

Draft TNUoS tariffs for 2011/12

This statement details the draft Transmission Network Use of System (TNUoS) tariffs that will apply on 1 April 2011. These tariffs will be updated on or before 1 February 2011, to provide two month's notice of the tariffs that will apply for 2011/12.

Tariffs have been calculated according to the current Charging Methodology¹ and updates have been made that affect both the locational and non-locational elements of tariffs. In summary, the charging model has been updated to include:

- ❑ generation changes reflecting contracts Users have entered with National Grid and detailed in the October update of the 2010 Seven Year Statement² (SYS);
- ❑ demand information provided by Distribution Network Owners (DNOs) and directly connected demand customers and also detailed in the October update of the SYS;
- ❑ the transmission network data included in the SYS;
- ❑ the collectable transmission revenues, which are comprised of
 - allowed revenue of onshore TOs, taking into account inflation on price controlled revenues and allowances for strategic investment and investment to connect renewable generation; and
 - forecast revenue of OFTOs, taking into account those projects where asset transfer is expected to occur in 2011/12;
- ❑ an RPI inflationary increase of 4.8% to the expansion constant and local substation tariffs; and
- ❑ an initial view of the generation and demand charging bases in 2011/12.

Throughout this note, tariffs have been quoted to 2 decimal points to aid clarity. However, customers' actual charges are calculated using tariffs calculated to 6 decimal points. These can be found in the tables that accompany this notice.

GENERATION TNUoS TARIFFS

Generation TNUoS tariffs are comprised of a wider zonal tariff (which includes a non-locational residual component that ensures correct overall revenue recovery) and a local tariff, which will contain a substation element for directly connected generators and may also contain a circuit element.

Wider zonal tariffs

The following table presents the wider zonal generation TNUoS tariffs for 2011/12 (which, for the avoidance of doubt, include the residual tariff component). A comparison with the effective tariff for 2010/11 is given³.

¹ [Charging Statements](#) Issue 6, Revision 3

² [Seven Year Statements](#)

Zone	Zone Name	2010/11 Tariff (£/kW)	2011/12 Draft Tariff (£/kW)	Tariff Changes	
				Absolute	%
1	North Scotland	20.57	21.33	0.76	4%
2	Peterhead	19.20	19.60	0.39	2%
3	Western Highland & Skye	23.29	22.76	-0.53	-2%
4	Central Highlands	18.13	18.01	-0.12	-1%
5	Argyll	13.83	13.87	0.04	0%
6	Stirlingshire	13.93	14.06	0.13	1%
7	South Scotland	12.98	12.39	-0.59	-5%
8	Auchencrosh	11.40	12.11	0.70	6%
9	Humber, Lancashire	5.91	5.41	-0.50	-9%
10	North East England	9.29	8.69	-0.60	-6%
11	Anglesey	6.67	6.25	-0.41	-6%
12	Dinorwig	5.99	5.55	-0.45	-7%
13	South Yorks & North Wales	4.09	3.74	-0.35	-9%
14	Midlands	2.06	1.55	-0.51	-25%
15	South Wales & Gloucester	0.89	0.52	-0.37	-42%
16	Central London	-5.92	-7.02	-1.10	19%
17	South East	1.30	0.49	-0.81	-62%
18	Oxon & South Coast	-0.87	-2.06	-1.19	137%
19	Wessex	-2.14	-3.84	-1.70	80%
20	Peninsula	-5.38	-7.22	-1.84	34%

Most wider tariffs have fallen compared to 2010/11, as the non-locational residual component has reduced and is the same in all generation zones. This is because despite an increase in the overall revenue collectable from generation during 2011/12, a larger proportion of this is expected to be collected through locational charges and, in particular, offshore local charges.

Regional variations to these overall changes are due to the locational components of wider generation TNUoS tariffs, which in Scotland have generally increased whilst in England & Wales these have generally decreased. This is largely due to the increase to the expansion constant, which tends to increase the spread of tariffs and reflects the annual increase in the cost of providing additional transmission infrastructure. However, there are exceptions to this general trend, which are caused by changes in generation and demand in different locations. The main features are as follows:

- ❑ the impact of the increase to the expansion constant has been diluted in Scotland because additional generation connecting in England & Wales (for example, West Burton B 1305MW in Zone 13 and Pembroke 1350MW in Zone 15) has reduced modelled power flows from north to south;
- ❑ tariffs in the north of Scotland (Zones 1 and 2) see higher increases compared to other parts of Scotland, as demand in these areas has reduced compared to 2010/11;
- ❑ tariffs in Zone 8 have increased because, following a reduction in forecast demand at Auchencrosh, generation at Mark Hill and Auchencrosh tend to increase network flows between Mark Hill and Coynton South whereas previously additional generation would have reduced these flows. Against this background, additional generation in the Auchencrosh area will (all other things

³ The effective tariffs represent the weighted average of the tariffs that applied during 2010/11. Details of these tariffs are can be found at: <http://www.nationalgrid.com/uk/Electricity/Charges/usefulinfo/>

being equal) increase the modelled need for reinforcement and this is reflected in a higher tariff;

- tariffs in Wessex and Peninsula (Zones 19 and 20) have reduced more significantly than other southern zones due to increased demand in these areas with no offsetting increase in contracted generation.

