

Criteria Value Total generation of all >= 33 kV connected wind and solar sites (MWh) 3,708,377 MWh Total lost generation of all >=33 kV connected wind and solar sites (MWh) 24,224 MWh Percentage lost wind and solar generation as a result of network outages 0.65% Total Lost % Lost Generation Generation Generation (MWh) (MWh) Jan 292,389 1,703 0.58% Feb 295,977 1,148 0.39% Mar 320,196 1,111 0.35% Apr 326,374 1,669 0.51% May 368,297 1,514 0.41% Jun 355,663 2,166 0.61% Jul 3,305 328,307 1.01% Aug 347,928 4,303 1.24%

283,521

352,954

177,823

2,462

3,012

1,095

0.87%

0.85%

0.62%

Sep

Oct

Nov

# Summary of lost generation due to constraints 2018 in MWh





### Summary of the estimated cost of lost generation due to constraints 2018

Criteria	Value
Total generation of all >= 33 kV connected wind and solar sites (MWh)	3,708,377 MWh
Total lost generation of all >=33 kV connected wind and solar sites (MWh)	24,224 MWh
Percentage lost wind and solar generation as a result of network outages	0.65%

### Cost of lost generation over monthly period for both onshore wind and photovoltaic



				Onshore	wind	l lost gene	rati	on (£)						Photovo	ltai	c lost gener	atic	on (£)				Total lost
	So	outh West		West Midlands	N	East Iidlands		Wales		Total	So	outh West		West Vidlands	N	East ⁄Iidlands		Wales		Total	g	eneration by month
January	£	152,053	£	-	£	-	£	4,399	£	156,452	£	5,778	£	-	£	-	£	4,019	£	9,797	£	166,249
February	£	4,755	£	-	£	-	£	67,499	£	72,254	£	27,001	£	-	£	-	£	682	£	27,683	£	99,937
March	£	4,004	£	-	£	5,456	£	9,977	£	19,437	£	94,622	£	-	£	-	£	24,929	£	119,551	£	138,988
April	£	12,307	£	-	£	-	£	54,099	£	66,406	£	61,069	£	-	£	-	£	60,410	£	121,479	£	187,885
May	£	16,298	£	-	£	44	£	23,937	£	40,279	£	67,626	£	-	£	-	£	83,867	£	151,493	£	191,772
June	£	103,235	£	-	£	-	£	-	£	103,235	£	-	£	-	£	-	£	143,210	£	143,210	£	246,445
July	£	77,786	£	-	£	841	£	138,318	£	216,945	£	-	£	26,961	£	54,552	£	103,305	£	184,818	£	401,763
August	£	576,658	£	-	£	-	£	801,000	£	1,377,658	£	132,208	£	-	£	377,688	£	588,412	£	1,098,308	£	2,475,966
September	£	495,169	£	-	£	11,779	£	155,366	£	662,314	£	304,545	£	25,010	£	102,579	£	43,132	£	475,266	£	1,137,580
October	£	112,050	£	-	£	-	£	186,134	£	298,184	£	646,149	£	-	£	308,729	£	525,965	£	1,480,843	£	1,779,027
November	£	10,761	£	-	£	5,369	£	17,919	£	34,049	£	68,778	£	-	£	206,150	£	283,251	£	558,179	£	592,228
December	£	169,296	£	-	£	33,503	£	183,496	£	386,295	£	16,384	£	2	£	10,786	£	26,942	£	54,114	£	440,409
Total lost generation by licence area and technology		1,734,372	£	-	£	56,992	£	1,642,144	£	3,433,508	£	1,424,160	£	51,973	£	1,060,484	£	1,888,124	£	4,424,741	£	7,858,249

## Monthly breakdown of lost generation by technology and licence area

### January

### Onshore Total lost generation by Photovoltaic wind licence area 5,778 South West 152,053 £ £ £ 157,831 area West Midlands £ £ £ ---Licence £ £ £ East Midlands --\_ Wales £ 8,418 £ 4,019 £ 4,399 166,250 Subtotals £ 9,797 £ 156,452 £

