

Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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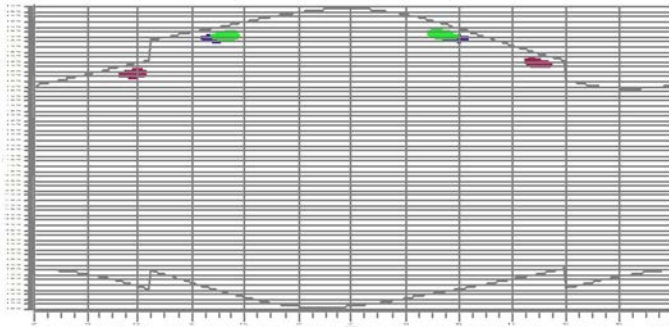
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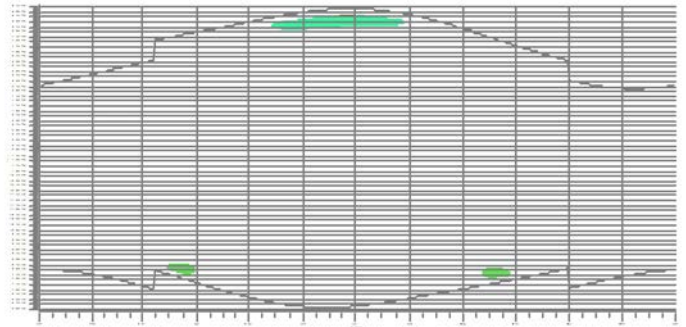
SHADOW - Calendar per WTG, graphical

Calculation: 2014-07-31_Scioto Ridge SFA_M122@89m

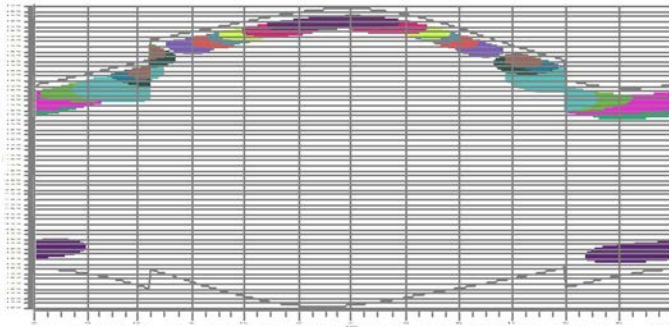
65: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (569)



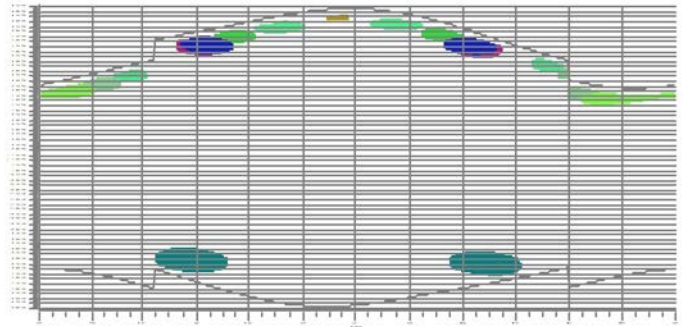
66: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (570)



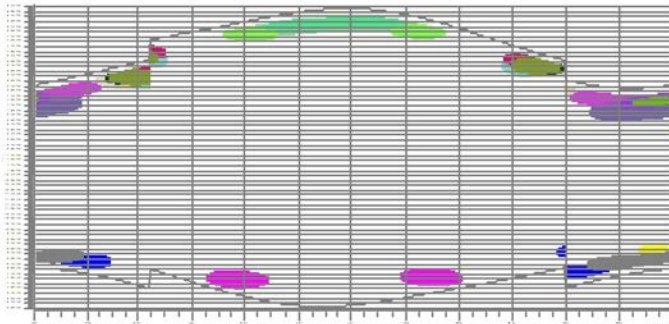
67: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (571)



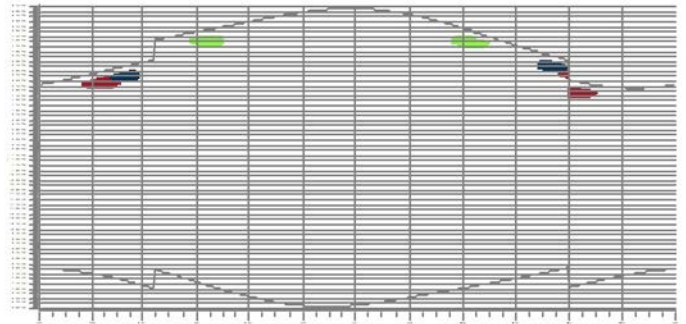
69: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (572)



71: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (573)



72: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (574)



Legend: 00:00-01:00 01:00-02:00 02:00-03:00 03:00-04:00 04:00-05:00 05:00-06:00 06:00-07:00 07:00-08:00 08:00-09:00 09:00-10:00 10:00-11:00 11:00-12:00 12:00-13:00 13:00-14:00 14:00-15:00 15:00-16:00 16:00-17:00 17:00-18:00 18:00-19:00 19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-00:00

Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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8/5/2014 5:05 PM / 13

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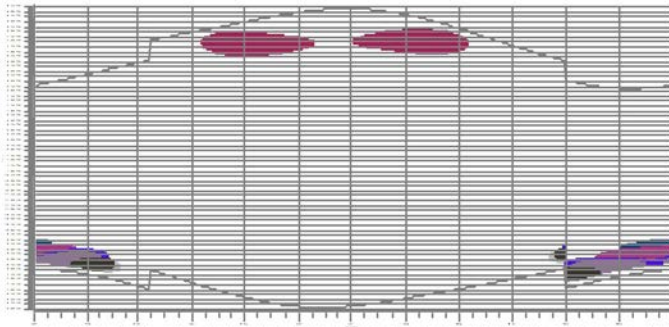
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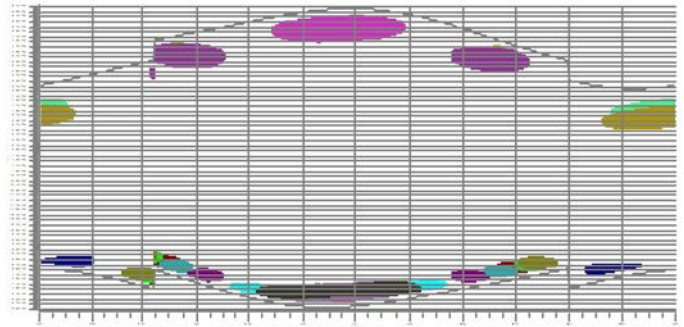
SHADOW - Calendar per WTG, graphical

Calculation: 2014-07-31 Scioto Ridge SFA_M122@89m

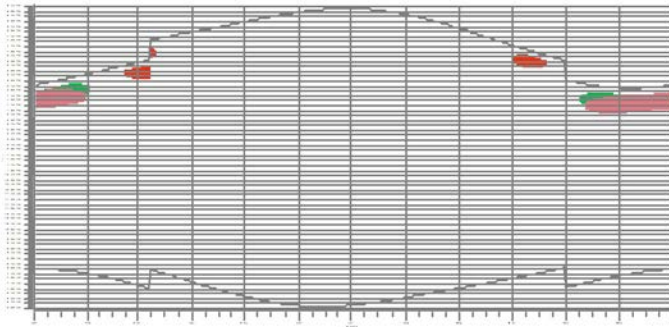
82: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (581)



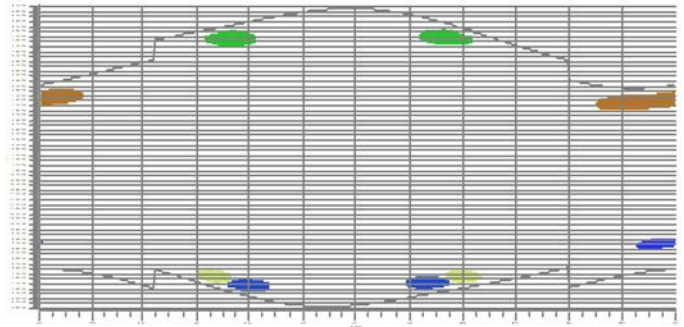
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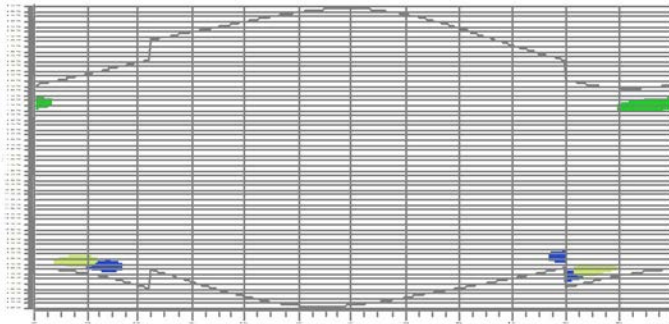
85: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (583)



