

# Draft Annual Load Factors for 2017/18 Generation TNUoS Charges

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This information paper contains Draft Annual Load Factors (ALFs) that National Grid proposes to use in the calculation of Generation TNUoS charges from April 2017. Queries with these ALFs should be raised with National Grid by Friday 6 January 2017 at the latest.

**9 December 2016**  
**V1**

**Disclaimer**

This report is published without prejudice and whilst every effort has been made to ensure the accuracy of the Draft Annual Load Factors, National Grid reserves the right to alter Annual Load Factors where the methodology is found to have been incorrectly applied.

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**Any Questions?**

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## 1 Introduction

Annual Load Factors (ALFs) are an important component used in the calculation of a generator's share of Transmission Network Use of System (TNUoS) tariffs.

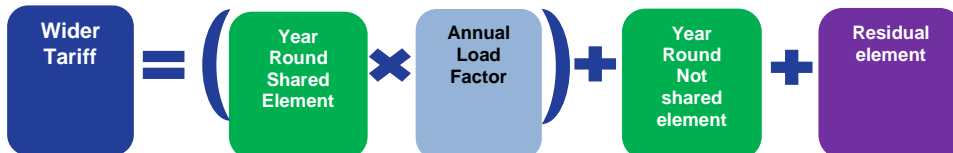
Following Project TransmiT, the Authority's significant code review of electricity transmission charging arrangements, National Grid raised CUSC Modification Proposal 213. The modification made changes to the TNUoS charging methodology to better reflect the costs imposed by different types of generators 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<sup>1</sup>.

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 ALF based on its performance over the last five years. Where a new plant does not have at least three complete years of charging history then the generic ALF for that technology is used.

National Grid is required by CUSC to provide customers with draft ALFs for the following charging year before 25 December. CUSC states that customers have a period of 15 working days from the date of publishing to notify National Grid of any errors. We invite responses and queries to be submitted by Friday 6 January 2017.

<sup>1</sup> <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 October 2016 forecast

On 31 October 2016, we published our quarterly update of forecast TNUoS tariffs for 2017/18. Appendix D of the report contained the generator-specific and generic ALFs for 2016/17. The values in this document supersede those in the quarterly forecast.

### 3 Approach

ALFs have been calculated using data from 2011/12 to 2015/16, these being the five most recent complete charging years. For each charging year 2011/12 to 2015/16 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 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 calculated using the remaining three. Where four complete years are available only the lowest is removed. If fewer 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.

ALFs 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 is 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<sup>2</sup> 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.

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

## 4 Annual Load Factors

Table 1 shows Annual Load Factors (ALF) for generators operating between 2011/12 and 2015/16. 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
			2011/12	2012/13	2013/14	2014/15	2015/16	2011/12	2012/13	2013/14	2014/15	2015/16	
ABERTHAW	Coal	Yes	Actual	Actual	Actual	Actual	Actual	44.5767%	74.0137%	65.5413%	59.0043%	54.2611%	<b>59.6022%</b>
ACHRUACH	Onshore_Wind		Generic	Generic	Generic	Generic	Partial	0.0000%	0.0000%	0.0000%	0.0000%	33.6463%	<b>36.4210%</b>
AN SUIDHE WIND FARM	Onshore_Wind		Actual	Actual	Actual	Actual	Actual	34.8406%	31.6380%	41.5843%	36.9422%	35.4900%	<b>35.7576%</b>
ARECLEOCH	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	35.1282%	32.4826%	33.8296%	29.7298%	36.8612%	<b>33.8135%</b>
BAGLAN BAY	CCGT_CHP	Yes	Actual	Actual	Actual	Actual	Actual	61.0787%	27.5756%	16.4106%	37.9194%	29.1228%	<b>31.5393%</b>
BARROW OFFSHORE WIND LTD	Offshore_Wind	Yes	Partial	Actual	Actual	Actual	Actual	51.5009%	42.8840%	54.1080%	47.0231%	47.1791%	<b>49.4368%</b>
BARRY	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	8.2014%	0.6999%	1.2989%	0.4003%	2.1727%	<b>1.3905%</b>
BEAULY CASCADE	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	44.8523%	25.4532%	35.6683%	37.1167%	35.0094%	<b>35.9315%</b>
BLACK LAW	Onshore_Wind		Actual	Actual	Actual	Actual	Actual	32.5465%	22.0683%	31.9648%	26.7881%	26.9035%	<b>28.5521%</b>
BLACK LAW EXTENSION	Onshore_Wind		Generic	Generic	Generic	Generic	Partial	0.0000%	0.0000%	0.0000%	0.0000%	33.4635%	<b>36.3601%</b>
BRIMSDOWN	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	39.5562%	21.8759%	18.7645%	11.1229%	16.4463%	<b>19.0289%</b>
BURBO BANK	Offshore_Wind		Generic	Generic	Generic	Generic	Actual	0.0000%	0.0000%	0.0000%	0.0000%	16.7781%	<b>37.5881%</b>
CARRAIG GHEAL	Onshore_Wind		Generic	Partial	Actual	Actual	Actual	0.0000%	32.7219%	45.2760%	48.9277%	45.6254%	<b>46.6097%</b>
CARRINGTON	CCGT_CHP		Generic	Generic	Generic	Generic	Actual	0.0000%	0.0000%	0.0000%	0.0000%	0.0109%	<b>25.9594%</b>
CLUNIE SCHEME	Hydro		Actual	Actual	Actual	Actual	Actual	50.3272%	33.4563%	45.3256%	43.2488%	47.9711%	<b>45.5152%</b>
CLYDE (NORTH)	Onshore_Wind		Partial	Actual	Actual	Actual	Actual	23.1890%	28.5345%	42.6598%	36.8882%	41.4120%	<b>40.3200%</b>
CLYDE (SOUTH)	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	21.1154%	31.6084%	39.8941%	29.4115%	39.9615%	<b>33.6380%</b>
CONNAHS QUAY	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	33.6741%	18.5104%	12.8233%	18.3739%	28.2713%	<b>21.7185%</b>

