



Cooper Farms' Wind VW

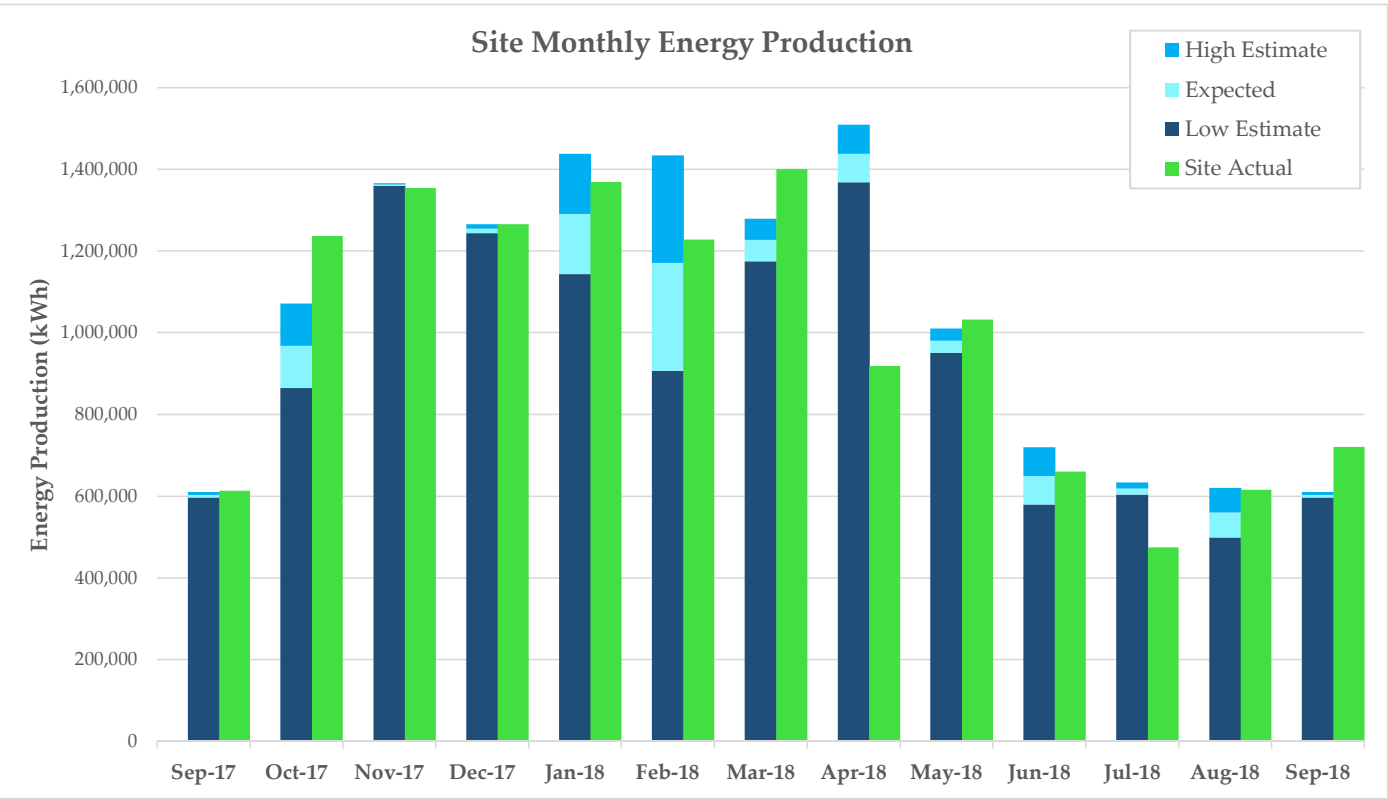
Van Wert, OH

A. Site Energy Production Summary

	Energy Production (kWh)				
	Site		By Turbine		
	Expected Production	Actual Production	WTG 1	WTG 2	WTG 3
Sep-17	603,085	612,820	204,550	207,830	200,440
Oct-17	967,926	1,236,610	415,110	393,660	427,840
Nov-17	1,362,692	1,354,336	447,934	467,136	439,266
Dec-17	1,254,397	1,265,600	312,430	468,440	484,730
Jan-18	1,290,968	1,369,330	300,220	544,990	524,120
Feb-18	1,170,349	1,227,684	415,536	413,210	398,938
Mar-18	1,227,217	1,400,340	500,650	409,470	490,220
Apr-18	1,438,497	918,970	311,290	302,960	304,720
May-18	980,450	1,031,960	343,900	352,850	335,210
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
Production 2018 (ytd) (kWh)	8,537,920	8,418,944	2,688,656	2,838,280	2,892,008
Total Production (kWh)*	12,122,935	12,275,490	3,864,130	4,167,516	4,243,844
Capacity Factor*	31.14%		*Value calculated over the last 12 months		

B. Site Energy Production Graph

September-2018



Monthly Report

September-2018



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
November-2018	Goldwind 6.5 Year Maintenance	~8	WTG 1
November-2018	Goldwind 6.5 Year Maintenance	~8	WTG 2
November-2018	Goldwind 6.5 Year Maintenance	~8	WTG 3

E. Actual Maintenance Events

Date	Event	Planned/Unplanned	Duration (hr)	Turbine
9/11/2018	Grid Fault	Unplanned	5.51	WTG 1, WTG 2
9/12/2018	Grid Fault	Unplanned	7.67	WTG 1
9/12/2018	Grid Fault	Unplanned	7.63	WTG 2
9/21/2018	Grid Fault	Unplanned	9.23	WTG 3

F. Turbine Availability & Downtime

Availability (%)	This Month	Year to Date
WTG 1	100.00%	98.72%
WTG 2	100.00%	99.46%
WTG 3	100.00%	99.52%
Avg	100.00%	99.23%

Downtime (hr)	This Month	Year to Date
WTG 1	13.18	429.28
WTG 2	13.14	404.87
WTG 3	9.23	412.89
Total	35.55	1247.04

G. Wind Speed & Capacity Factor

Wind Speed (mph)	This Month	2018 Annual
WTG 1	12.79	12.88
WTG 2	10.94	12.00
WTG 3	11.26	12.48
Estimated	11.09	13.39

Capacity Factor (%)	This Month	2018 Annual
WTG 1	22.36%	27.36%
WTG 2	22.52%	28.88%
WTG 3	21.88%	29.43%
Low Estimate	18.42%	28.70%

H. Report Notes and Comments