



Cooper Farms' Wind VW

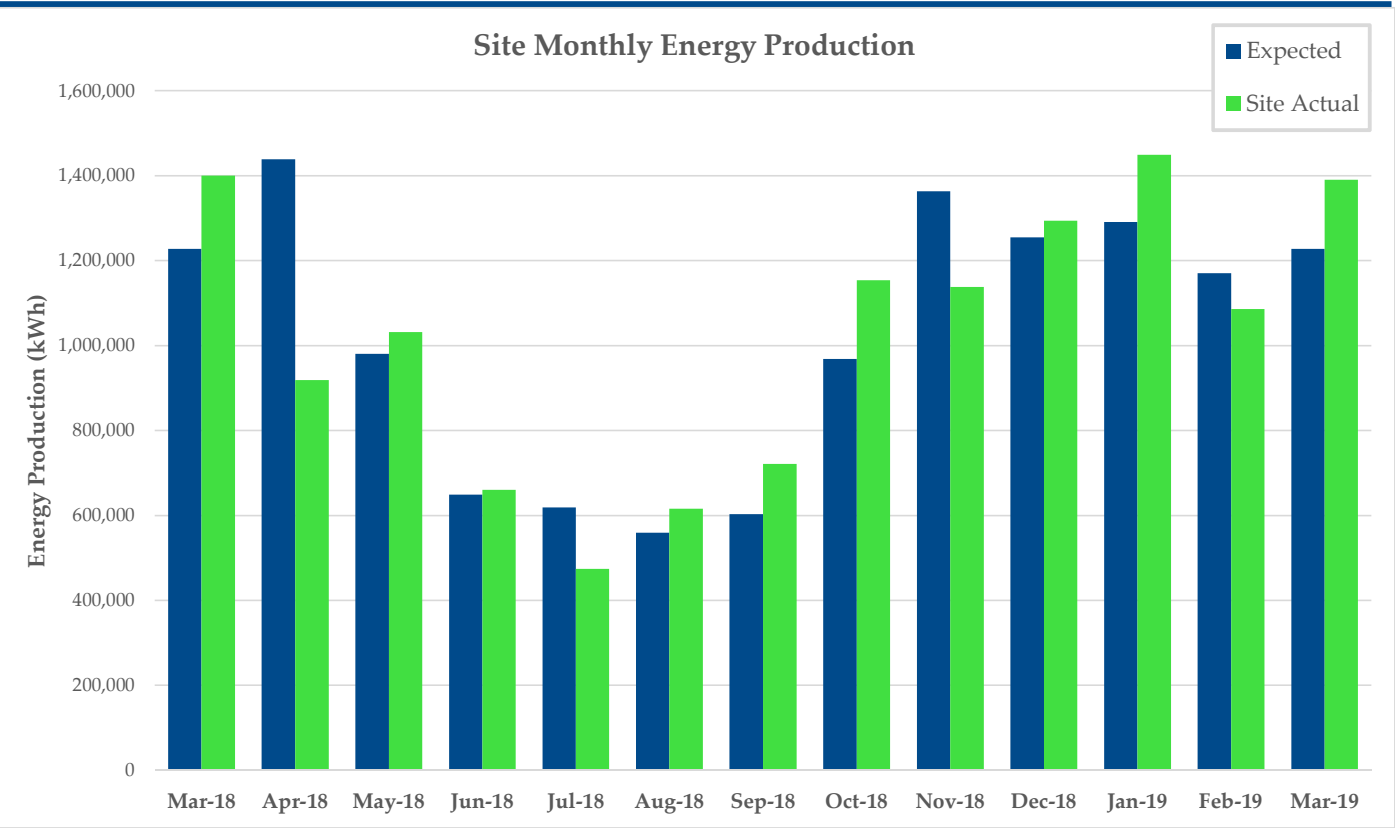
Van Wert, OH

A. Site Energy Production Summary

	Energy Production (kWh)				
	Site		By Turbine		
	Expected Production	Actual Production	WTG 1	WTG 2	WTG 3
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
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
Production 2019 (ytd) (kWh)	3,688,534	3,924,982	1,320,986	1,283,044	1,320,952
Total Production (kWh)*	12,122,935	11,931,802	3,991,656	3,927,394	4,012,752
Capacity Factor*	30.27%		*Value calculated over the last 12 months		

B. Site Energy Production Graph

March-2019



Monthly Report

March-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	Goldwind7 Year Maintenance	~15	WTG 1
September-2019	Goldwind7 Year Maintenance	~15	WTG 2
September-2019	Goldwind7 Year Maintenance	~15	WTG 3

E. Actual Maintenance Events

Date	Event	Planned/Unplanned	Duration (hr)	Turbine
3/1/2019	Goldwind 6.5 Year Maintenance	Planned	3.71	WTG 2
3/7/2019	Goldwind 6.5 Year Maintenance	Planned	4.70	WTG 3
3/10/2019	Grid Fault	Unplanned	10.04	WTG 1,2,3
3/28/2019	Goldwind 6.5 Year Maintenance	Planned	6.11	WTG 2,3
3/28/2019	Goldwind 6.5 Year Maintenance	Planned	6.07	WTG 1,2,3
3/28/2019	Goldwind Troubleshooting	Unplanned	10.56	WTG 2
3/29/2019	Goldwind Troubleshooting	Unplanned	13.54	WTG 2

F. Turbine Availability & Downtime

Availability (%)	This Month	Year to Date
WTG 1	100.00%	99.70%
WTG 2	96.76%	98.88%
WTG 3	100.00%	100.00%
Avg	98.92%	99.53%

Downtime (hr)	This Month	Year to Date
WTG 1	17.70	140.05
WTG 2	45.55	177.04
WTG 3	22.44	133.13
Total	85.69	450.22

G. Wind Speed & Capacity Factor

Wind Speed (mph)	This Month	2019 Annual
WTG 1	13.63	14.30
WTG 2	13.61	14.33
WTG 3	13.97	14.66
Estimated	14.92	13.39

Capacity Factor (%)	This Month	2019 Annual
WTG 1	42.22%	40.77%
WTG 2	40.38%	39.60%
WTG 3	41.97%	40.77%
Low Estimate	35.10%	28.70%

H. Report Notes and Comments