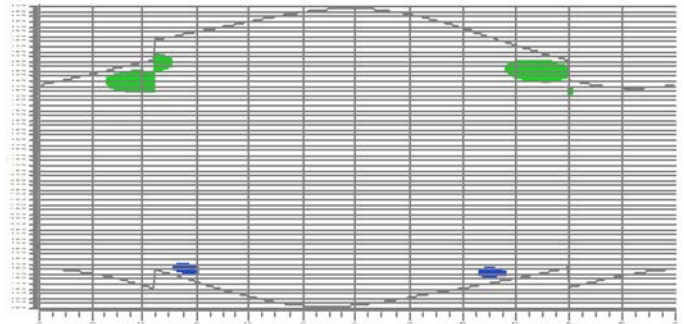
89: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (584)



90: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (585)



93: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (586)



Legend: 82: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (581) 83: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (582) 85: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (583) 89: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (584) 90: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (585) 93: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (586)

Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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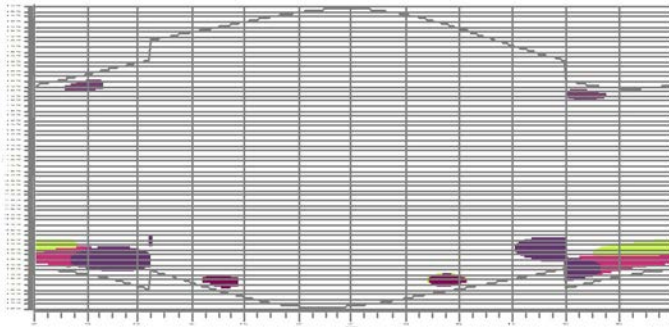
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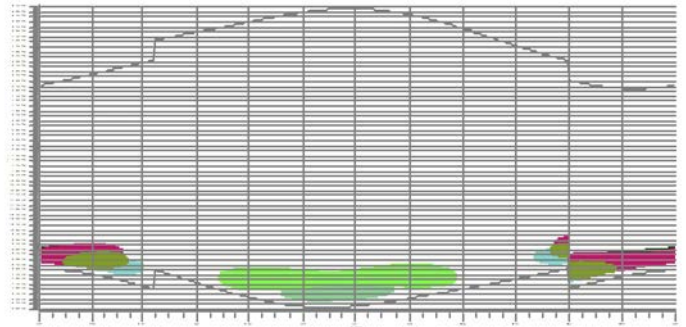
SHADOW - Calendar per WTG, graphical

Calculation: 2014-07-31 Scioto Ridge SFA_M122@89m

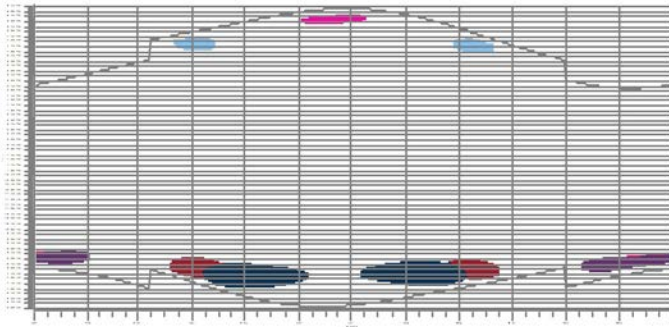
95: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (587)



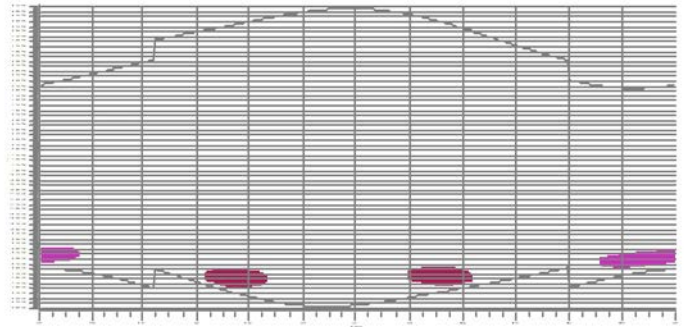
96: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (588)



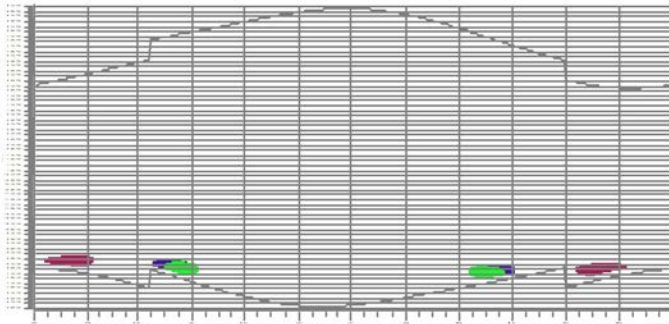
97: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (589)



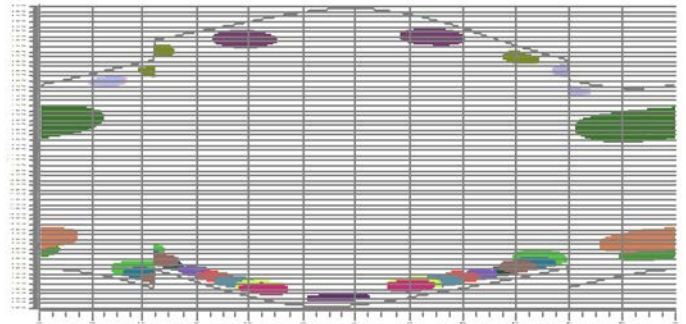
98: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (590)



99: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (591)



100: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (592)



Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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8/5/2014 5:05 PM / 15

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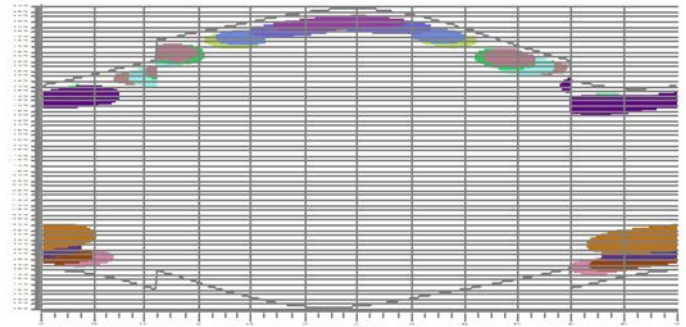
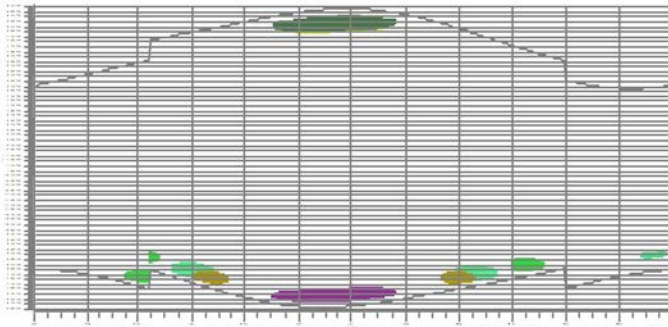
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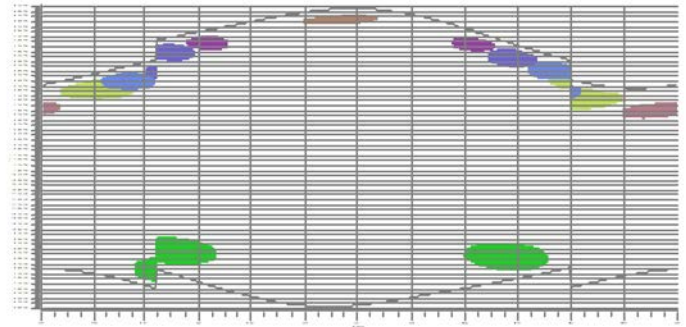
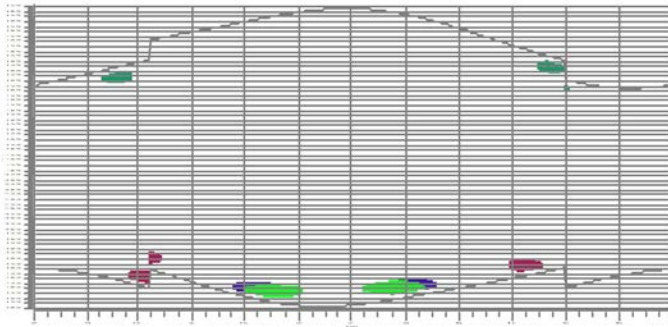
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SHADOW - Calendar per WTG, graphical**Calculation:** 2014-07-31_Scioto Ridge SFA_M122@89m

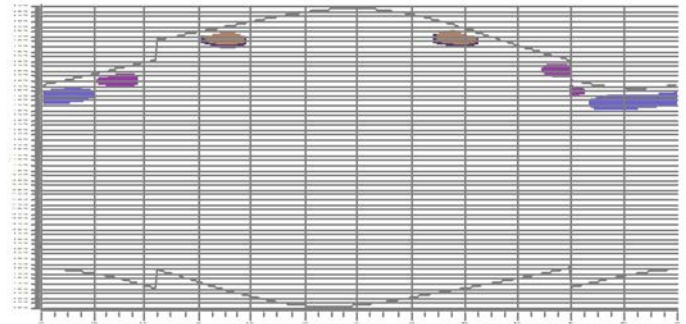
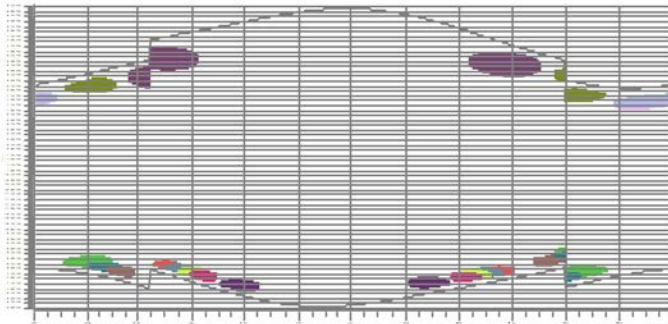
102: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (593) 103: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (594)



