nationalgrid

Tariff Information Paper

Draft Annual Load Factors for 2016/17 Generation TNUoS Charges

This information paper contains Draft Annual Load Factors (ALFs) that National Grid proposes to use in the calculation of Generation TNUoS charges from April 2016. Queries with these ALFs should be raised with National Grid by 8 January 2016 at the latest.

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V1.0

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Any Questions?

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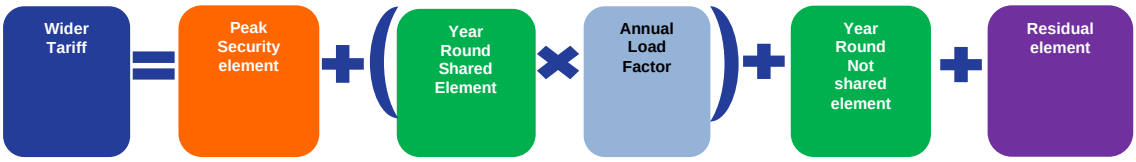
1 Introduction

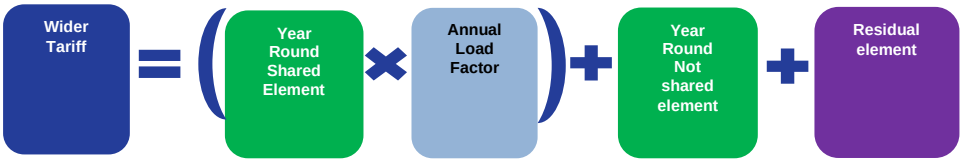
Following Project TransmiT, the Authority's significant code review of electricity transmission charging arrangements, National Grid raised CUSC Modification Proposal 213. The modification makes changes to the Transmission Network Use of System (TNUoS) charging methodology to better reflect the costs imposed by different types of generators on the electricity transmission network. The Authority directed the implementation of CMP213 Working Group Alternative 2 (WACM2) on 25 July 2014. Further details of the modification can be found on the CUSC Modifications area of National Grid's website[1].

Under the new methodology there are still 27 generation zones but each zone now has four tariffs rather than just one. A Generator's liability is dependent upon its type of generation. Generation powered by intermittent sources (e.g. wind, wave, tidal and solar) do not pay the peak security element whereas conventionally powered generation (e.g. fossil, nuclear, biomass, storage and hydro) do. Liability for each tariff component is shown below:

Conventional Generator



Intermittent Generator



Each generator has an Annual Load Factor (ALF) based on its performance over the last five years. Where new plant does not have at least three complete charging year's history then a generic ALF for the technology is used.

National Grid is required to provide its customers with draft ALFs for the following charging year before 25th December. Customers have a period of 15 working days from the date of publishing to notify National Grid of any errors. We are publishing draft ALFs earlier than required this year to extend the opportunity for generators to understand and review the specific and generic ALFs applicable to them. We therefore invite responses and queries to be submitted by 8 January 2016.

[1] http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP213/

We are happy to provide support and advice on the derivation of ALFs to our customers. However the data used to derive the ALFs is very large so we are only able to provide support to generators for stations in their own portfolios.

2 Changes from the November 2015 forecast

On 9 November 2015, we published our quarterly update of forecast TNUoS tariffs for 2016/17. Appendix D contained expected Annual Load Factors (ALF) and generic ALFs for 2016/17. The values in this document supersede those in the quarterly forecast. Corrections have been made to the ALFs for Glendoe, Kings Lynn A and Shoreham where generic ALFs were being incorrectly substituted for certain years and Thanet where the Balancing Mechanism Units changed following asset transfer. This latter change has also affected the generic ALF for offshore wind farms impacting other generators.

3 Approach

ALFs have been calculated using data from 2010/11 to 2014/15, these being the five most recent complete charging years. For each charging year 2010/11 to 2014/15 a Yearly Load Factor has been calculated using the higher of Metered Output (MO), Final Physical Notification (FPN) or zero in each half hour settlement period, divided by the sum of Transmission Entry Capacity (TEC), Short Term TEC (STTEC) and Limited Duration TEC (LDTEC) applicable in the same half hour.

All calculations are in local time, i.e. clock change days have 46 or 50 half hour settlement periods rather than the usual 48. TEC, STTEC and LDTEC are daily products so changes occur at midnight.