Power Station	Technology	Generic Station	Yearly Load Factor Source					Yearly Load Factor Value					Specific ALF
			2011/12	2012/13	2013/14	2014/15	2015/16	2011/12	2012/13	2013/14	2014/15	2015/16	
CONON CASCADE	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	62.1102%	47.5286%	54.2820%	55.5287%	58.9860%	56.2656%
CORBY	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	8.1854%	3.4375%	8.0834%	9.6755%	4.5411%	6.9366%
CORYTON	CCGT_CHP	Yes	Actual	Actual	Actual	Actual	Actual	40.7480%	15.6869%	9.7852%	17.5123%	26.4000%	19.8664%
COTTAM	Coal	Yes	Actual	Actual	Actual	Actual	Actual	61.2151%	65.0700%	67.3951%	51.4426%	34.4157%	59.2426%
COTTAM DEVELOPMENT CENTRE	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	46.0664%	13.7361%	16.0249%	31.3132%	28.2382%	25.1921%
COWES	Gas_Oil	Yes	Actual	Actual	Actual	Actual	Actual	0.2783%	0.1743%	0.0956%	0.3135%	0.4912%	0.2554%
CRUACHAN	Pumped_Storage	Yes	Actual	Actual	Actual	Actual	Actual	8.9462%	8.4281%	9.6969%	9.0516%	8.8673%	8.9550%
CRYSTAL RIG II	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	49.3600%	40.6845%	50.2549%	47.5958%	48.3836%	48.4464%
DAMHEAD CREEK	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	77.3504%	45.0617%	77.1783%	67.4641%	64.8983%	69.8469%
DEESIDE	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	35.4538%	19.7551%	17.3035%	13.9018%	17.4579%	18.1722%
DIDCOT B	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	56.8079%	49.0134%	18.6624%	25.5345%	41.1389%	38.5623%
DIDCOT GTS	Gas_Oil	Yes	Actual	Actual	Actual	Actual	Actual	0.1401%	0.0720%	0.0902%	0.2843%	0.4861%	0.1715%
DINORWIG	Pumped_Storage	Yes	Actual	Actual	Actual	Actual	Actual	15.0985%	15.0990%	15.0898%	15.0650%	14.6353%	15.0844%
DRAX	Coal	Yes	Actual	Actual	Actual	Actual	Actual	81.1523%	82.4774%	80.5151%	82.2149%	76.2030%	81.2941%
DUNGENESS B	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	11.6712%	59.8295%	61.0068%	54.6917%	70.7617%	58.5094%
DUNLAW EXTENSION	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	37.7664%	32.3771%	34.8226%	30.0797%	29.1203%	32.4265%
EDINBANE WIND	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	52.8496%	29.3933%	39.4785%	31.2458%	35.5937%	35.4393%
EGGBOROUGH	Coal	Yes	Actual	Actual	Actual	Actual	Actual	41.4851%	72.6884%	72.1843%	45.7421%	27.0157%	53.1372%
ERROCHTY	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	25.1643%	14.5869%	28.2628%	25.3585%	28.1507%	26.2245%
FALLAGO	Onshore_Wind		Generic	Partial	Actual	Actual	Actual	0.0000%	35.7448%	54.8683%	44.7267%	55.7992%	51.7981%
FARR WINDFARM TOMATIN	Onshore_Wind		Actual	Actual	Actual	Actual	Actual	43.3953%	34.0149%	44.7212%	38.5712%	40.9963%	40.9876%
FASNAKYLE G1 & G3	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	39.9896%	22.1176%	35.3695%	57.4834%	53.1573%	42.8388%
FAWLEY CHP	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	71.5686%	61.1362%	63.3619%	72.8484%	57.6978%	65.3556%
FERRYBRIDGE B	Coal	Yes	Actual	Actual	Actual	Actual	Actual	50.2631%	59.1851%	48.8918%	25.1499%	23.6444%	41.4349%
FFESTINIOG	Pumped_Storage	Yes	Actual	Actual	Actual	Actual	Actual	3.3676%	2.9286%	5.4631%	4.3251%	3.4113%	3.7013%
FIDDLERS FERRY	Coal	Yes	Actual	Actual	Actual	Actual	Actual	52.0973%	61.6386%	49.0374%	45.2435%	27.4591%	48.7927%
FINLARIG	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	67.9805%	40.2952%	59.9142%	59.4092%	65.1349%	61.4861%
FOYERS	Pumped_Storage	Yes	Actual	Actual	Actual	Actual	Actual	18.9885%	13.4800%	14.7097%	12.3048%	15.4323%	14.5407%