104: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (595) 105: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (596)



106: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (597) 107: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (598)



Legend: 102: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (593) 103: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (594) 104: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (595) 105: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (596) 106: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (597) 107: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (598)

Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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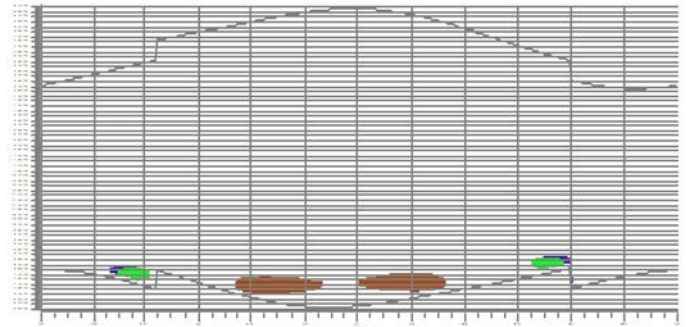
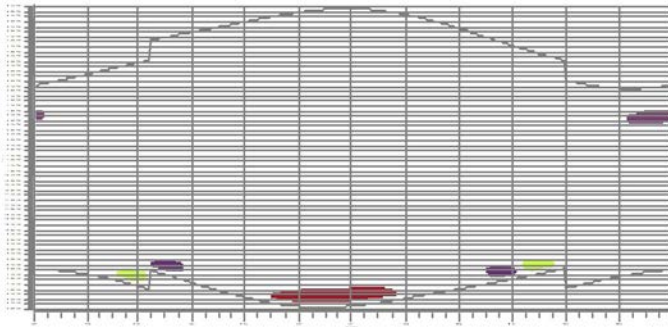
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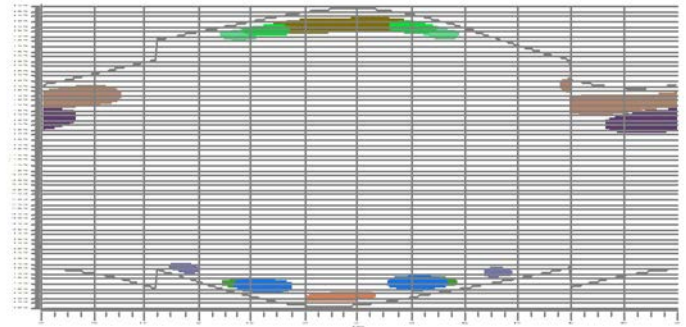
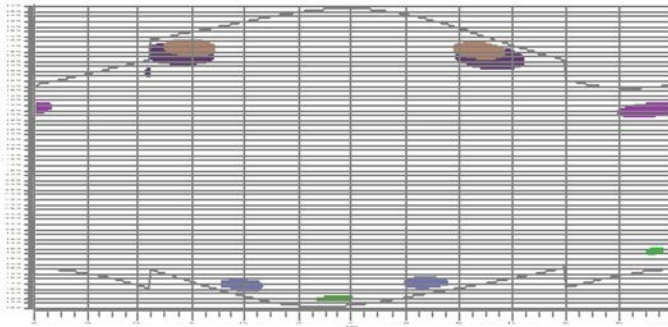
SHADOW - Calendar per WTG, graphical

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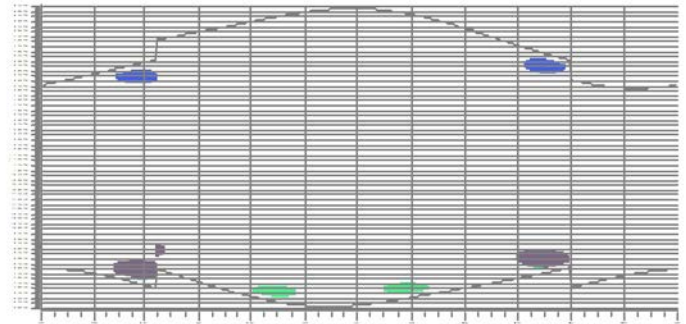
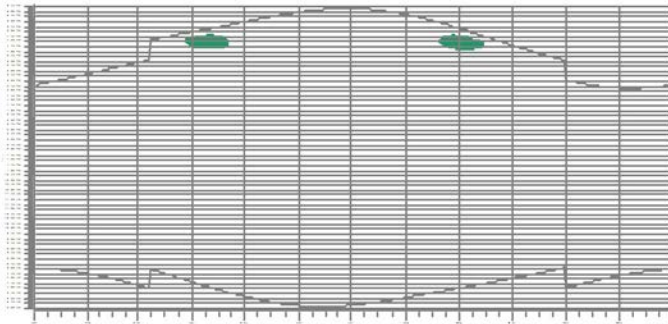
108: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (599) 110: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (600)



112: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (601) 113: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (602)



114: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (603) 115: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (604)



Legend: 108: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (599) 110: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (600) 112: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (601) 113: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (602) 114: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (603) 115: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (604)

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2014-07-31_Scioto Ridge SFA_M122_89m

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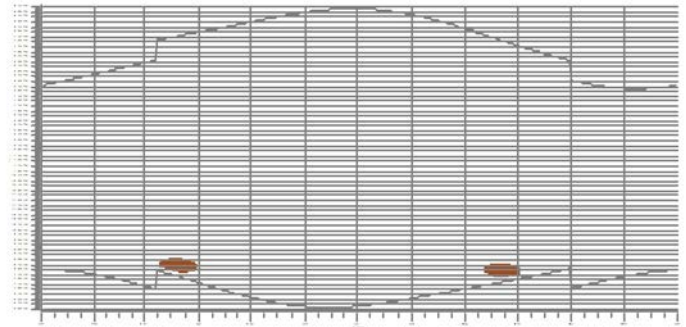
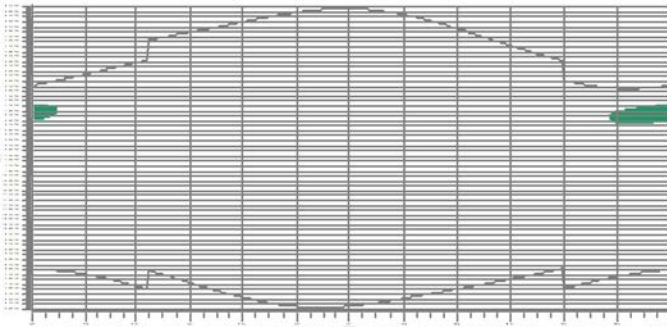
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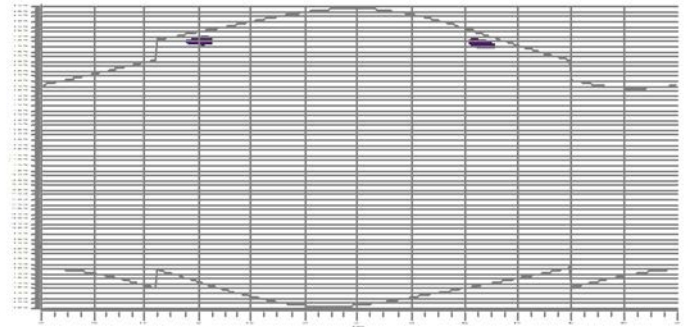
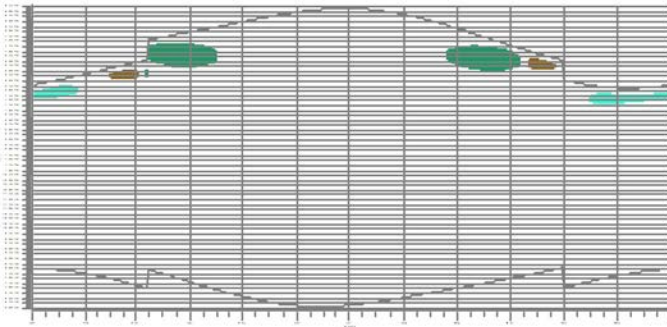
SHADOW - Calendar per WTG, graphical

