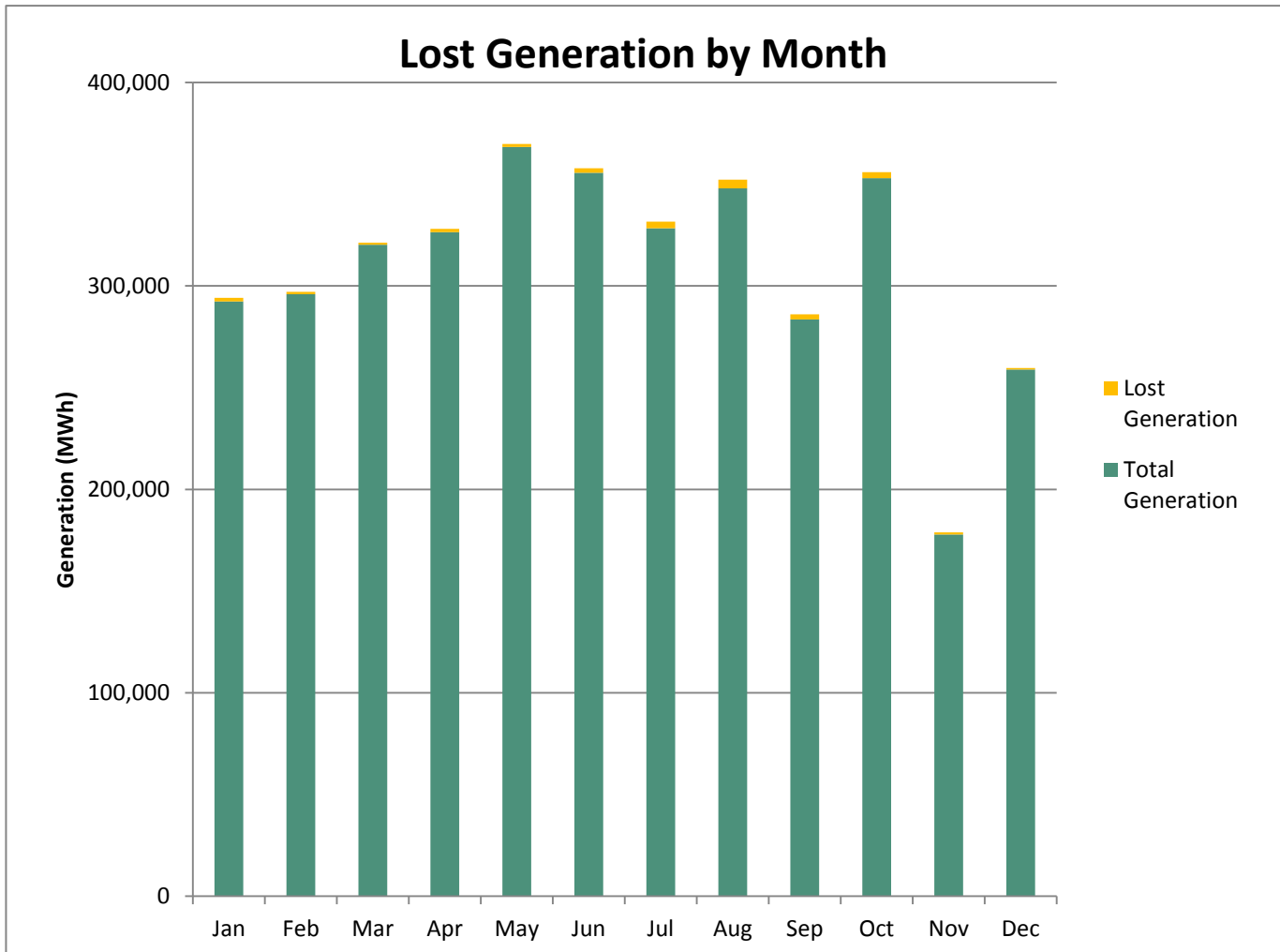


Summary of lost generation due to constraints 2018 in MWh

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%

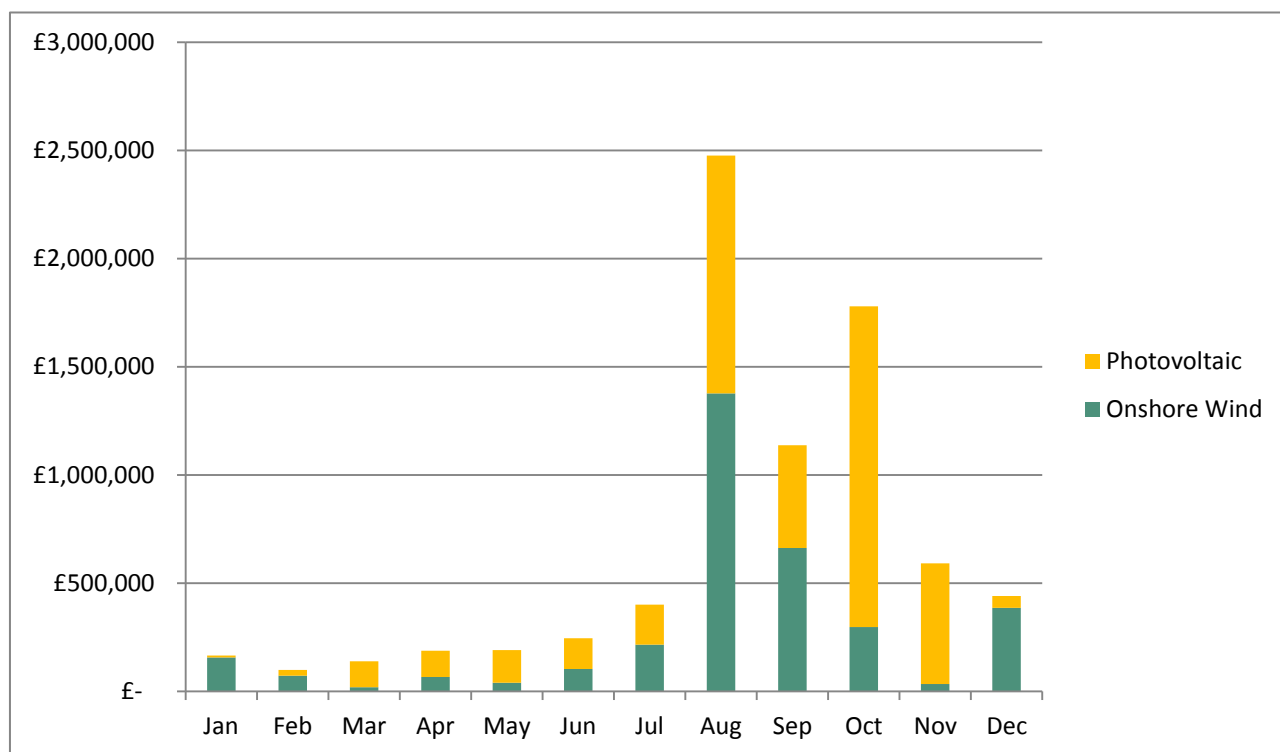
	Total Generation (MWh)	Lost Generation (MWh)	% Lost Generation
Jan	292,389	1,703	0.58%
Feb	295,977	1,148	0.39%
Mar	320,196	1,111	0.35%
Apr	326,374	1,669	0.51%
May	368,297	1,514	0.41%
Jun	355,663	2,166	0.61%
Jul	328,307	3,305	1.01%
Aug	347,928	4,303	1.24%
Sep	283,521	2,462	0.87%
Oct	352,954	3,012	0.85%
Nov	177,823	1,095	0.62%
Dec	258,948	738	0.28%



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 lost generation (£)					Photovoltaic lost generation (£)					Total lost generation by month
	South West	West Midlands	East Midlands	Wales	Total	South West	West Midlands	East Midlands	Wales	Total	
Jan	£ 152,053	£ -	£ -	£ 4,399	£ 156,452	£ 5,778	£ -	£ -	£ 4,019	£ 9,797	£ 166,249
Feb	£ 4,755	£ -	£ -	£ 67,499	£ 72,254	£ 27,001	£ -	£ -	£ 682	£ 27,683	£ 99,937