The Annual Load Factor (ALF) is the average of three Yearly Load Factors. Where five complete years are available, the highest and lowest Yearly Load Factors are removed and the average is of the remaining three. Where four complete years are available only the lowest is removed. If less than three Yearly Load Factors are available, the generic ALF is used to either complete a year where a generator commissioned mid-year or to provide additional years.

ALF are calculated at station level, so where a station has multiple Balancing Mechanism Units (BMU) representing generating units, station demand or trading site demand, the MO and FPN will be the aggregate of these.

For cascade hydro schemes the ALF are calculated at scheme level, so the MO and FPN will be the aggregate of the BMU associated with the scheme. The scheme ALF is applied to each station in the scheme.

Generic ALFs are calculated from the ten most recently commissioned generators from each technology where available. Commissioning years have been taken from the Digest of United Kingdom Energy Statistics Table 5.11[2] but commissioning dates within the five charging years under consideration have been checked against Metered Output and Final Physical Notification data to determine the exact date.

Further details on ALFs can be found in the 11 November 2015 TCMF slide pack[3].

[2] https://www.gov.uk/government/publications/electricity-chapter-5-digest-of-united-kingdom-energy-statistics-dukes

[3] http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=43785

4 Annual Load Factors

Table 1 shows Annual Load Factors (ALF) for generators operating between 2010/11 and 2014/15. New power stations should refer to Table 2 for the generic ALF for their fuel type.

Where a station is listed as a Generic Station it has been used in the calculation of the Generic Annual Load Factor for its technology.

Table 1

Power Station	Technology	Generic Station	Yearly Load Factor Source					Yearly Load Factor Value					Specific ALF
			2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	
Aberthaw	Coal	Yes	Actual	Actual	Actual	Actual	Actual	42.1681%	44.5767%	74.0137%	65.5413%	59.0043%	**56.3741%**
An Suidhe Wind Farm	Onshore_Wind		Partial	Actual	Actual	Actual	Actual	27.7229%	34.8406%	31.6380%	41.5843%	36.9422%	**37.7890%**
Arecleoch	Onshore_Wind		Partial	Actual	Actual	Actual	Actual	28.4997%	35.1282%	32.4826%	33.8296%	29.7298%	**33.8135%**
Baglan Bay	CCGT_and_CHP	Yes	Actual	Actual	Actual	Actual	Actual	75.0152%	61.0787%	27.5756%	16.4106%	37.9194%	**42.1913%**
Barking	CCGT_and_CHP		Actual	Actual	Actual	Actual	Partial	57.3199%	20.8541%	2.3383%	1.8802%	14.1930%	**26.8374%**
Barrow Offshore Wind Ltd	Offshore_Wind	Yes	Generic	Partial	Actual	Actual	Actual	0.0000%	51.4525%	42.8840%	54.1080%	47.0231%	**48.0051%**
Barry	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	20.6262%	8.2014%	0.6999%	1.2989%	0.4003%	**3.4001%**
Beauly Cascade	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	23.7270%	44.8523%	25.4532%	35.6683%	37.1167%	**32.7461%**
Black Law	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	21.8248%	32.5465%	22.0683%	31.9648%	26.7881%	**26.9404%**
Brimsdown	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	57.0990%	39.5562%	21.8759%	18.7645%	11.1229%	**26.7322%**
Carraig Gheal	Onshore_Wind		Generic	Generic	Partial	Actual	Actual	0.0000%	0.0000%	31.8214%	45.2760%	48.9277%	**42.0083%**
Clunie Scheme	Hydro		Actual	Actual	Actual	Actual	Actual	33.6597%	50.3272%	33.4563%	45.3256%	43.2488%	**40.7447%**
Clyde (North)	Onshore_Wind		Generic	Partial	Actual	Actual	Actual	0.0000%	22.5934%	28.5345%	42.6598%	36.8882%	**36.0275%**
Clyde (South)	Onshore_Wind		Partial	Actual	Actual	Actual	Actual	23.0513%	21.1154%	31.6084%	39.8941%	29.4115%	**33.6380%**
Cockenzie	Coal		Actual	Actual	Actual	Generic	Generic	35.6836%	23.6394%	26.7482%	0.0000%	0.0000%	**28.6904%**
Connahs Quay	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	51.0194%	33.6741%	18.5104%	12.8233%	18.3739%	**23.5195%**
Conon Cascade	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	42.9004%	62.1102%	47.5286%	54.2820%	55.5287%	**52.4464%**
Corby	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	18.2387%	8.1854%	3.4375%	8.0834%	9.6755%	**8.6481%**
Coryton	CCGT_and_CHP	Yes	Actual	Actual	Actual	Actual	Actual	84.0339%	40.7480%	15.6869%	9.7852%	17.5123%	**24.6490%**
Cottam	Coal	Yes	Actual	Actual	Actual	Actual	Actual	59.3181%	61.2151%	65.0700%	67.3951%	51.4426%	**61.8678%**