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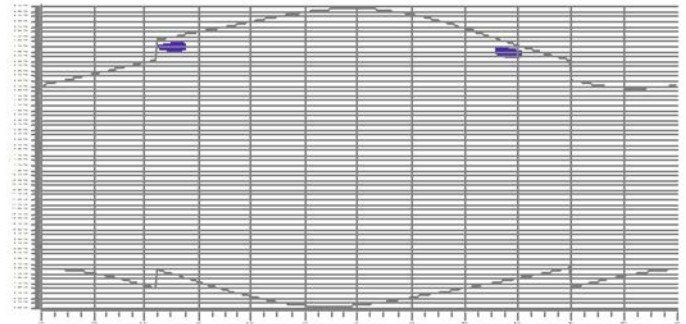
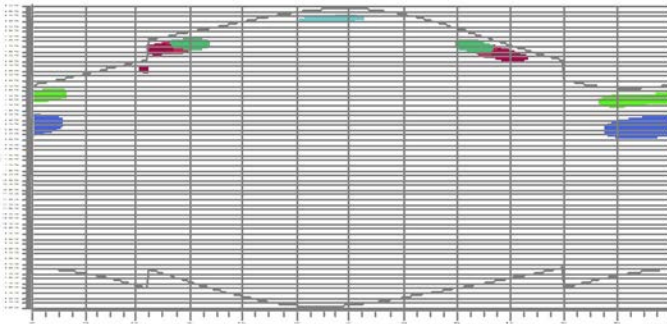
117: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (605) 118: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (606)



119: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (607) 120: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (608)



121: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (609) 122: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (610)



Legend: 117: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (605) 118: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (606) 119: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (607) 120: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (608) 121: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (609) 122: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (610)

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2014-07-31_Scioto Ridge SFA_M122_89m

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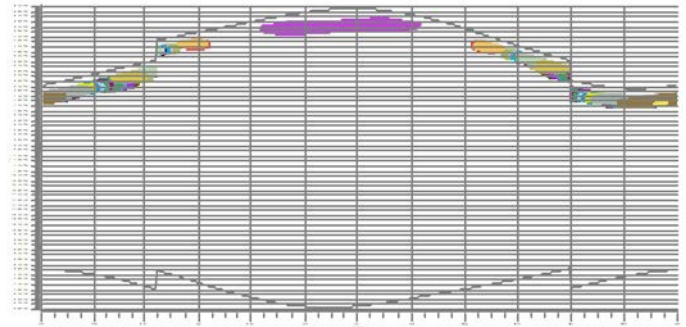
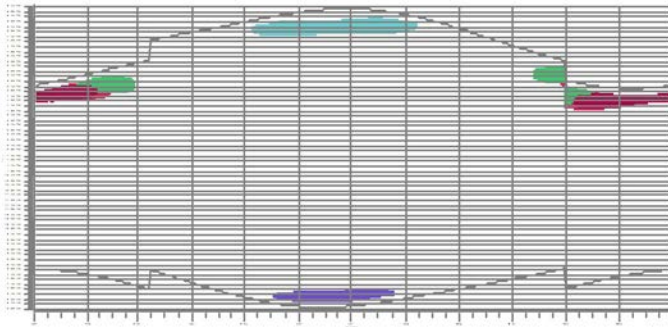
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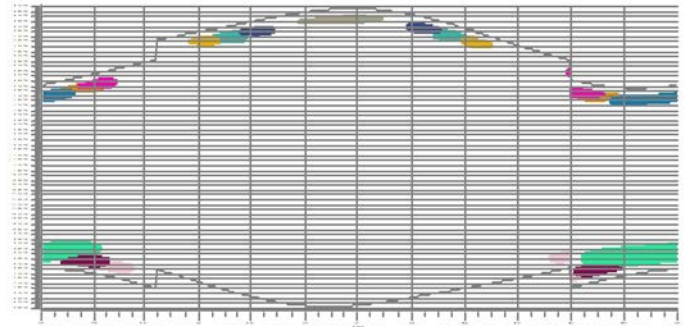
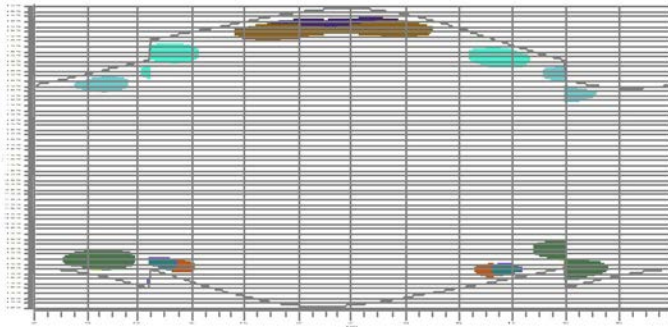
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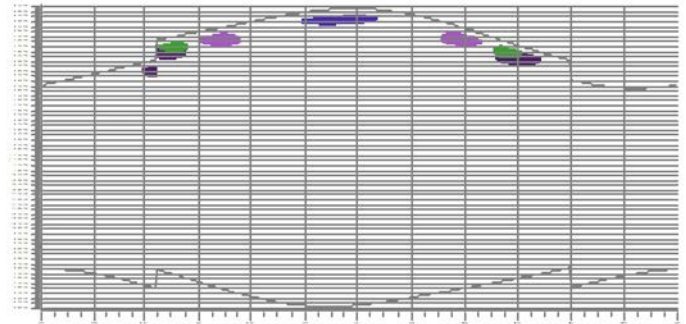
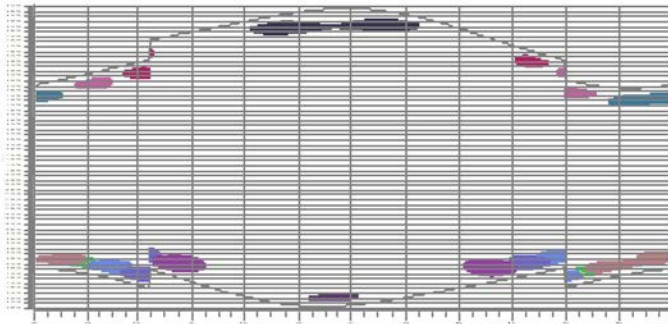
124: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (611) 126: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (612)



128: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (613) 129: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (614)



130: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (615) 131: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (616)



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2014-07-31_Scioto Ridge SFA_M122_89m

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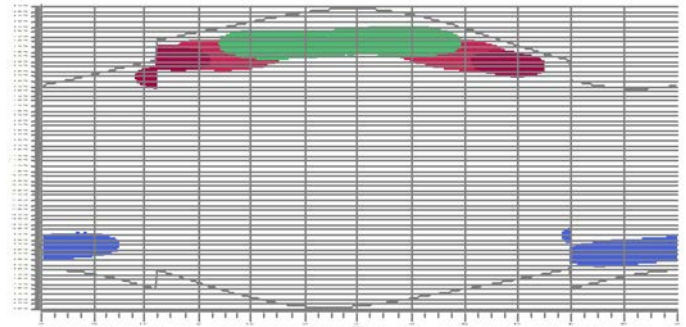
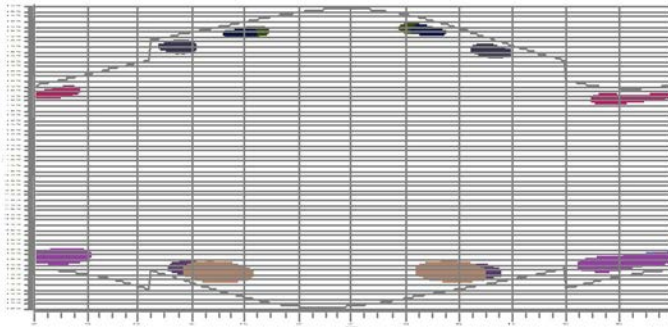
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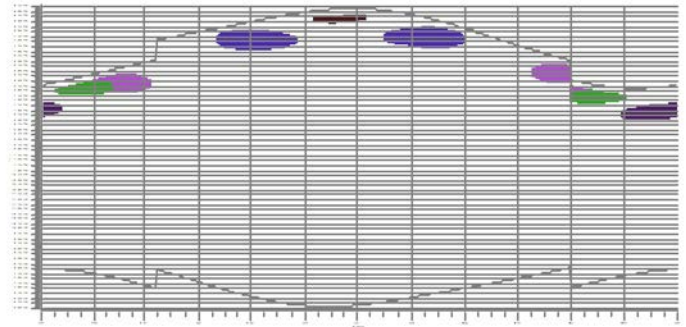
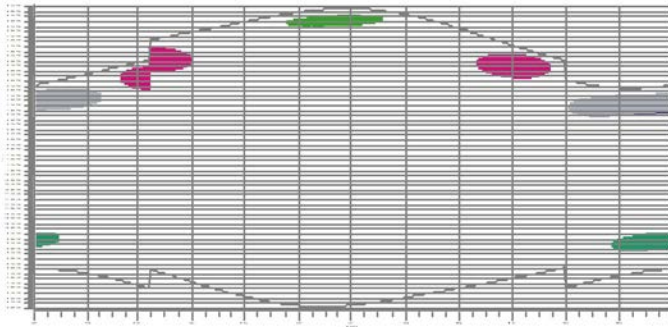
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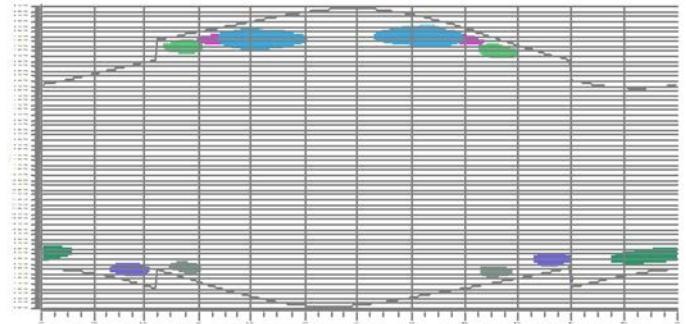
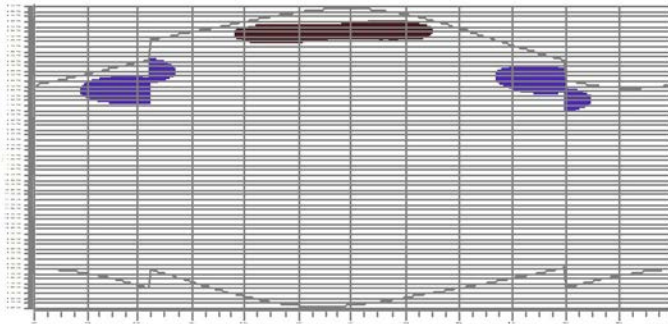
132: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (617) 133: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (618)