Onshore local tariffs

All transmission connected generation is liable to pay a local substation charge. The following table shows the 2011/12 substation local tariffs that will apply to all transmission connected generators where the first transmission substation is onshore. In accordance with the charging methodology, these have increased from those set for 2010/11 in line with inflation.

The tariff in £/kW depends on the substation rating, connection type (redundancy / no redundancy), and connection voltage of the substation.

Substation Rating	Connection Type	132kV	275kV	400kV
<1320 MW	No redundancy	0.14	0.08	0.07
<1320 MW	Redundancy	0.32	0.20	0.16
>=1320 MW	No redundancy	-	0.27	0.22
>=1320 MW	Redundancy	-	0.44	0.35

In addition, generators that are not connected to main interconnected transmission system (MITS) pay a local circuit charge. The following table below presents the local circuit generation TNUoS tariffs for 2011/12 for onshore generators connected at the listed substation.

Substation Name	Local Tariff (£/kW)	Substation Name	Local Tariff (£/kW)
Aigas	0.55	Griffin Wind	2.04
Kilmorack	0.16	Hadyard Hill	2.01
An Suidhe	1.03	Hartlepool	0.42
Arecleoch	1.70	Invergarry	1.06
Mark Hill	0.63	Killingholme	0.42
Baglan Bay	0.03	South Humber Bank	0.63
Black Law	2.68	Langage	0.48
Clyde	1.54	Leiston	0.91
Coryton	0.26	Lochay	0.27
Cruachan	1.26	London Array	-0.03
Crystal Rig	0.44	Marchwood	0.39
Fallago	0.94	Glenmoriston	1.07
Culligran	1.30	Millennium Wind	1.32
Deanie	2.13	Nant	-0.93
Dersalloach	1.34	Oldbury-on-Severn	1.39
Didcot	0.61	Luichart	0.85
Dinorwig	3.95	Mossford	2.80
DunLaw	0.48	Pencloe	1.31
Earlshaugh	2.24	Quoich	3.01
Harestanes	1.34	Rocksavage	0.01
Hearthstanes	2.01	Saltend	0.26
Edinbane	5.00	Spalding	0.23
Farr Windfarm	5.02	Teesside	0.09
Ffestiniog	0.20	Waterhead Moor	1.93
Finlarig	0.23	Whitelee	1.50
Foyers	0.55	Kilbraur	1.03
Glendoe	1.86		

Offshore local tariffs

Offshore local tariffs have the same structure as onshore local tariffs but are based on project specific costs. The information needed to calculate these tariffs will be provided by the OFTOs once identified through an offshore tender; however, at the point of publishing these draft tariffs, no OFTOs have been appointed. In the meantime, National Grid has sought information from the preferred bidders of offshore transmission projects. Where information has been provided, this has been on a confidential basis to enable onshore tariffs to be calculated and to provide illustrative tariffs to relevant offshore generators. National Grid expects to publish these tariffs once final offshore tariffs have been set.

Discount for small generators

Subject to the Authority's ongoing consultation on retaining the small generation discount⁴, the draft 2011/12 small generation discount, based on 25% of the combined draft generation and demand residuals, is £5.80/kW.

DEMAND TNUoS TARIFFS

The tables below present the half-hourly (HH) and non half-hourly (NHH) demand TNUoS tariffs for 2011/12 and include the adjustment for the small generation discount, assuming that the current arrangements are extended for 2011/12. Tariffs for HH demand have been compared to the effective tariff for 2010/11. Tariffs for NHH demand have been compared to the average tariff for 2010/11⁵.

Zone	Zone Name (HH)	2010/11 Tariff (£/kW)	2011/12 Draft Tariff (£/kW)	Tariff Changes	
				Absolute	%
1	Northern Scotland	5.19	6.62	1.43	28%
2	Southern Scotland	10.54	11.81	1.27	12%
3	Northern	13.85	15.76	1.92	14%
4	North West	17.75	19.53	1.78	10%
5	Yorkshire	17.67	19.66	1.99	11%
6	N Wales & Mersey	18.22	20.28	2.07	11%
7	East Midlands	20.26	22.28	2.02	10%
8	Midlands	22.02	23.89	1.87	9%
9	Eastern	21.16	22.75	1.59	8%
10	South Wales	21.85	22.92	1.07	5%
11	South East	23.96	26.82	2.86	12%
12	London	26.08	28.02	1.94	7%
13	Southern	24.82	27.65	2.83	11%
14	South Western	25.38	28.49	3.10	12%

Zone	Zone Name (NHH)	2010/11 Tariff (p/kWh)	2011/12 Draft Tariff (p/kWh)	Tariff Changes	
				Absolute	%
1	Northern Scotland	0.71	0.90	0.20	28%
2	Southern Scotland	1.46	1.68	0.22	15%
3	Northern	1.91	2.19	0.28	15%
4	North West	2.47	2.76	0.29	12%
5	Yorkshire	2.41	2.73	0.32	13%
6	N Wales & Mersey	2.56	2.98	0.42	16%

⁴ [Consultation on extending the Small Generation discount](#)

⁵ This is the weighted average tariff for 2010/11 based on the consumption during the periods that each tariff applied.