Power Station	Technology	Generic Station	Yearly Load Factor Source					Yearly Load Factor Value					Specific ALF
			2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	
Cottam Development Centre	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	63.9771%	46.0664%	13.7361%	16.0249%	31.3132%	**31.1348%**
Cowes	Oil_and_OCGT	Yes	Actual	Actual	Actual	Actual	Actual	0.1267%	0.2783%	0.1743%	0.0956%	0.3135%	**0.1931%**
Cruachan	Pumped_Storage	Yes	Actual	Actual	Actual	Actual	Actual	11.2970%	8.9462%	8.4281%	9.6969%	9.0516%	**9.2315%**
Crystal Rig II	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	27.9128%	49.3600%	40.6845%	50.2549%	47.5958%	**45.8801%**
Damhead Creek	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	86.5589%	77.3504%	45.0617%	77.1783%	67.4641%	**73.9976%**
Deeside	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	55.6058%	35.4538%	19.7551%	17.3035%	13.9018%	**24.1708%**
Derwent	CCGT_and_CHP		Actual	Actual	Actual	Generic	Generic	52.3453%	29.2563%	16.7577%	0.0000%	0.0000%	**32.7864%**
Didcot	Coal		Actual	Actual	Actual	Generic	Generic	15.2952%	27.9656%	55.7020%	0.0000%	0.0000%	**32.9876%**
Didcot B	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	73.4424%	56.8079%	49.0134%	18.6624%	25.5345%	**43.7853%**
Didcot GTs	Oil_and_OCGT	Yes	Actual	Actual	Actual	Actual	Actual	0.0072%	0.1401%	0.0720%	0.0902%	0.2843%	**0.1008%**
Dinorwig	Pumped_Storage	Yes	Actual	Actual	Actual	Actual	Actual	15.3082%	15.0985%	15.0990%	15.0898%	15.0650%	**15.0958%**
Drax	Coal	Yes	Actual	Actual	Actual	Actual	Actual	82.0455%	81.1523%	82.4774%	80.5151%	82.2149%	**81.8042%**
Dungeness B	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	39.6373%	11.6712%	59.8295%	61.0068%	54.6917%	**51.3862%**
Dunlaw extension	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	34.6421%	37.7664%	32.3771%	34.8226%	30.0797%	**33.9472%**
Edinbane Wind	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	29.0483%	52.8496%	29.3933%	39.4785%	31.2458%	**33.3725%**
Eggborough	Coal	Yes	Actual	Actual	Actual	Actual	Actual	25.4194%	41.4851%	72.6884%	72.1843%	45.7421%	**53.1372%**
Errochty	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	17.0180%	25.1643%	14.5869%	28.2628%	25.3585%	**22.5136%**
Fallago	Onshore_Wind		Generic	Generic	Partial	Actual	Actual	0.0000%	0.0000%	34.8914%	54.8683%	44.7267%	**44.8288%**
Farr Windfarm Tomatin	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	30.4445%	43.3953%	34.0149%	44.7212%	38.5712%	**38.6604%**
Fasnakyle G1 & G3	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	19.7278%	39.9896%	22.1176%	35.3695%	57.4834%	**32.4922%**
Fawley	Oil_and_OCGT	Yes	Actual	Actual	Actual	Actual	Actual	0.3133%	0.2192%	0.2024%	0.0821%	0.0400%	**0.1679%**
Fawley CHP	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	69.0226%	71.5686%	61.1362%	63.3619%	72.8484%	**67.9844%**
Ferrybridge B	Coal		Actual	Actual	Actual	Actual	Actual	36.5904%	50.2631%	59.1851%	48.8918%	25.1499%	**45.2484%**
Ffestiniogg	Pumped_Storage	Yes	Actual	Actual	Actual	Actual	Actual	3.0731%	3.3676%	2.9286%	5.4631%	4.3251%	**3.5886%**
Fiddlers Ferry	Coal	Yes	Actual	Actual	Actual	Actual	Actual	46.7146%	52.0973%	61.6386%	49.0374%	45.2435%	**49.2831%**
Finlarig	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	50.0484%	67.9805%	40.2952%	59.9142%	59.4092%	**56.4573%**
Foyers	Pumped_Storage	Yes	Actual	Actual	Actual	Actual	Actual	17.9834%	18.9885%	13.4800%	14.7097%	12.3048%	**15.3910%**
Garry Cascade	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	32.5155%	70.4039%	48.5993%	55.9308%	64.3828%	**56.3043%**
Glandford Brigg	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	11.3147%	0.9617%	0.3336%	1.5673%	0.5401%	**1.0230%**