Power Station	Technology	Generic Station	Yearly Load Factor Source					Yearly Load Factor Value					Specific ALF
			2011/12	2012/13	2013/14	2014/15	2015/16	2011/12	2012/13	2013/14	2014/15	2015/16	
GARRY CASCADE	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	70.4039%	48.5993%	55.9308%	64.3828%	60.2772%	60.1969%
GLANDFORD BRIGG	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	0.9617%	0.3336%	1.5673%	0.5401%	1.8191%	1.0230%
GLENDOE	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	0.0000%	17.3350%	36.3802%	32.3494%	34.8532%	28.1792%
GLENMORISTON	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	58.0412%	36.3045%	44.4594%	48.7487%	50.6921%	47.9668%
GORDONBUSH	Onshore_Wind		Partial	Actual	Actual	Actual	Actual	33.5929%	37.8930%	46.5594%	47.7981%	47.7161%	47.3579%
GRAIN	CCGT_CHP	Yes	Actual	Actual	Actual	Actual	Actual	29.4910%	25.4580%	41.3833%	44.0031%	39.7895%	36.8879%
GRANGEMOUTH	CCGT_CHP	Yes	Actual	Actual	Actual	Actual	Actual	67.5783%	52.8594%	55.9047%	62.6168%	59.8274%	59.4496%
GREAT YARMOUTH	CCGT_CHP	Yes	Actual	Actual	Actual	Actual	Actual	45.0785%	19.0270%	20.7409%	18.6633%	59.8957%	28.2821%
GREATER GABBARD OFFSHORE WIND FARM	Offshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	17.8601%	40.1778%	48.3038%	42.1327%	50.2468%	43.5381%
GRIFFIN WIND	Onshore_Wind		Partial	Actual	Actual	Actual	Actual	14.0338%	17.9885%	31.9566%	31.3152%	31.0284%	31.4334%
GUNFLEET SANDS I	Offshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	43.7552%	50.1496%	56.6472%	47.0132%	50.4650%	49.2093%
GUNFLEET SANDS II	Offshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	41.4244%	45.0132%	52.2361%	44.7211%	49.0521%	46.2622%
GWYNT Y MOR	Offshore_Wind	Yes	Generic	Partial	Actual	Actual	Actual	0.0000%	18.2777%	8.0036%	61.6185%	63.1276%	44.2499%
HADYARD HILL	Onshore_Wind		Actual	Actual	Actual	Actual	Actual	38.9802%	27.6927%	31.9488%	27.7635%	36.6527%	32.1217%
HARESTANES	Onshore_Wind		Generic	Generic	Partial	Actual	Actual	0.0000%	0.0000%	23.8423%	28.6355%	27.8093%	26.7624%
HARTLEPOOL	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	71.1712%	80.2632%	73.7557%	56.2803%	53.8666%	67.0691%
HEYSHAM	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	83.7012%	83.3828%	73.3628%	68.8252%	72.7344%	76.4933%
HINKLEY POINT B	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	56.9291%	61.7582%	68.8664%	70.1411%	67.6412%	66.0886%
HUMBER GATEWAY OFFSHORE WIND FARM	Offshore_Wind		Generic	Generic	Generic	Generic	Actual	0.0000%	0.0000%	0.0000%	0.0000%	62.9631%	52.9831%
HUNTERSTON	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	75.3474%	73.5984%	84.7953%	79.1368%	82.1786%	78.8876%
IMMINGHAM	CCGT_CHP	Yes	Actual	Actual	Actual	Actual	Actual	73.3041%	50.1793%	37.8219%	56.8316%	69.4686%	58.8265%
INDIAN QUEENS	Gas_Oil	Yes	Actual	Actual	Actual	Actual	Actual	1.3382%	0.3423%	0.2321%	0.0876%	0.0723%	0.2207%
IRONBRIDGE	Biomass	Yes	Generic	Generic	Actual	Actual	Actual	0.0000%	0.0000%	11.0838%	30.9006%	38.6698%	26.8847%
KEADBY	CCGT_CHP		Actual	Actual	Actual	Generic	Partial	49.8412%	4.6125%	0.0001%	0.0000%	35.1858%	18.1513%
KILBRAUR	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	45.1817%	45.2306%	51.3777%	54.3550%	50.3807%	48.9964%
KILLIN CASCADE	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	53.0410%	32.3429%	45.5356%	44.8205%	53.2348%	47.7990%