134: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (619) 135: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (620)



139: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (621) 141: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (622)



Legend: 132: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (617) 133: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (618) 134: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (619) 135: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (620) 139: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (621) 141: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (622)

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2014-07-31_Scioto Ridge SFA_M122_89m

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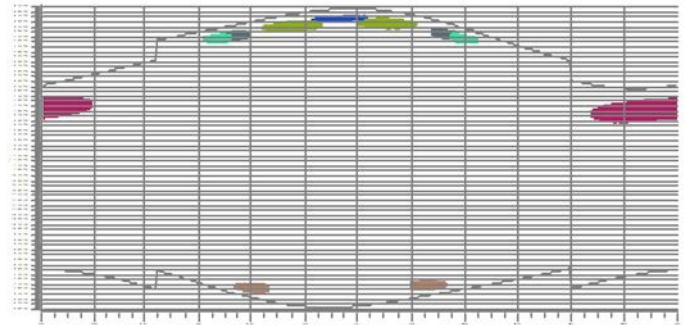
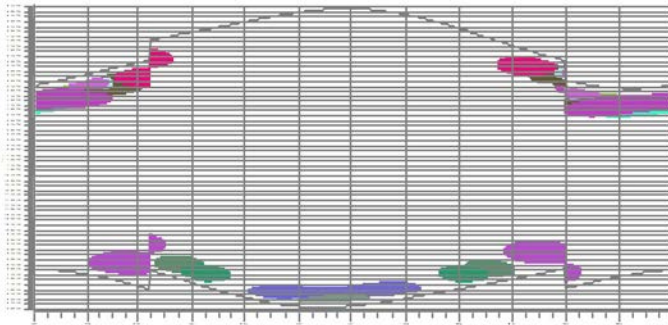
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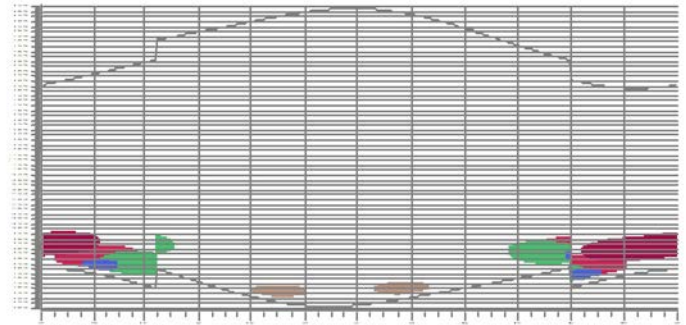
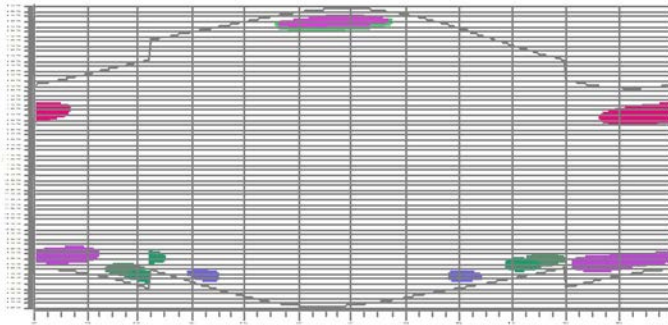
SHADOW - Calendar per WTG, graphical

Calculation: 2014-07-31 Scioto Ridge SFA_M122@89m

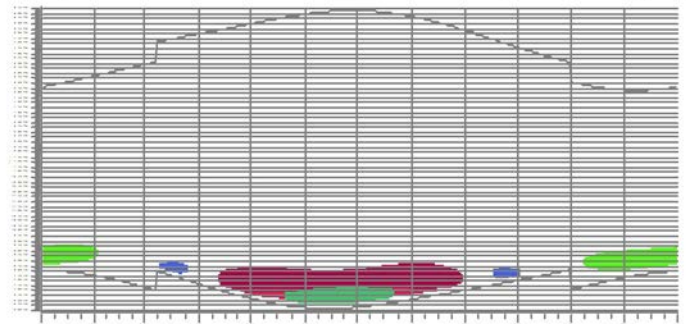
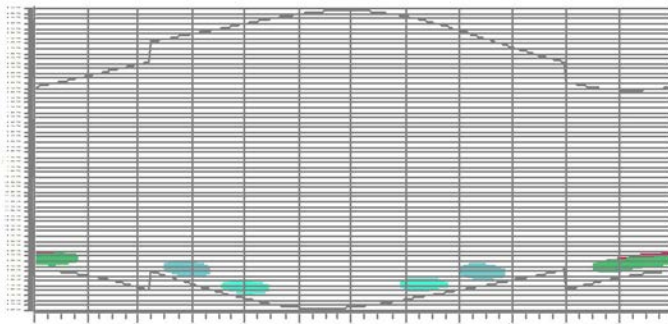
142: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (623) 143: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (624)



144: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (625) 145: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (626)



146: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (627) 147: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (628)



Legend: 142: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (623) 143: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (624) 144: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (625) 145: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (626) 146: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (627) 147: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (628)

Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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8/5/2014 5:05 PM / 21

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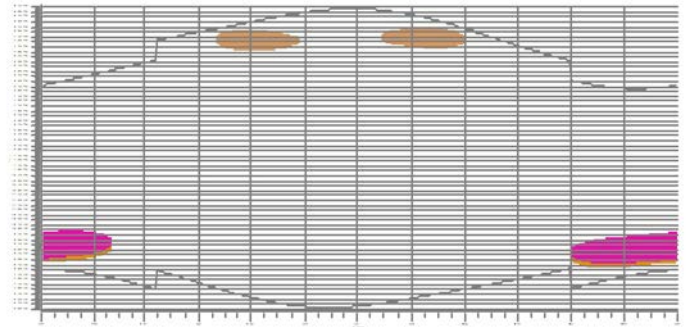
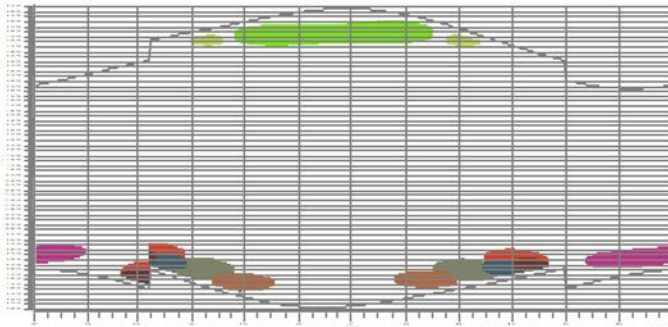
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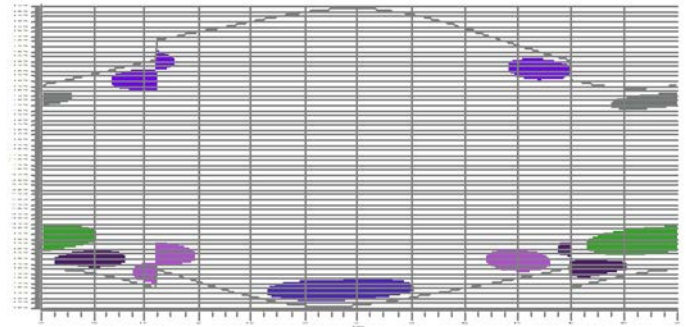
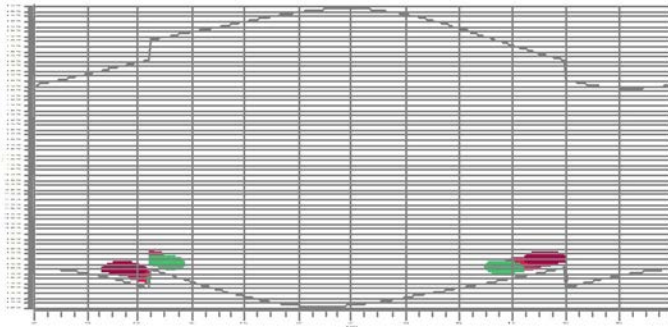
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SHADOW - Calendar per WTG, graphical**Calculation:** 2014-07-31 Scioto Ridge SFA_M122@89m