Power Station	Technology	Generic Station	Yearly Load Factor Source					Yearly Load Factor Value					Specific ALF
			2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	
Glendoe	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	0.0000%	0.0000%	17.3350%	36.3802%	32.3494%	**16.5615%**
Glenmoriston	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	28.3321%	58.0412%	36.3045%	44.4594%	48.7487%	**43.1709%**
Gordonbush	Onshore_Wind		Generic	Partial	Actual	Actual	Actual	0.0000%	32.9384%	37.8930%	46.5594%	47.7981%	**44.0835%**
Grain	CCGT_and_CHP	Yes	Actual	Actual	Actual	Actual	Actual	18.2091%	29.4910%	25.4580%	41.3833%	44.0031%	**32.1108%**
Grangemouth	CCGT_and_CHP	Yes	Actual	Actual	Actual	Actual	Actual	66.2697%	67.5783%	52.8594%	55.9047%	62.6168%	**61.5971%**
Great Yarmouth	CCGT_and_CHP	Yes	Actual	Actual	Actual	Actual	Actual	76.2183%	45.0785%	19.0270%	20.7409%	18.6633%	**28.2821%**
Greater Gabbard Offshore Wind Farm	Offshore_Wind	Yes	Partial	Actual	Actual	Actual	Actual	35.8865%	17.8601%	40.1778%	48.3038%	42.1327%	**43.5381%**
Griffin Wind	Onshore_Wind		Generic	Partial	Actual	Actual	Actual	0.0000%	13.9399%	17.9885%	31.9566%	31.3152%	**27.0867%**
Gunfleet Sands I	Offshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	38.1775%	43.7552%	50.1496%	56.6472%	47.0132%	**46.9727%**
Gunfleet Sands II	Offshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	41.0784%	41.4244%	45.0132%	52.2361%	44.7211%	**43.7196%**
Gwynt y Mor	Onshore_Wind		Generic	Generic	Partial	Actual	Actual	0.0000%	0.0000%	13.9901%	8.0036%	61.6185%	**27.8707%**
Hadyard Hill	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	23.8131%	38.9802%	27.6927%	31.9488%	27.7635%	**29.1350%**
Harestanes	Onshore_Wind		Generic	Generic	Generic	Partial	Actual	0.0000%	0.0000%	0.0000%	23.3480%	28.6355%	**29.5726%**
Hartlepool	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	79.3759%	71.1712%	80.2632%	73.7557%	56.2803%	**74.7676%**
Heysham	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	58.1497%	83.7012%	83.3828%	73.3628%	68.8252%	**75.1903%**
Hinkley Point B	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	65.3580%	56.9291%	61.7582%	68.8664%	70.1411%	**65.3275%**
Hunterston	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	73.4059%	75.3474%	73.5984%	84.7953%	79.1368%	**76.0275%**
Immingham	CCGT_and_CHP	Yes	Actual	Actual	Actual	Actual	Actual	55.5560%	73.3041%	50.1793%	37.8219%	56.8316%	**54.1890%**
Indian Queens	Oil_and_OCGT	Yes	Actual	Actual	Actual	Actual	Actual	0.7122%	1.3382%	0.3423%	0.2321%	0.0876%	**0.4289%**
Ironbridge	Coal	Yes	Actual	Actual	Actual	Actual	Actual	15.0869%	12.8012%	0.6405%	11.0838%	30.9006%	**12.9906%**
Keadby	CCGT_and_CHP		Actual	Actual	Actual	Actual	Generic	60.4703%	49.8412%	4.6125%	0.0001%	0.0000%	**38.3080%**
Kilbraur	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	35.3544%	45.1817%	45.2306%	51.3777%	54.3550%	**47.2633%**
Killin Cascade	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	25.4645%	53.0410%	32.3429%	45.5356%	44.8205%	**40.8997%**
Killingholme (NP)	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	16.0550%	10.3057%	10.6552%	7.4217%	11.6191%	**10.8600%**
Killingholme (Powergen)	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	23.7875%	7.2577%	3.0933%	1.7383%	3.7863%	**4.7124%**
Kings Lynn A	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	34.3620%	15.6080%	0.0003%	0.0000%	0.0000%	**5.2027%**
Kingsnorth	Coal		Actual	Actual	Actual	Generic	Generic	22.3298%	30.0991%	26.9316%	0.0000%	0.0000%	**26.4535%**
Langage	CCGT_and_CHP	Yes	Actual	Actual	Actual	Actual	Actual	74.0119%	60.7905%	41.9115%	40.8749%	34.8629%	**47.8589%**
Lincs Wind Farm	Offshore_Wind	Yes	Generic	Generic	Partial	Actual	Actual	0.0000%	0.0000%	19.7816%	46.5987%	43.8178%	**36.7327%**