Power Station	Technology	Generic Station	Yearly Load Factor Source					Yearly Load Factor Value					Specific ALF
			2011/12	2012/13	2013/14	2014/15	2015/16	2011/12	2012/13	2013/14	2014/15	2015/16	
LANGAGE	CCGT_CHP	Yes	Actual	Actual	Actual	Actual	Actual	60.7905%	41.9115%	40.8749%	34.8629%	16.5310%	39.2164%
LINCS WIND FARM	Offshore_Wind	Yes	Generic	Partial	Actual	Actual	Actual	0.0000%	19.8148%	46.5987%	43.8178%	49.1306%	46.5157%
LITTLE BARFORD	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	11.8210%	16.3807%	33.6286%	49.6644%	39.9829%	29.9974%
LITTLEBROOK D	Gas_Oil	Yes	Actual	Actual	Actual	Actual	Actual	0.1055%	0.0588%	0.0201%	0.1394%	0.0000%	0.0615%
LOCHLUICHART	Onshore_Wind		Generic	Generic	Partial	Actual	Actual	0.0000%	0.0000%	27.2412%	20.2103%	29.2663%	25.5726%
LONDON ARRAY	Offshore_Wind	Yes	Generic	Partial	Actual	Actual	Actual	0.0000%	38.0987%	51.2703%	64.0880%	66.8682%	60.7422%
LONGANNET	Coal	Yes	Actual	Actual	Actual	Actual	Actual	47.9712%	52.1025%	56.8761%	56.4764%	48.8989%	52.4926%
LYNEMOUTH	Coal		Generic	Generic	Generic	Generic	Partial	0.0000%	0.0000%	0.0000%	0.0000%	68.2454%	60.9881%
MARCHWOOD	CCGT_CHP	Yes	Actual	Actual	Actual	Actual	Actual	66.1953%	43.3537%	48.6845%	66.4021%	55.0879%	56.6559%
MARK HILL	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	26.3795%	30.1675%	30.2863%	26.7942%	34.0227%	29.0827%
MEDWAY	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	42.4273%	1.0718%	14.5545%	28.0962%	34.1799%	25.6102%
MILLENNIUM	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	47.2065%	42.1318%	52.6618%	53.2636%	48.4038%	49.4240%
NANT	Hydro	Yes	Actual	Actual	Actual	Actual	Actual	42.4480%	20.8965%	35.5883%	36.4040%	37.3788%	36.4571%
ORMONDE	Offshore_Wind	Yes	Generic	Partial	Actual	Actual	Actual	0.0000%	48.4264%	49.6561%	42.8711%	47.1986%	46.5753%
PEMBROKE	CCGT_CHP		Generic	Actual	Actual	Actual	Actual	0.0000%	61.5434%	60.3928%	67.5346%	64.5596%	64.5459%
PETERBOROUGH	CCGT_CHP		Actual	Actual	Actual	Actual	Partial	3.4546%	0.9506%	1.8311%	1.0929%	4.1032%	2.1262%
PETERHEAD	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	66.1917%	31.3766%	41.8811%	0.4858%	23.3813%	32.2130%
RATCLIFFE-ON-SOAR	Coal	Yes	Actual	Actual	Actual	Actual	Actual	53.5677%	66.7461%	71.7403%	56.1767%	19.6814%	58.8302%
ROBIN RIGG EAST	Offshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	41.4118%	37.4157%	46.7562%	55.3209%	51.9700%	46.7127%
ROBIN RIGG WEST	Offshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	44.4918%	38.2254%	48.0629%	53.4150%	56.0881%	48.6565%
ROCKSAVAGE	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	47.7376%	41.4820%	2.6155%	4.4252%	19.8061%	21.9044%
RUGELEY B	Coal	Yes	Actual	Actual	Actual	Actual	Actual	53.2455%	68.6109%	82.6505%	59.4472%	44.5189%	60.4345%
RYE HOUSE	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	20.4253%	10.7188%	7.4695%	5.3701%	7.7906%	8.6596%
SALTEND	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	90.6801%	81.5834%	69.0062%	67.9518%	55.6228%	72.8471%
SEABANK	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	34.5669%	15.2311%	18.2781%	25.6956%	27.2136%	23.7291%
SELLAFIELD	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	4.1046%	14.0549%	25.0221%	18.9719%	28.6790%	19.3496%
SEVERN POWER	CCGT_CHP	Yes	Actual	Actual	Actual	Actual	Actual	32.2421%	27.7976%	32.4163%	24.6354%	18.3226%	28.2250%
SHERINGHAM SHOAL	Offshore_Wind	Yes	Partial	Actual	Actual	Actual	Actual	19.2859%	36.6431%	49.3517%	46.2286%	53.6184%	49.7329%