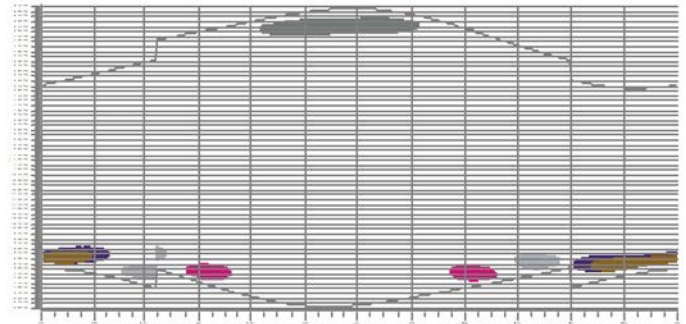
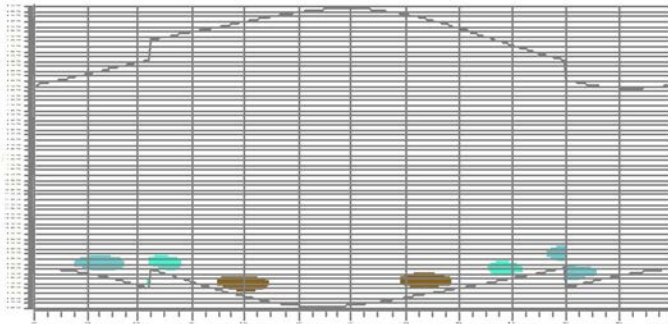
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150: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (631) 151: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (632)



152: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (633) 154: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (634)



Legend: 148: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (629) 149: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (630) 150: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (631) 151: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (632) 152: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (633) 154: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (634)

Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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8/5/2014 5:05 PM / 22

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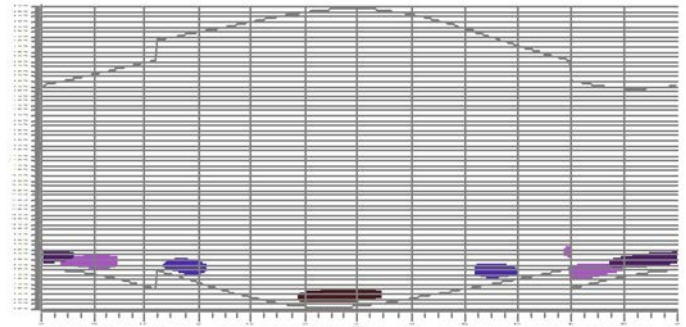
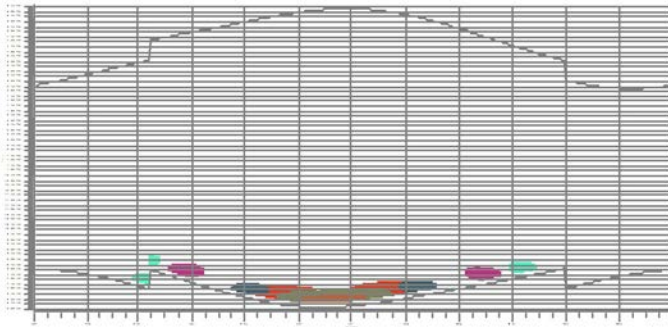
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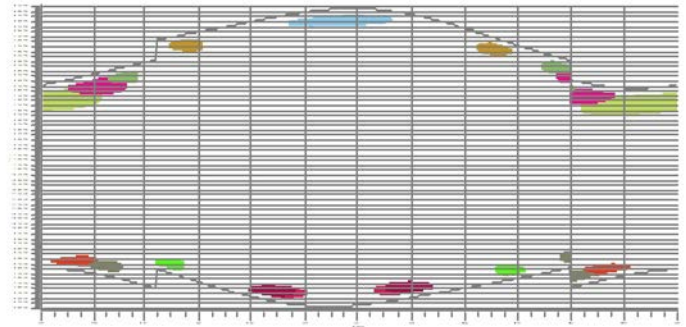
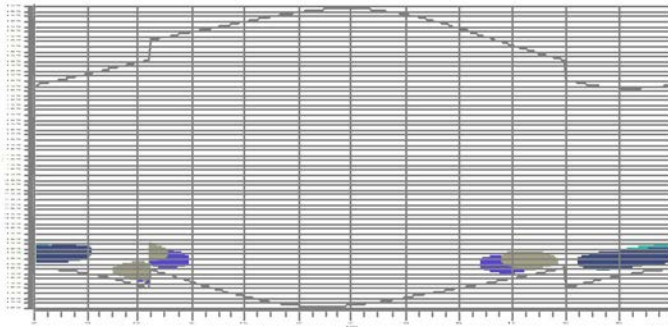
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SHADOW - Calendar per WTG, graphical**Calculation:** 2014-07-31_Scioto Ridge SFA_M122@89m

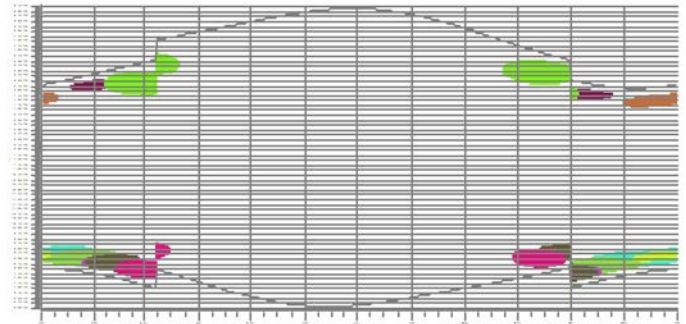
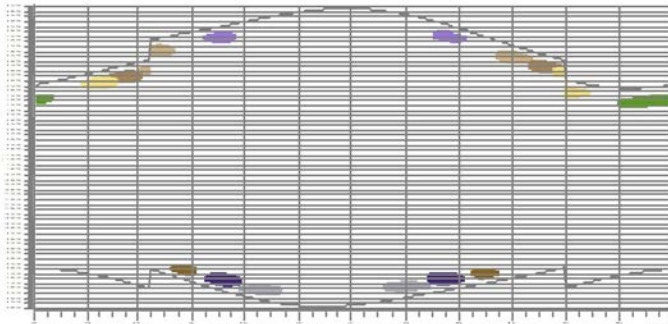
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159: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (637) 161: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (638)



162: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (639) 163: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (640)



Legend: 155: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (635) 158: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (636) 159: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (637) 161: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (638) 162: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (639) 163: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (640)

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2014-07-31_Scioto Ridge SFA_M122_89m

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8/5/2014 5:05 PM / 23

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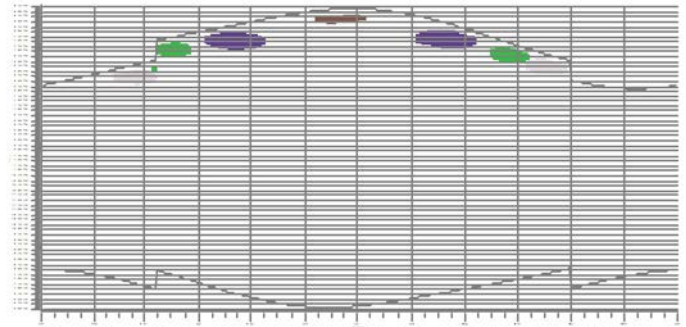
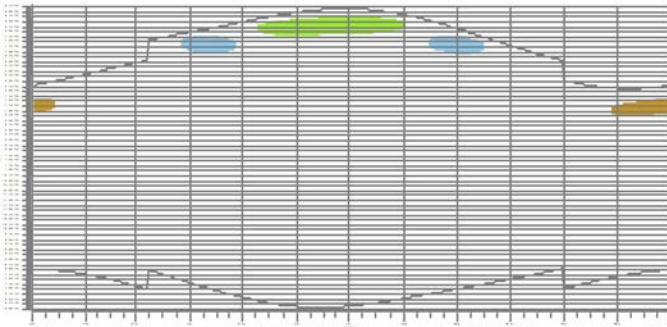
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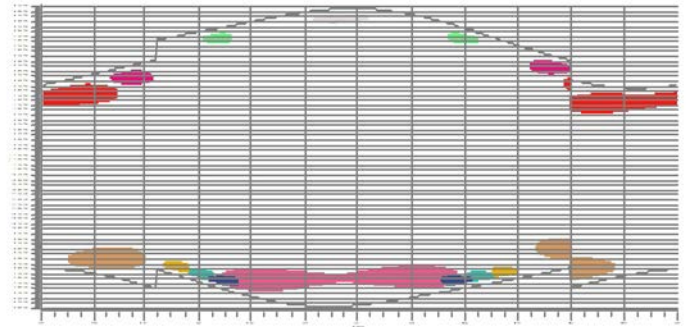
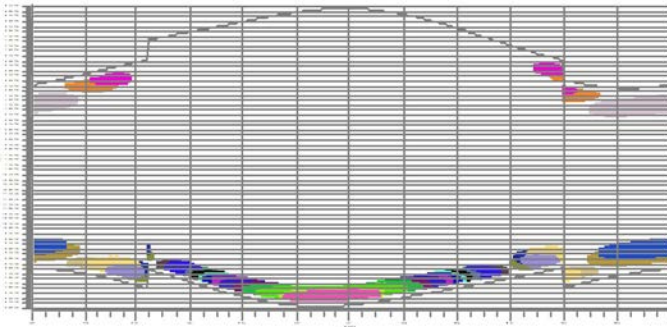
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SHADOW - Calendar per WTG, graphical**Calculation:** 2014-07-31_Scioto Ridge SFA_M122@89m