Power Station	Technology	Generic Station	Yearly Load Factor Source					Yearly Load Factor Value					Specific ALF
			2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	
Little Barford	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	84.4222%	11.8210%	16.3807%	33.6286%	49.6644%	**33.2246%**
Littlebrook D	Oil_and_OCGT	Yes	Actual	Actual	Actual	Actual	Actual	0.3282%	0.1055%	0.0588%	0.0201%	0.1394%	**0.1013%**
Lochluichart	Onshore_Wind		Generic	Generic	Generic	Partial	Actual	0.0000%	0.0000%	0.0000%	26.5290%	20.2103%	**27.8246%**
London Array	Offshore_Wind	Yes	Generic	Generic	Partial	Actual	Actual	0.0000%	0.0000%	38.0431%	51.2703%	64.0880%	**51.1338%**
Longannet	Coal	Yes	Actual	Actual	Actual	Actual	Actual	56.2206%	47.9712%	52.1025%	56.8761%	56.4764%	**54.9332%**
Marchwood	CCGT_and_CHP	Yes	Actual	Actual	Actual	Actual	Actual	84.3291%	66.1953%	43.3537%	48.6845%	66.4021%	**60.4273%**
Mark Hill	Onshore_Wind		Partial	Actual	Actual	Actual	Actual	35.0347%	26.3795%	30.1675%	30.2863%	26.7942%	**29.0827%**
Medway	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	67.0026%	42.4273%	1.0718%	14.5545%	28.0962%	**28.3594%**
Millennium	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	32.8403%	47.2065%	42.1318%	52.6618%	53.2636%	**47.3334%**
Nant	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	22.6503%	42.4480%	20.8965%	35.5883%	36.4040%	**31.5476%**
Ormonde	Offshore_Wind	Yes	Generic	Generic	Partial	Actual	Actual	0.0000%	0.0000%	48.3994%	49.6561%	42.8711%	**46.9755%**
Pembroke	CCGT_and_CHP		Generic	Partial	Actual	Actual	Actual	0.0000%	32.9605%	61.5434%	60.3928%	67.5346%	**63.1569%**
Peterborough	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	19.5921%	3.4546%	0.9506%	1.8311%	1.0929%	**2.1262%**
Peterhead	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	52.3771%	66.1917%	31.3766%	41.8811%	0.4858%	**41.8783%**
Ratcliffe-on-Soar	Coal	Yes	Actual	Actual	Actual	Actual	Actual	53.1708%	53.5677%	66.7461%	71.7403%	56.1767%	**58.8302%**
Robin Rigg East	Offshore_Wind	Yes	Partial	Actual	Actual	Actual	Actual	46.4720%	41.4118%	37.4157%	46.7562%	55.3209%	**47.8296%**
Robin Rigg West	Offshore_Wind	Yes	Partial	Actual	Actual	Actual	Actual	46.5741%	44.4918%	38.2254%	48.0629%	53.4150%	**48.6565%**
Rocksavage	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	55.9818%	47.7376%	41.4820%	2.6155%	4.4252%	**31.2149%**
Roosecote	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	21.2259%	9.3939%	0.0121%	0.0000%	0.0000%	**3.1353%**
Rugeley B	Coal	Yes	Actual	Actual	Actual	Actual	Actual	50.2059%	53.2455%	68.6109%	82.6505%	59.4472%	**60.4345%**
Rye House	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	40.3688%	20.4253%	10.7188%	7.4695%	5.3701%	**12.8712%**
Saltend	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	89.0335%	90.6801%	81.5834%	69.0062%	67.9518%	**79.8744%**
Seabank	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	72.4476%	34.5669%	15.2311%	18.2781%	25.6956%	**26.1802%**
Sellafield	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	18.9905%	4.1046%	14.0549%	25.0221%	18.9719%	**17.3391%**
Severn Power	CCGT_and_CHP		Partial	Actual	Actual	Actual	Actual	53.7190%	32.2421%	27.7976%	32.4163%	24.6354%	**30.8187%**
Sheringham Shoal	Offshore_Wind	Yes	Generic	Partial	Actual	Actual	Actual	0.0000%	19.2506%	36.6431%	49.3517%	46.2286%	**44.0744%**
Shoreham	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	70.9592%	65.7100%	0.0000%	20.7501%	10.2239%	**32.2280%**
Shotton	CCGT_and_CHP		Actual	Actual	Actual	Generic	Generic	32.5752%	19.2180%	4.2964%	0.0000%	0.0000%	**18.6965%**
Sizewell B	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	49.0352%	77.3818%	96.7260%	82.5051%	84.7924%	**81.5598%**