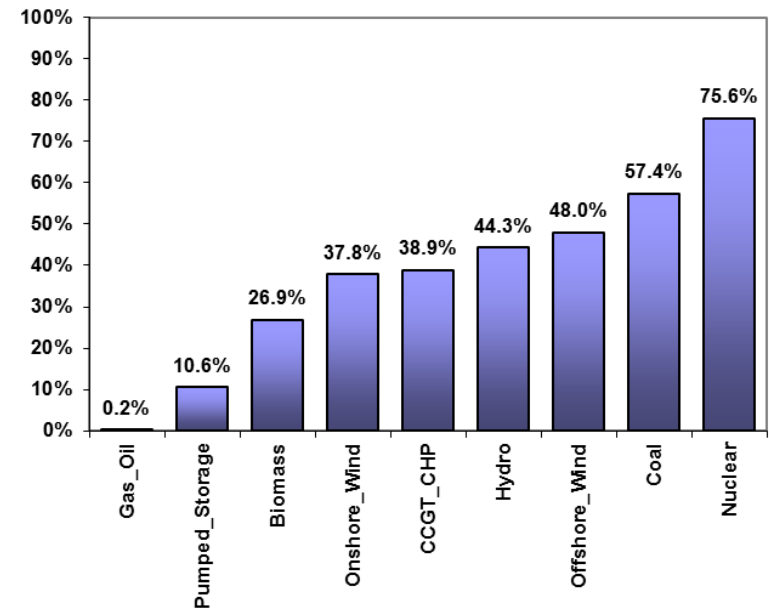
Power Station	Technology	Generic Station	Yearly Load Factor Source					Yearly Load Factor Value					Specific ALF
			2011/12	2012/13	2013/14	2014/15	2015/16	2011/12	2012/13	2013/14	2014/15	2015/16	
SHOREHAM	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	65.7100%	0.0000%	20.7501%	10.2239%	48.9514%	26.6418%
SIZEWELL B	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	77.3818%	96.7260%	82.5051%	84.7924%	98.7826%	88.0078%
SLOY G2 & G3	Hydro		Actual	Actual	Actual	Actual	Actual	15.0995%	9.1252%	14.3471%	15.5941%	13.9439%	14.4635%
SOUTH HUMBER BANK	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	33.8760%	27.9763%	24.3373%	34.4673%	48.6753%	32.1065%
SPALDING	CCGT_CHP	Yes	Actual	Actual	Actual	Actual	Actual	65.1849%	34.6976%	33.4800%	39.3092%	47.9407%	40.6492%
STAYTHORPE	CCGT_CHP	Yes	Actual	Actual	Actual	Actual	Actual	58.4594%	54.4117%	37.6216%	56.6148%	69.4422%	56.4953%
SUTTON BRIDGE	CCGT_CHP		Actual	Actual	Actual	Actual	Actual	64.8794%	20.1652%	9.4124%	17.2025%	13.1999%	16.8559%
TAYLORS LANE	Gas_Oil	Yes	Actual	Actual	Actual	Actual	Actual	0.1048%	0.2037%	0.0483%	0.0640%	0.1708%	0.1132%
THANET OFFSHORE WIND FARM	Offshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	32.4868%	41.1093%	39.7489%	35.5935%	41.3434%	38.8172%
TODDLBURN	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	38.1923%	32.7175%	39.5374%	33.7211%	35.0823%	35.6652%
TORNESS	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	90.0662%	84.8669%	86.4669%	91.4945%	85.7725%	87.4352%
USKMOUTH	Coal		Actual	Actual	Actual	Partial	Actual	19.2655%	45.1938%	38.9899%	46.4198%	25.5184%	36.5674%
WALNEY I	Offshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	45.6003%	44.2799%	57.7046%	52.0555%	50.7535%	49.4697%
WALNEY II	Offshore_Wind	Yes	Generic	Partial	Actual	Actual	Actual	0.0000%	54.0202%	61.9219%	58.2355%	35.7988%	51.9854%
