



Cooper Farms' Wind VW

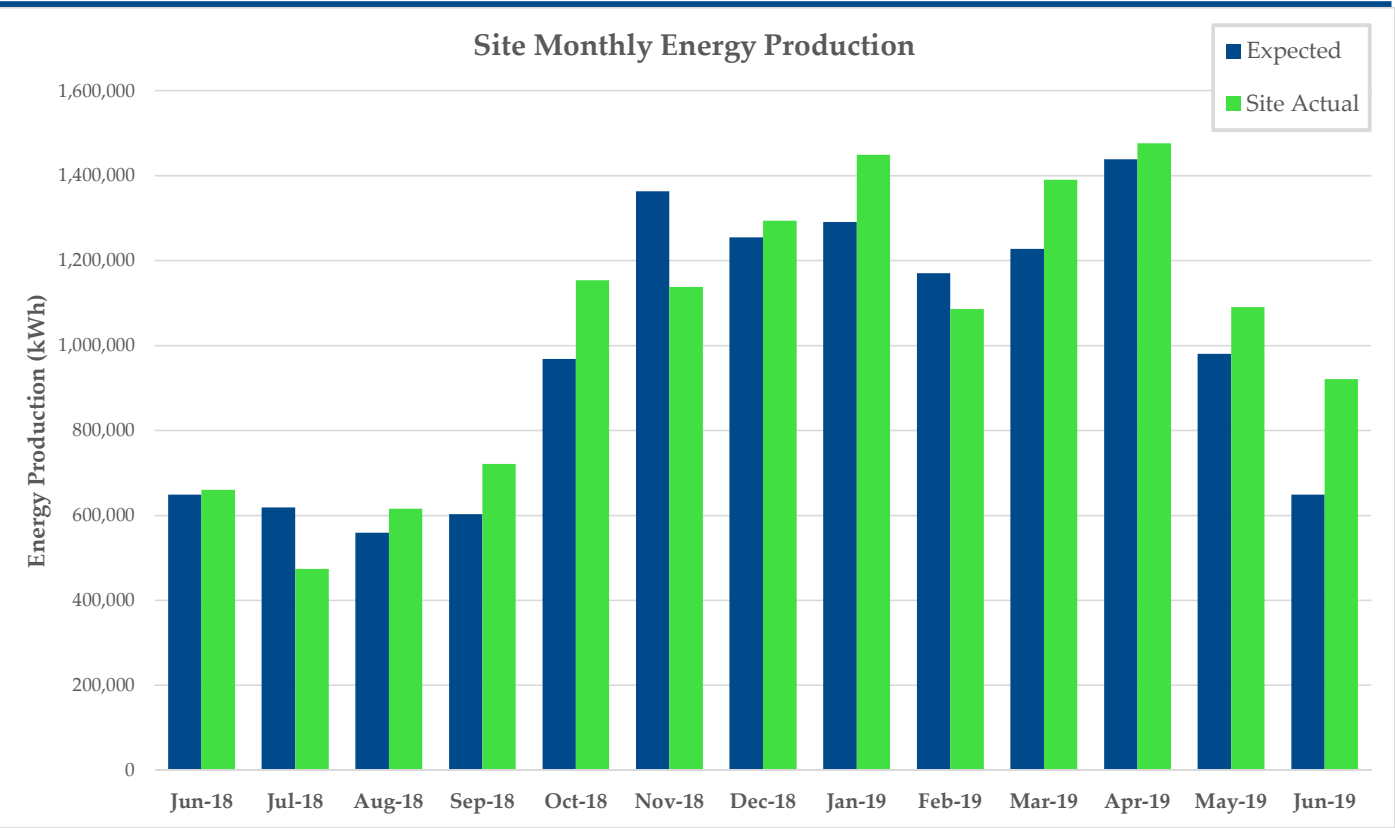
Van Wert, OH

A. Site Energy Production Summary

	Energy Production (kWh)				
	Site		By Turbine		
	Expected Production	Actual Production	WTG 1	WTG 2	WTG 3
Jun-18	649,158	660,000	219,170	215,060	225,770
Jul-18	618,687	474,100	152,310	157,510	164,280
Aug-18	559,508	615,620	204,140	199,030	212,450
Sep-18	603,085	720,940	241,440	243,200	236,300
Oct-18	967,926	1,153,610	388,960	373,700	390,950
Nov-18	1,362,692	1,138,070	381,630	373,480	382,960
Dec-18	1,254,397	1,293,550	427,830	426,560	439,160
Jan-19	1,290,968	1,449,160	491,430	475,470	482,260
Feb-19	1,170,349	1,085,536	358,334	356,884	370,318
Mar-19	1,227,217	1,390,286	471,222	450,690	468,374
Apr-19	1,438,497	1,476,210	495,410	493,970	486,830
May-19	980,450	1,090,450	368,640	351,610	370,200
Jun-19	649,158	921,230	304,100	301,760	315,370
Production 2019 (ytd) (kWh)	6,756,639	7,412,872	2,489,136	2,430,384	2,493,352
Total Production (kWh)*	12,122,935	12,808,762	4,285,446	4,203,864	4,319,452
Capacity Factor*	32.49%		*Value calculated over the last 12 months		

B. Site Energy Production Graph

June-2019



Monthly Report

June-2019



C. Safety Summary

	This Month	Project Cumulative
Recordable Incident(s)	0	0
Near Miss(es)	0	0

D. Planned Maintenance Events*

Date	Event	Duration (hr)	Turbine
September-2019	Goldwind 7 Year Maintenance	~15	WTG 1
September-2019	Goldwind 7 Year Maintenance	~15	WTG 2
September-2019	Goldwind 7 Year Maintenance	~15	WTG 3

E. Actual Maintenance Events

Date	Event	Planned/Unplanned	Duration (hr)	Turbine
6/25/2019	Grid Fault	Unplanned	8.48	WTG 2
6/26/2019	Grid Fault	Unplanned	7.24	WTG 2
6/27/2019	Grid Fault	Unplanned	8.99	WTG 1, 2, 3
6/28/2019	Grid Fault	Unplanned	9.92	WTG 2
6/28/2019	Grid Fault	Unplanned	9.09	WTG 1, 3
6/28/2019	Pitch Safety Chain Error	Unplanned	4.06	WTG 1, 3
6/29/2019	Pitch Safety Chain Error	Unplanned	11.75	WTG 1

F. Turbine Availability & Downtime

Availability (%)	This Month	Year to Date
WTG 1	97.80%	99.48%
WTG 2	100.00%	99.13%
WTG 3	100.00%	100.00%
Avg	99.27%	99.54%

Downtime (hr)	This Month	Year to Date
WTG 1	42.38	200.87
WTG 2	39.13	247.53
WTG 3	26.42	185.05
Total	107.93	633.45

G. Wind Speed & Capacity Factor

Wind Speed (mph)	This Month	2019 Annual
WTG 1	14.25	14.46
WTG 2	11.86	13.54
WTG 3	12.44	13.98
Estimated	11.44	13.39

Capacity Factor (%)	This Month	2019 Annual
WTG 1	28.16%	38.20%
WTG 2	27.94%	37.30%
WTG 3	29.20%	38.27%
Low Estimate	17.87%	28.70%

H. Report Notes and Comments