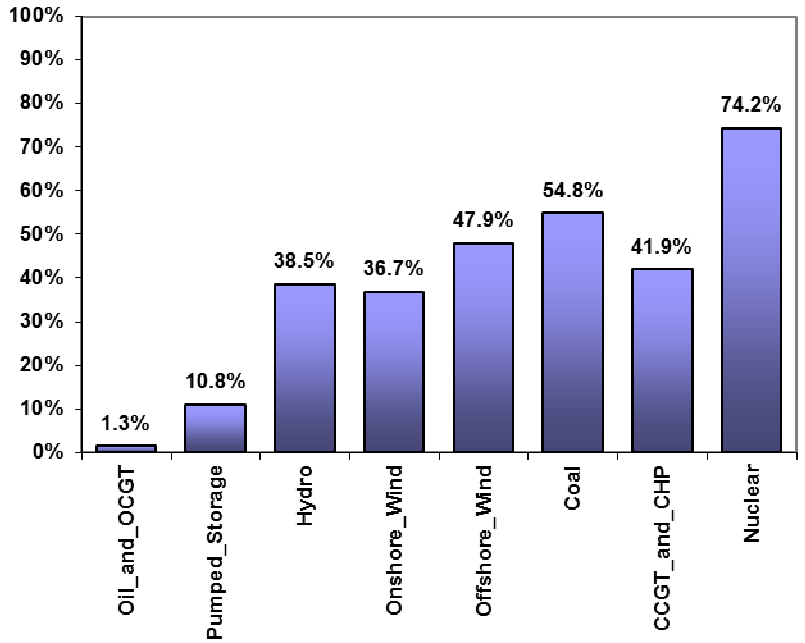
Power Station	Technology	Generic Station	Yearly Load Factor Source					Yearly Load Factor Value					Specific ALF
			2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	
Sloy G2 & G3	Hydro		Actual	Actual	Actual	Actual	Actual	9.0965%	15.0995%	9.1252%	14.3471%	15.5941%	**12.8573%**
South Humber Bank	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	70.2595%	33.8760%	27.9763%	24.3373%	34.4673%	**32.1065%**
Spalding	CCGT_and_CHP	Yes	Actual	Actual	Actual	Actual	Actual	63.5046%	65.1849%	34.6976%	33.4800%	39.3092%	**45.8371%**
Staythorpe	CCGT_and_CHP	Yes	Actual	Actual	Actual	Actual	Actual	51.3069%	58.4594%	54.4117%	37.6216%	56.6148%	**54.1112%**
Sutton Bridge	CCGT_and_CHP		Actual	Actual	Actual	Actual	Actual	34.5042%	64.8794%	20.1652%	9.4124%	17.2025%	**23.9573%**
Taylors Lane	Oil_and_OCGT	Yes	Actual	Actual	Actual	Actual	Actual	0.3131%	0.1048%	0.2037%	0.0483%	0.0640%	**0.1242%**
Teesside	Oil_and_OCGT	Yes	Actual	Actual	Actual	Generic	Generic	21.4573%	1.0876%	2.0764%	0.0000%	0.0000%	**8.2071%**
Thanet Offshore Wind Farm	Offshore_Wind	Yes	Partial	Actual	Actual	Actual	Actual	32.8600%	32.4868%	41.1093%	39.7489%	35.5935%	**38.8172%**
Tilbury B	Biomass	Yes	Actual	Actual	Actual	Actual	Generic	28.0151%	6.9154%	33.7378%	23.2025%	0.0000%	**28.3185%**
Toddleburn	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	28.9787%	38.1923%	32.7175%	39.5374%	33.7211%	**34.8770%**
Torness	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	76.6401%	90.0662%	84.8669%	86.4669%	91.4945%	**87.1333%**
Uskmouth	COAL		Actual	Actual	Actual	Actual	Partial	12.6458%	19.2655%	45.1938%	38.9899%	44.4061%	**34.4831%**
Walney I	Offshore_Wind	Yes	Partial	Actual	Actual	Actual	Actual	38.6273%	45.6003%	44.2799%	57.7046%	52.0555%	**51.7868%**
Walney II	Offshore_Wind	Yes	Generic	Generic	Partial	Actual	Actual	0.0000%	0.0000%	53.9700%	61.9219%	58.2355%	**58.0425%**
West Burton	Coal	Yes	Actual	Actual	Actual	Actual	Actual	38.2764%	44.5447%	70.5868%	68.9176%	61.5364%	**58.3329%**
West Burton B	CCGT_and_CHP		Generic	Generic	Partial	Actual	Actual	0.0000%	0.0000%	21.1178%	30.3021%	46.8421%	**32.7540%**
West of Duddon Sands Offshore Wind Farm	Offshore_Wind		Generic	Generic	Generic	Partial	Actual	0.0000%	0.0000%	0.0000%	39.1958%	40.0506%	**42.3803%**
Westermost Rough	Offshore_Wind		Generic	Generic	Generic	Generic	Partial	0.0000%	0.0000%	0.0000%	0.0000%	26.6535%	**40.8142%**
Whitelee	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	24.7528%	31.7670%	28.2265%	35.1074%	29.8105%	**29.9346%**
Whitelee Extension	Onshore_Wind		Generic	Partial	Actual	Actual	Actual	0.0000%	26.0889%	12.4146%	27.0102%	27.7787%	**22.4011%**
Wilton	CCGT_and_CHP	Yes	Actual	Actual	Actual	Actual	Actual	11.7767%	12.6949%	3.4258%	4.4941%	21.5867%	**9.6552%**
Wylfa	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	84.7281%	79.4968%	60.0463%	84.4883%	83.5566%	**82.5139%**