WEST BURTON	Coal	Yes	Actual	Actual	Actual	Actual	Actual	44.5447%	70.5868%	68.9176%	61.5364%	32.7325%	58.3329%
WEST BURTON B	CCGT_CHP		Generic	Partial	Actual	Actual	Actual	0.0000%	20.6382%	30.3021%	46.8421%	59.3477%	45.4973%
WEST OF DUDDON SANDS OFFSHORE WIND FARM	Offshore_Wind		Generic	Generic	Partial	Actual	Partial	0.0000%	0.0000%	39.2722%	40.0506%	47.5520%	42.2916%
WESTERMOST ROUGH	Offshore_Wind		Generic	Generic	Generic	Partial	Actual	0.0000%	0.0000%	0.0000%	26.6918%	54.8014%	43.1621%
WHITELEE	Onshore_Wind	Yes	Actual	Actual	Actual	Actual	Actual	31.7670%	28.2265%	35.1074%	29.8105%	31.8773%	31.1516%
WHITELEE EXTENSION	Onshore_Wind		Partial	Actual	Actual	Actual	Actual	26.8490%	12.4146%	27.0102%	27.7787%	26.7655%	27.1848%
WILTON	CCGT_CHP	Yes	Actual	Actual	Actual	Actual	Actual	12.6949%	3.4258%	4.4941%	21.5867%	16.1379%	11.1090%
WYLFA	Nuclear	Yes	Actual	Actual	Actual	Actual	Actual	79.4968%	60.0463%	84.4883%	83.5566%	86.5533%	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
Gas_Oil	0.1645%	Conventional	Carbon
Pumped_Storage	10.5704%	Conventional	Carbon
Biomass	26.8847%	Conventional	Carbon
Onshore_Wind	37.8084%	Intermittent	Low Carbon
CCGT_CHP	38.9336%	Conventional	Carbon
Hydro	44.3345%	Conventional	Low Carbon
Offshore_Wind	47.9931%	Intermittent	Low Carbon
Coal	57.3594%	Conventional	Carbon
Nuclear	75.6256%	Conventional	Low Carbon



## 6 Next Steps

We propose to use the Annual Load Factors (ALF) in this document to set charges in 2017/18. Where customers have a query regarding their ALF they are requested to contact National Grid as soon as possible and by Friday 6 January 2017 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 2017/18. 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 2017/18 will be published at the end of January 2017 and the final ALFs used to set charges will be published at the same time.