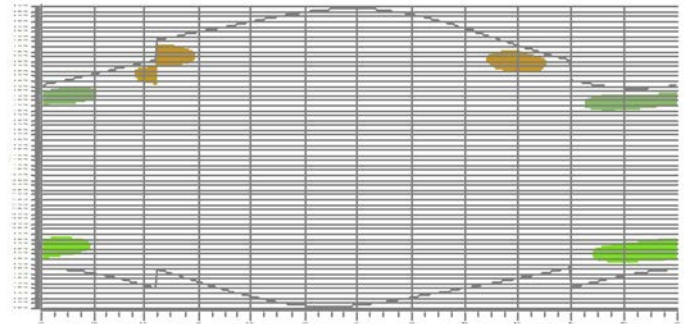
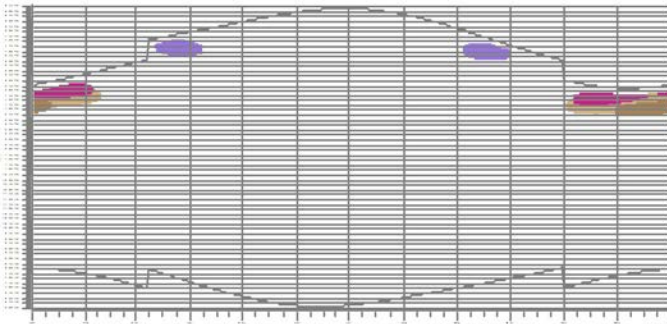
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166: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (643) 167: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (644)



168: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (645) 169: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (646)



Legend:

1	2	3	4	5	6	7	8	9	10	11	12
1	2	3	4	5	6	7	8	9	10	11	12

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2014-07-31_Scioto Ridge SFA_M122_89m

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8/5/2014 5:05 PM / 24

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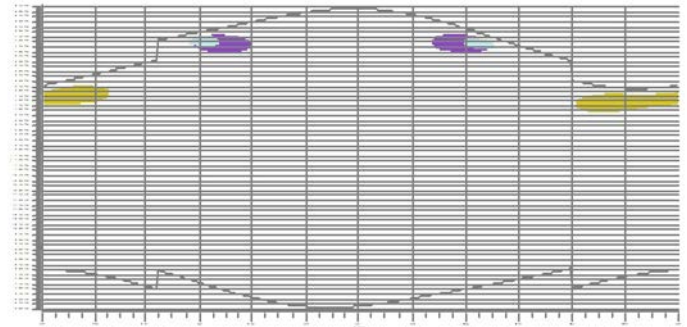
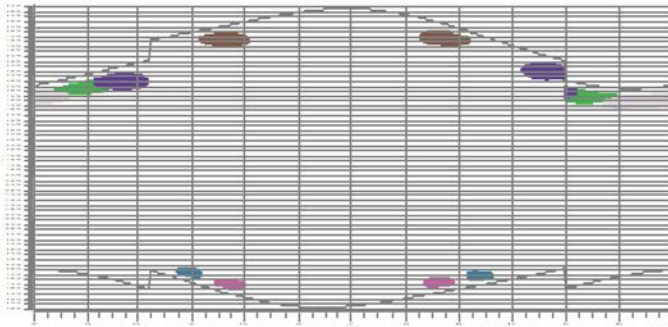
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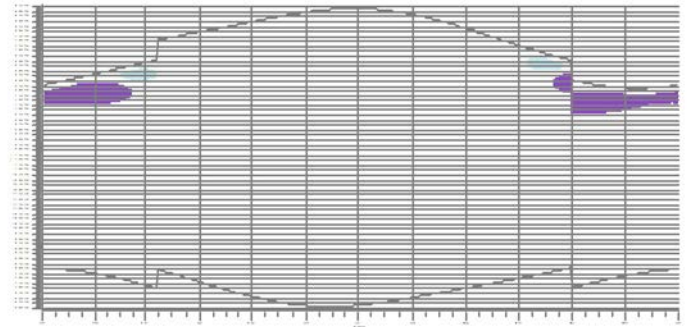
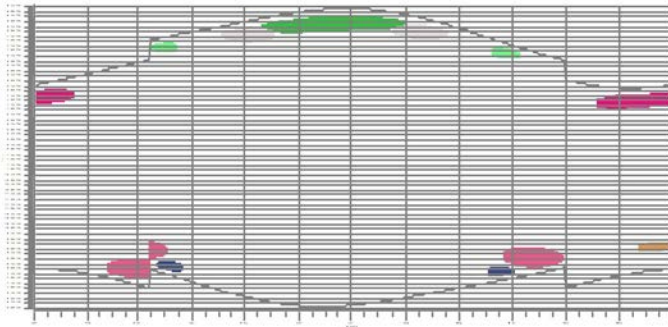
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SHADOW - Calendar per WTG, graphical**Calculation:** 2014-07-31 Scioto Ridge SFA_M122@89m

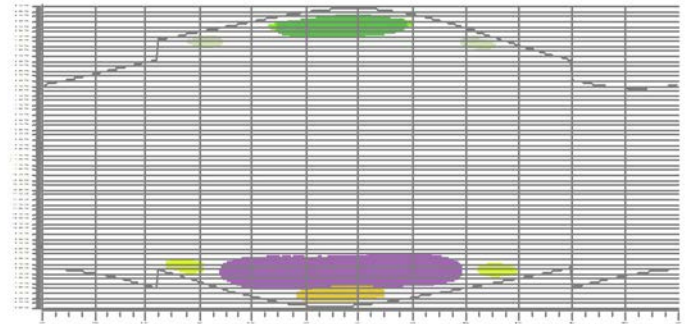
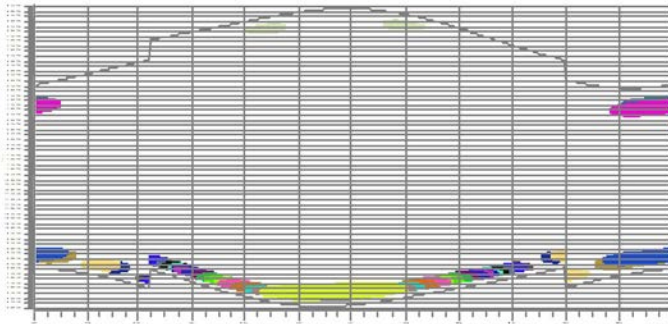
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172: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (649) 173: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (650)



174: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (651) 176: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (652)



Legend: 170: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (647) 171: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (648) 172: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (649) 173: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (650) 174: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (651) 176: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (652)

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2014-07-31_Scioto Ridge SFA_M122_89m

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8/5/2014 5:05 PM / 25

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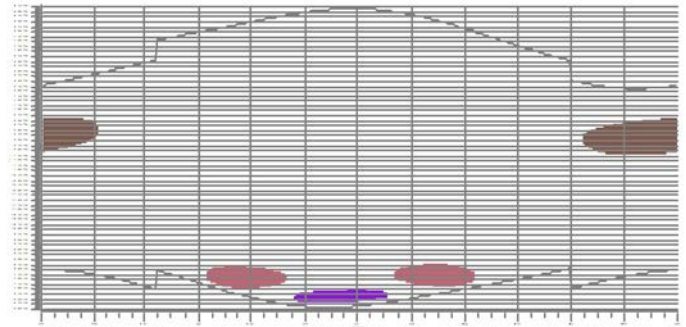
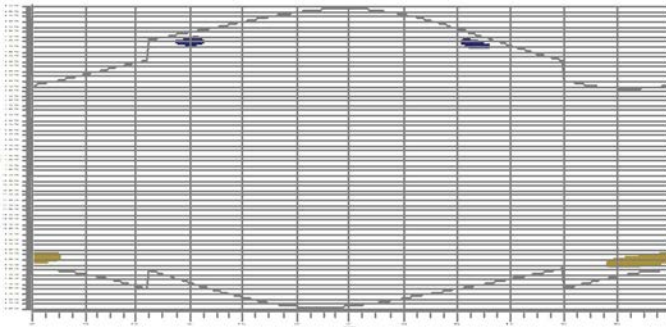
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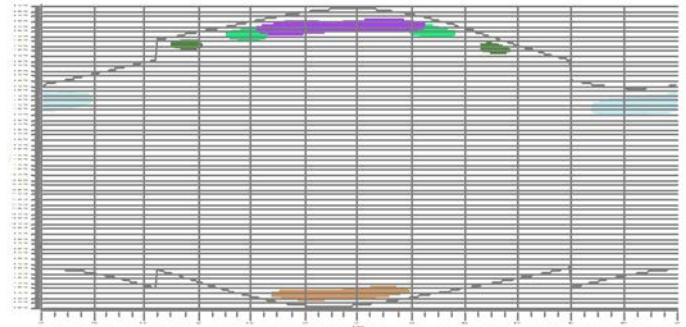
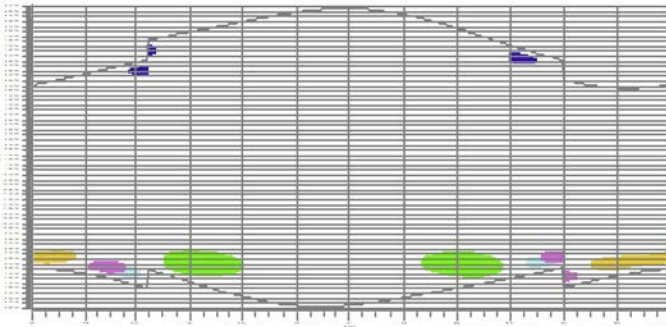
SHADOW - Calendar per WTG, graphical