Mar	£ 4,004	£ -	£ 5,456	£ 9,977	£ 19,437	£ 94,622	£ -	£ -	£ 24,929	£ 119,551	£ 138,988
Apr	£ 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
Jun	£ 103,235	£ -	£ -	£ -	£ 103,235	£ -	£ -	£ -	£ 143,210	£ 143,210	£ 246,445
Jul	£ 77,786	£ -	£ 841	£ 138,318	£ 216,945	£ -	£ 26,961	£ 54,552	£ 103,305	£ 184,818	£ 401,763
Aug	£ 576,658	£ -	£ -	£ 801,000	£ 1,377,658	£ 132,208	£ -	£ 377,688	£ 588,412	£ 1,098,308	£ 2,475,966
Sep	£ 495,169	£ -	£ 11,779	£ 155,366	£ 662,314	£ 304,545	£ 25,010	£ 102,579	£ 43,132	£ 475,266	£ 1,137,580
Oct	£ 112,050	£ -	£ -	£ 186,134	£ 298,184	£ 646,149	£ -	£ 308,729	£ 525,965	£ 1,480,843	£ 1,779,027
Nov	£ 10,761	£ -	£ 5,369	£ 17,919	£ 34,049	£ 68,778	£ -	£ 206,150	£ 283,251	£ 558,179	£ 592,228
Dec	£ 169,296	£ -	£ 33,503	£ 183,496	£ 386,295	£ 16,384	£ 2	£ 10,786	£ 26,942	£ 54,114	£ 440,409
Total	£ 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