### Lost income per MWh breakdown

	Photovoltaic	Onshore wind
(Lost MWh)	85	1,618
(Lost subsidy value per MWh)	£61.46	£45.33
(Lost wholesale value per MWh)	£49.77	£47.32
(Lost G-Duos value per MWh)	£4.51	£4.03

### February

		Pho	otovoltaic	C	Onshore wind	Tota	al lost generation by licence area
еа	South West	£	27,001	£	4,755	£	31,756
ar	West Midlands	£	-	£	-	£	-
Licence	East Midlands	£	-	£	-	£	-
Li	Wales	£	682	£	67,499	£	68,181
	Subtotals	£	27,683	£	72,254	£	99,937

# PhotovoltaicOnshore<br/>wind(Lost MWh)192956(Lost subsidy value per MWh)£88.46£21.78(Lost wholesale value per MWh)£51.30£48.65(Lost G-Duos value per MWh)£4.06£5.18

Lost income per MWh breakdown

### Lost income per MWh breakdown

	Photovoltaic	Onshore wind
(Lost MWh)	920	191
(Lost subsidy value per MWh)	£72.40	£43.32
(Lost wholesale value per MWh)	£53.30	£53.75
(Lost G-Duos value per MWh)	£4.28	£4.48

# March

		Pho	otovoltaic	C	nshore wind	Tot	al lost generation by licence area
ea	South West	£	94,622	£	4,004	£	98,626
are	West Midlands	£	-	£	-	£	-
icence	East Midlands	£	-	£	5,456	£	5,456
E.	Wales	£	24,929	£	9,977	£	34,906
	Subtotals	£	119,551	£	19,438	£	138,988

Photovoltaic

61,069

- £

\_

60,410 £

121,478

£

£

£

£

£

Subtotals

South West

West Midlands

East Midlands

Wales

South \

West M East M Wales

area

Licence

Licence area

Onshore

wind

£

£

£

12,307

- £

\_

54,099

66,406

£

£

£

£

# Lost income per MWh breakdown

	Photovoltaic	Onshore wind								
(Lost MWh)	1,028	641								
(Lost subsidy value per MWh)	£63.32	£50.44								
(Lost wholesale value per MWh)	£50.17	£48.17								
(Lost G-Duos value per MWh)	£4.65	£5.01								

### May

73,376

-

\_

114,509

187,884

							_	
	Pho	otovoltaic	(	Onshore wind	Tot	al lost generation by licence area		
West	£	67,626	£	16,298	£	83,923		(Lost MWh)
/lidlands	£	-	£	-	£	-		(Lost subsidy
idlands	£	-	£	44	£	44		(Lost wholes
	£	83,867	£	23,937	£	107,804		(Lost G-Duos
Subtotals	£	151,493	£	40,278	£	191,771		

# Lost income per MWh breakdown

Photovoltaic	wind
1,100	414
£81.48	£42.01
£51.47	£50.64
£4.73	£4.76
	1,100 £81.48 £51.47

### June

		Pho	otovoltaic	C	Onshore wind	Tota	l lost generation by licence area
ea	South West	£	-	£	103,235	£	103,235
are	West Midlands	£	-	£	-	£	-
Licence	East Midlands	£	-	£	-	£	-
П	Wales	£	143,210	£	-	£	143,210
	Subtotals	£	143,210	£	103,235	£	246,445

### Lost income per MWh breakdown

	Photovoltaic	Onshore wind
(Lost MWh)	1,154	1,012
(Lost subsidy value per MWh)	£67.52	£46.75
(Lost wholesale value per MWh)	£51.30	£51.30
(Lost G-Duos value per MWh)	£5.24	£4.00

# 138,98 **April**

Total lost generation by

licence area

## July

### Lost income per MWh breakdown

'		Photovoltaic	Onshore wind
	(Lost MWh)	856	2,449
	(Lost subsidy value per MWh)	£62.84	£29.69
	(Lost wholesale value per MWh)	£53.41	£54.05
	(Lost G-Duos value per MWh)	£4.43	£4.86