5 Generic Annual Load Factors

Table 2 shows Generic ALFs for each generation technology. Generic ALFs are used to calculate Yearly Load Factors of power stations with less than three complete charging years of data and Annual Load Factors of generators commissioning during 2015/16 or 2016/17.

Table 2

Technology	Generic ALF	Intermittent/ Conventional	Carbon/ Low Carbon
Oil_and_OCGT	1.3319%	Conventional	Carbon
Pumped_Storage	10.8267%	Conventional	Carbon
Hydro	38.5139%	Conventional	Low Carbon
Onshore_Wind	36.7344%	Intermittent	Low Carbon
Offshore_Wind	47.8946%	Intermittent	Low Carbon
Coal	54.7988%	Conventional	Carbon
CCGT_and_CHP	41.9008%	Conventional	Carbon
Nuclear	74.2383%	Conventional	Low Carbon
Biomass	28.3185%	Conventional	Carbon



6 Next Steps

We propose to use the Annual Load Factors (ALF) in this document to set charges in 2016/17. Where customers have a query regarding their ALF they are requested to contact National Grid as soon as possible and by 8 January 2016 at the latest so that queries can be resolved.

If a query results in a generator's ALF being altered, the new value will be used to set its charges in 2016/17. Where the generator is a Generic Station, a change to its ALF may also change the generic ALF for its technology. This will impact the charges of all generators of the same technology which do not have at least three complete charging years of Yearly Load Factors.

Final tariffs for 2016/17 will be published at the end of January 2016 and the final ALFs used to set charges will be published at the same time.