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

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

		Photovoltaic	Onshore wind	Total lost generation by licence area
Licence area	South West	£ 27,001	£ 4,755	£ 31,756
	West Midlands	£ -	£ -	£ -
	East Midlands	£ -	£ -	£ -
	Wales	£ 682	£ 67,499	£ 68,181
Subtotals		£ 27,683	£ 72,254	£ 99,937

Lost income per MWh breakdown

	Photovoltaic	Onshore wind
(Lost MWh)	192	956
(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

March

		Photovoltaic	Onshore wind	Total lost generation by licence area
Licence area	South West	£ 94,622	£ 4,004	£ 98,626
	West Midlands	£ -	£ -	£ -
	East Midlands	£ -	£ 5,456	£ 5,456
	Wales	£ 24,929	£ 9,977	£ 34,906
Subtotals		£ 119,551	£ 19,438	£ 138,988

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

April

		Photovoltaic	Onshore wind	Total lost generation by licence area
Licence area	South West	£ 61,069	£ 12,307	£ 73,376
	West Midlands	£ -	£ -	£ -
	East Midlands	£ -	£ -	£ -
	Wales	£ 60,410	£ 54,099	£ 114,509
Subtotals		£ 121,478	£ 66,406	£ 187,884

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

Lost income per MWh breakdown

		Photovoltaic	Onshore wind	Total lost generation by licence area
Licence area	South West	£ 67,626	£ 16,298	£ 83,923
	West Midlands	£ -	£ -	£ -
	East Midlands	£ -	£ 44	£ 44
	Wales	£ 83,867	£ 23,937	£ 107,804
Subtotals		£ 151,493	£ 40,278	£ 191,771

	Photovoltaic	Onshore wind
(Lost MWh)	1,100	414
(Lost subsidy value per MWh)	£81.48	£42.01
(Lost wholesale value per MWh)	£51.47	£50.64
(Lost G-Duos value per MWh)	£4.73	£4.76

June

Lost income per MWh breakdown

		Photovoltaic	Onshore wind	Total lost generation by licence area
Licence area	South West	£ -	£ 103,235	£ 103,235
	West Midlands	£ -	£ -	£ -
	East Midlands	£ -	£ -	£ -
	Wales	£ 143,210	£ -	£ 143,210
Subtotals		£ 143,210	£ 103,235	£ 246,445

	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

July

Lost income per MWh breakdown

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

	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

August

Lost income per MWh breakdown

		Photovoltaic	Onshore wind	Total lost generation by licence area
Licence area	South West	£ 132,208	£ 576,658	£ 708,866
	West Midlands	£ -	£ -	£ -
	East Midlands	£ 377,688	£ -	£ 377,688
	Wales	£ 588,412	£ 801,000	£ 1,389,413
Subtotals		£ 1,098,308	£ 1,377,658	£ 2,475,967

	Photovoltaic	Onshore wind
(Lost MWh)	2,116	2,186
(Lost subsidy value per MWh)	£78.31	£49.75
(Lost wholesale value per MWh)	£436.25	£575.70
(Lost G-Duos value per MWh)	£4.38	£4.72

September

Lost income per MWh breakdown

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

	Photovoltaic	Onshore 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

October

Lost income per MWh breakdown

		Photovoltaic	Onshore wind	Total lost generation by licence area
Licence area	South West	£ 646,149	£ 112,050	£ 758,199
	West Midlands	£ -	£ -	£ -
	East Midlands	£ 308,729	£ -	£ 308,729
	Wales	£ 525,965	£ 186,134	£ 712,099
Subtotals		£ 1,480,842	£ 298,184	£ 1,779,027

	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

November

Lost income per MWh breakdown

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

	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

Lost income per MWh breakdown

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

	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