Zone	Zone Name (NHH)	2010/11 Tariff (p/kWh)	2011/12 Draft Tariff (p/kWh)	Tariff Changes	
				Absolute	%
7	East Midlands	2.79	3.12	0.33	12%
8	Midlands	3.09	3.41	0.32	10%
9	Eastern	2.92	3.15	0.24	8%
10	South Wales	2.92	3.12	0.20	7%
11	South East	3.30	3.77	0.47	14%
12	London	3.48	3.80	0.33	9%
13	Southern	3.45	3.94	0.49	14%
14	South Western	3.48	3.92	0.43	12%

Demand tariffs have risen across all zones, to reflect the proportion of the increase in allowed transmission revenue that is collected through demand charges. This impact is the same in all demand zones. As with generation tariffs, locational variations emerge due to changes in generation and demand. Typically, demand tariffs tend to move in the opposite direction to changes in generation tariffs in the same location. However, differences do arise which are caused by the way in which costs are averaged across nodes different geographic areas represented by demand and generation tariff zones. The following points are note worthy:

- ❑ tariffs in South Wales (Zone 10) have fallen with arrival of additional generation capacity at Pembroke; and
- ❑ increases in demand have driven increases in the demand tariffs in the South and South West (Zones 13 and 14).

POSSIBLE CHANGES TO TARIFFS

Before setting final tariffs for 2011/12, there are a number of areas where changes are expected to occur and which may impact the final tariff outcome. These are described in the following section.

Licence changes

There are a number of areas where transmission licensee's licences may change, which would have an impact on the tariffs outlined above:

- ❑ the Authority is consulting on the licence changes necessary to retain the **discount for small generation**. These arrangements are set in National Grid's transmission licence. Ofgem's initial view, as set out in its consultation documents, is to retain the discount. Accordingly, the draft tariffs in this note are based on the assumption that the discount will be retained. This National Grid expects to formalise this in January 2011.
- ❑ the Authority is considering providing additional revenue allowances to onshore TOs to fund strategic transmission works⁶ (**TO Investment Incentives**), in order to facilitate the connection of new low-carbon generation. The outline consultation timetable suggests that further information should be available in January, which may allow onshore TOs to update their revenue requirements for 2011/12 in time for setting final tariffs in January 2011. No consideration of the outcome of this consultation has been included in the draft tariffs.

⁶ [Consultation on TO Investment Incentives](#)

- updates to **Scottish TO revenue allowances** associated with investments to connect renewable generation. Any updates made by the Scottish TOs in January 2011 will be included in the final tariffs.

Offshore transmission

National Grid is currently reviewing the forecast revenues it expects to collect on behalf of OFTOs during 2011/12. In preparing this forecast, National Grid expects to use full-year revenue information from the tenders that have completed for projects in transitional Tender Round 1 (Barrow, Gunfleet Sands 1 & 2, Robin Rigg East & West, Thanet, Walney I & II, Sheringham Shoal, and Ormonde) and will extrapolate this data to forecast revenues for Greater Gabbard and projects in transitional Tender Round 2A that are expected to complete in 2011/12 (London Array Phase 1 and Lincs). In cases where asset transfer has not occurred, National Grid will use the best available information obtained through discussions with preferred bidders and Ofgem to determine when this may occur and therefore the forecast proportion of the full-year revenue OFTOs will require in 2011/12. Any change to our forecast, will be included in final tariffs.

Winter 2010/11 and Charging Bases for 2011/12

Before setting final tariffs, National Grid will review the forecast revenue collected in 2010/11 and the demand charging base for 2011/12 to take as much of the current winter into account when assessing HH and NHH demand.

FORECAST OF FUTURE TARIFFS

National Grid is in the process of preparing its forecast of future tariffs, the so-called Condition 5 report, which is published each year to assist customers to understand how tariffs might change over a five-year period. We anticipate this being published in January / February 2011. To build on previous customer feedback, in addition to our forecast changes to locational tariff elements, we hope to include further information as to how the residual tariff elements might evolve and a view of uncertainties that might affect tariffs in future years.

FURTHER INFORMATION

If you require any further information about the publication of TNUoS tariffs please contact the Charging Team on 01926 654633.