		Pho	otovoltaic	C	Onshore wind	Tota	al lost generation by licence area
ea	South West	£	21,792	£	77,786	£	99,578
are	West Midlands	£	-	£	-	£	-
Licence	East Midlands	£	26,961	£	841	£	27,802
5	Wales	£	54,552	£	138,318	£	192,870
	Subtotals	£	103,305	£	216,946	£	320,251

Photovoltaic

£

£

£

£

Subtotals

South West

West Midlands

East Midlands

South West

West Midlands

East Midlands

Wales

Licence area

Wales

Licence area

132,208

377,688

588,412

£ 1,098,308

Photovoltaic

646,149

308,729

525,965

£ 1,480,842

£

£

£

£

Subtotals

Onshore

wind

£

£

£

£

576,658

-

801,000

£ 1,377,658

Onshore

wind

112,050

-

-

186,134

298,184

£

£

£

£

£

£

£

£

£

£

£

£

£

£

£

# August

Total lost generation

licence area

Lost income per MWh breakdown										
neration by e area		Photovoltaic	Onshore wind							
708,866	(Lost MWh)	2,116	2,186							
-	(Lost subsidy value per MWh)	£78.31	£49.75							
377,688	(Lost wholesale value per MWh)	£436.25	£575.70							
1,389,413	(Lost G-Duos value per MWh)	£4.38	£4.72							
2,475,967										

### September

# Lost income per MWh breakdown

/		Photovoltaic	wind
	(Lost MWh)	1,488	974
	(Lost subsidy value per MWh)	£46.97	£47.98
	(Lost wholesale value per MWh)	£268.77	£627.75
	(Lost G-Duos value per MWh)	£3.67	£4.28

		Photovoltaic		Onshore wind		Total lost generation by licence area	
ä	South West	£	304,545	£	495,169	£	799,714
are	West Midlands	£	25,010	£	-	£	25,010
Licence area	East Midlands	£	102,579	£	11,779	£	114,359
	Wales	£	43,132	£	155,366	£	198,498
Subtotals		£	475,266	£	662,315	£	1,137,580

### October

758,199

308,729

712,099

Total lost generation by

licence area

### Lost income per MWh breakdown

	Photovoltaic	Onshore wind
(Lost MWh)	2,545	467
(Lost subsidy value per MWh)	£81.58	£47.92
(Lost wholesale value per MWh)	£496.04	£586.13
(Lost G-Duos value per MWh)	£4.30	£4.74

# 1,779,027 November

		Pho	otovoltaic	C	Onshore wind	Tota	al lost generation by licence area
g	South West	£	68,778	£	10,761	£	79,540
area	West Midlands	£	-	£	-	£	-
Licence	East Midlands	£	206,150	£	5,369	£	211,519
5	Wales	£	283,251	£	17,919	£	301,170
Subtotals		£	558,179	£	34,049	£	592,229

### Lost income per MWh breakdown

	Photovoltaic	Onshore wind
(Lost MWh)	1,034	61
(Lost subsidy value per MWh)	£69.83	£43.53
(Lost wholesale value per MWh)	£465.61	£508.96
(Lost G-Duos value per MWh)	£4.46	£4.65

### December

		Photovoltaic		Onshore wind	Tota	al lost generation by licence area	
IJ	South West	£	16,384	£	169,296	£	185,680
area	West Midlands	£	2	£	-	£	2
icence	East Midlands	£	10,786	£	33,503	£	44,289
Li	Wales	£	26,942	£	183,496	£	210,438
	Subtotals		54,114	£	386,295	£	440,409

### Lost income per MWh breakdown

	Photovoltaic	Onshore wind
(Lost MWh)	105	633
(Lost subsidy value per MWh)	£70.54	£47.06
(Lost wholesale value per MWh)	£441.52	£558.78
(Lost G-Duos value per MWh)	£4.47	£4.55