------------------|--|----------------------------|--|----------------------------|
| Ref | 275/132kV | | 400/132kV | |
| | Description | First Year Charges (£000s) | Description | First Year Charges (£000s) |
| A | 2 x 180MVA Transformers | 574 | 2 x 240MVA Transformers | 754 |
| B | 2 x 100m 180MVA Cables | 74 | 2 x 100m 240MVA Cables | 82 |
| C | 2 x 132kV Double Busbar Transformer Bays | 142 | 2 x 132kV Double Busbar Transformer Bays | 142 |
| Total | | 790 | Total | |
| | | | 978 | |

Example 2

NEW SUPERGRID CONNECTION DOUBLE BUSBAR TYPE



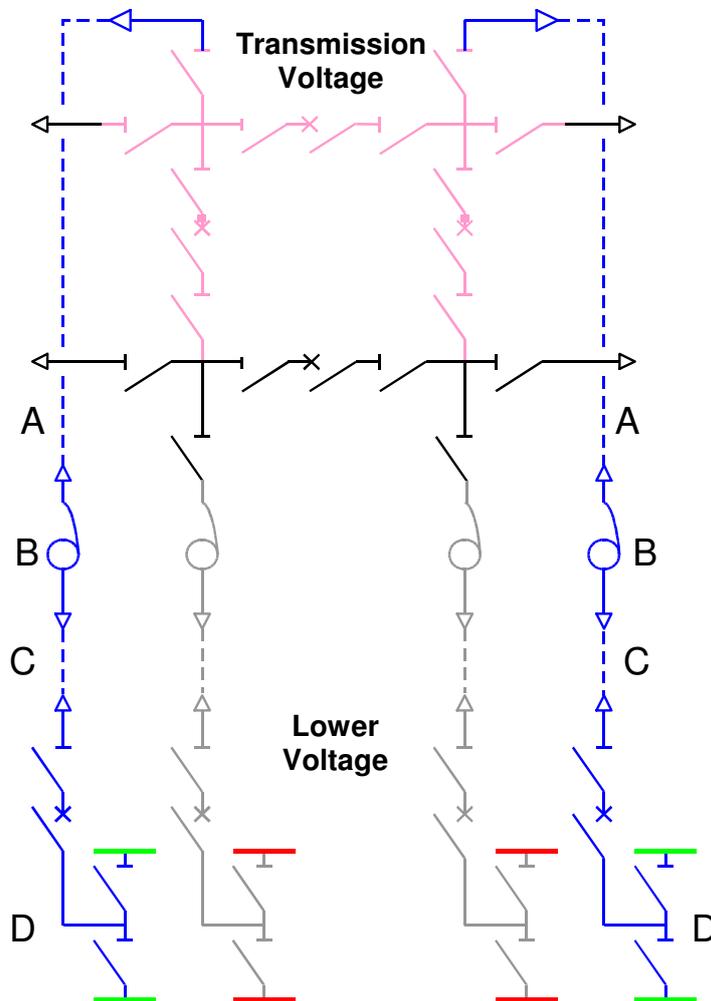
KEY:

- Existing Transmission Assets (infrastructure)
- New Transmission Assets (infrastructure)
- New connection assets wholly charged to customer
- Customer Assets

| SCHEDULE FOR NEW CONNECTION | | | | |
|-----------------------------|--|----------------------------|--|----------------------------|
| Ref | 275/132kV | | 400/132kV | |
| | Description | First Year Charges (£000s) | Description | First Year Charges (£000s) |
| A | 2 x 275kV Double Busbar Transformer Bays | 424 | 2 x 400kV Double Busbar Transformer Bays | 518 |
| B | 2 x 180MVA Transformers | 574 | 2 x 240MVA Transformers | 754 |
| C | 2 x 100m 180MVA Cables | 74 | 2 x 100m 240MVA Cables | 82 |
| D | 2 x 132kV Double Busbar Transformer Bays | 142 | 2 x 132kV Double Busbar Transformer Bays | 142 |
| Total | | 1214 | Total | 1496 |

Example 3

**EXTENSION OF SINGLE SWITCH MESH
TO FOUR SWITCH MESH
(extension to single user site)**



KEY:

- Existing Transmission Assets (infrastructure)
- New Transmission Assets (infrastructure)
- New connection assets wholly charged to customer
- Existing connection assets wholly charged to another user
- Customer Assets
- Other Users Assets

| SCHEDULE FOR NEW CONNECTION | | | | |
|-----------------------------|--|----------------------------|--|----------------------------|
| Ref | 275/132kV | | 400/132kV | |
| | Description | First Year Charges (£000s) | Description | First Year Charges (£000s) |
| A | 2 x 100m 180MVA Cables | 224 | 2 x 100m 240MVA Cables | 352 |
| B | 2 x 180MVA Transformers | 574 | 2 x 240MVA Transformers | 754 |
| C | 2 x 100m 180MVA Cables | 74 | 2 x 100m 240MVA Cables | 82 |
| D | 2 x 132kV Double Busbar Transformer Bays | 142 | 2 x 132kV Double Busbar Transformer Bays | 142 |
| Total | | 1014 | Total | 1330 |

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 2012
- 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 0.51% of GAV
- iv) the Transmission Running Cost component remains constant throughout the 40 years at 1.45% 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 2012.

| Charge | Calculation | |
|--|---------------------------|----------|
| Site Specific Maintenance Charge (0.51% of GAV) | $3,000,000 \times 0.51\%$ | £15,300 |
| Transmission Running Cost (1.45% of GAV) | $3,000,000 \times 1.45\%$ | £43,500 |
| Capital charge (40 year depreciation 2.5% of GAV) | $3,000,000 \times 2.5\%$ | £75,000 |
| Return on mid-year NAV (6%) | $2,962,500 \times 6\%$ | £177,750 |
| TOTAL | | £311,550 |

The first year charge of £311,050 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 | £313,050 |
| 2 | £307,050 |
| 10 | £271,050 |
| 40 | £136,050 |

Based on this example, charges of this form would be payable until 31 March 2052.

Example 2

The previous example assumes that the asset is commissioned on 1 April 2012. If it is assumed that the asset is commissioned on 1 July 2012, the first year charge would equal 9/12th of the first year annual connection charge i.e. £233,662.50

This gives the following annual charges over time:

| Year | Charge |
|------|---|
| 1 | £233,662 (connection charge for period July 2012 to March 2013) |
| 2 | £307,050 |
| 10 | £271,050 |
| 40 | £136,050 |

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:

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

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.

Index to the Statement of Use of System Charges (Issue 8) Revisions

| Issue 8 | Modifications | Changes to Pages |
|----------------|----------------------|-------------------------|
| 0 | Original | - |