



Cooper Farms' Wind VW

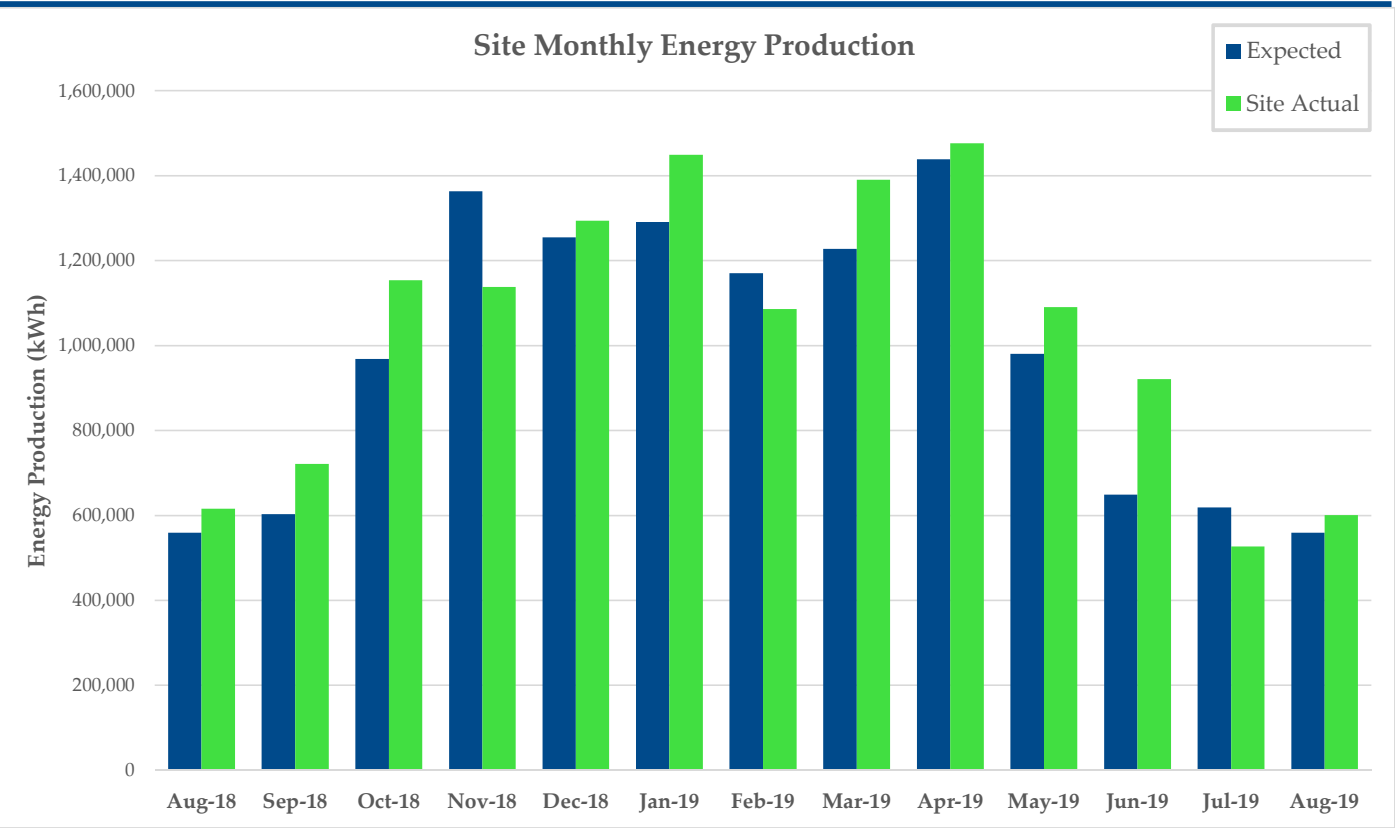
Van Wert, OH

A. Site Energy Production Summary

	Energy Production (kWh)				
	Site		By Turbine		
	Expected Production	Actual Production	WTG 1	WTG 2	WTG 3
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
Jul-19	618,687	526,810	179,780	167,330	179,700
Aug-19	559,508	600,600	200,850	197,710	202,040
Production 2019 (ytd) (kWh)	7,934,835	8,540,282	2,869,766	2,795,424	2,875,092
Total Production (kWh)*	12,122,935	12,846,452	4,309,626	4,212,364	4,324,462
Capacity Factor*	32.59%		*Value calculated over the last 12 months		

B. Site Energy Production Graph

August-2019



Monthly Report

August-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
February-2020	Goldwind 7.5 Year Maintenance	~8	WTG 1
February-2020	Goldwind 7.5 Year Maintenance	~8	WTG 2
February-2020	Goldwind 7.5 Year Maintenance	~8	WTG 3

E. Actual Maintenance Events

Date	Event	Planned/Unplanned	Duration (hr)	Turbine
8/1/2019	Generator Replacement	Unplanned	14.36	WTG 1
8/8/2019	Goldwind 7 Year Maintenance	Planned	3.07	WTG 1
8/14/2019	Goldwind 7 Year Maintenance	Planned	6.90	WTG 2
8/15/2019	Goldwind 7 Year Maintenance	Planned	5.68	WTG 1
8/18/2019	Grid Fault	Unplanned	11.50	WTG 1
8/18/2019	Grid Fault	Unplanned	13.33	WTG 2
8/18/2019	Grid Fault	Unplanned	12.49	WTG 3
8/19/2019	Goldwind 7 Year Maintenance	Planned	5.56	WTG 2
8/20/2019	Goldwind 7 Year Maintenance	Planned	3.83	WTG 3
8/21/2019	Goldwind 7 Year Maintenance	Planned	7.17	WTG 3
8/23/2019	Goldwind 7 Year Maintenance	Planned	6.45	WTG 1
8/28/2019	Goldwind 7 Year Maintenance	Planned	0.95	WTG 3

F. Turbine Availability & Downtime

Availability (%)	This Month	Year to Date
WTG 1	98.07%	98.52%
WTG 2	100.00%	98.44%
WTG 3	100.00%	100.00%
Avg	99.36%	98.99%

Downtime (hr)	This Month	Year to Date
WTG 1	44.47	314.02
WTG 2	29.20	348.53
WTG 3	27.85	231.05
Total	101.52	893.60

G. Wind Speed & Capacity Factor

Wind Speed (mph)	This Month	2019 Annual
WTG 1	12.08	13.69
WTG 2	10.05	12.53
WTG 3	10.34	12.99
Estimated	11.09	13.39

Capacity Factor (%)	This Month	2019 Annual
WTG 1	18.00%	32.80%
WTG 2	17.72%	31.96%
WTG 3	18.10%	32.87%
Low Estimate	14.90%	28.70%

H. Report Notes and Comments