Calculation: 2014-07-31 Scioto Ridge SFA_M122@89m

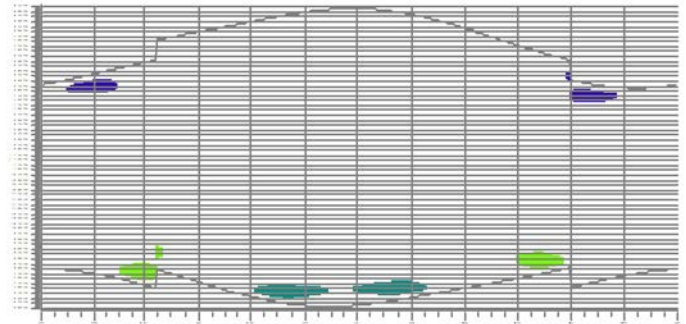
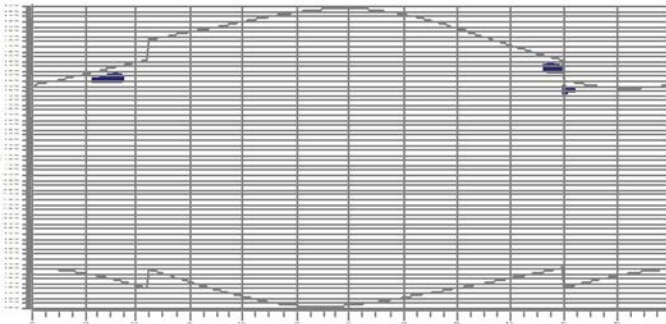
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181: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (655) 182: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (656)



183: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (657) 184: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (658)



Legend:

Color	Description
Blue	Shadow periods for WTG 179
Yellow	Shadow periods for WTG 180
Orange	Shadow periods for WTG 181
Green	Shadow periods for WTG 182
Purple	Shadow periods for WTG 183
Pink	Shadow periods for WTG 184

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2014-07-31_Scioto Ridge SFA_M122_89m

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8/5/2014 5:05 PM / 26

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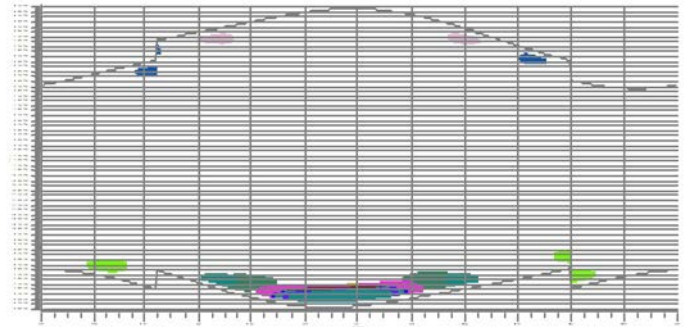
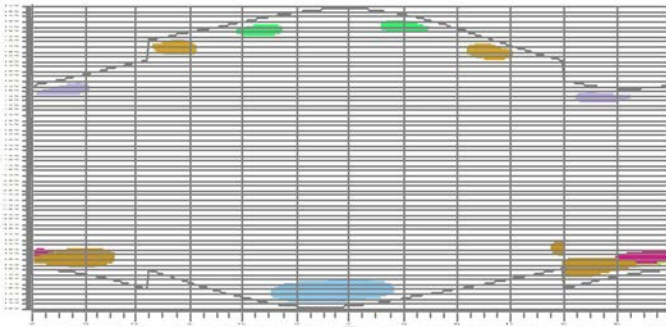
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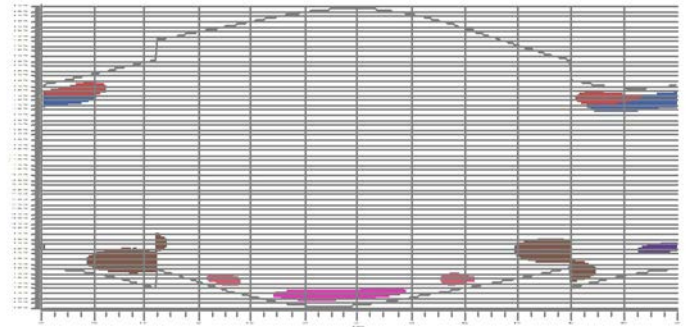
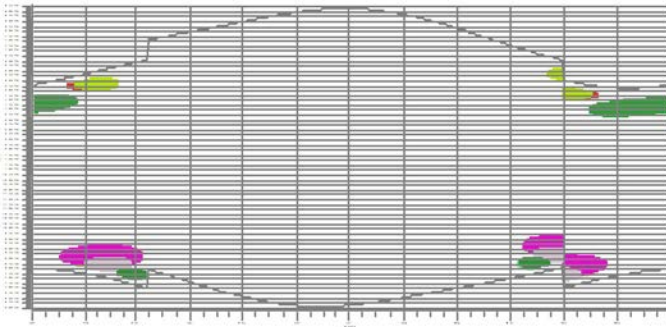
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SHADOW - Calendar per WTG, graphical**Calculation:** 2014-07-31 Scioto Ridge SFA_M122@89m

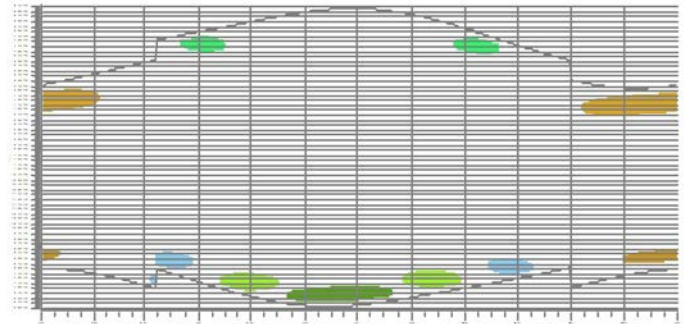
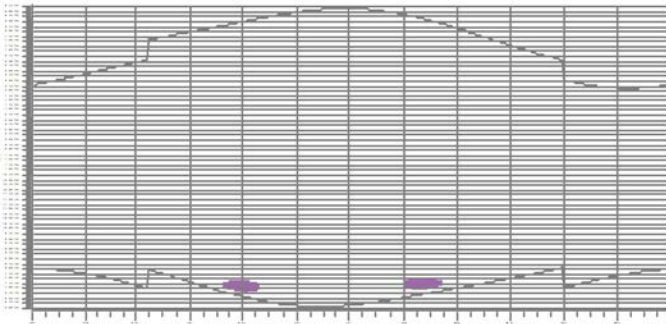
185: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (659) 186: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (660)



187: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (661) 188: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (662)



189: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (663) 190: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (664)



Legend: 185: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (659) 186: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (660) 187: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (661) 188: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (662) 189: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (663) 190: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (664)

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2014-07-31_Scioto Ridge SFA_M122_89m

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8/5/2014 5:05 PM / 27

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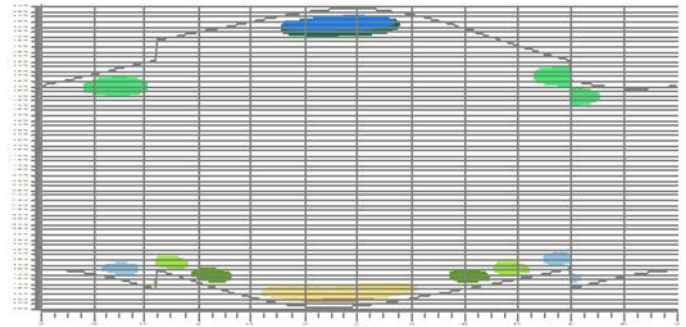
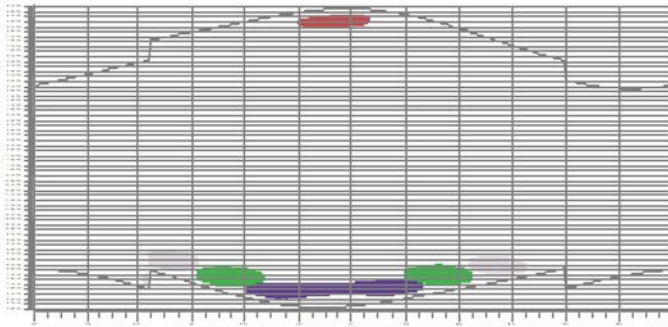
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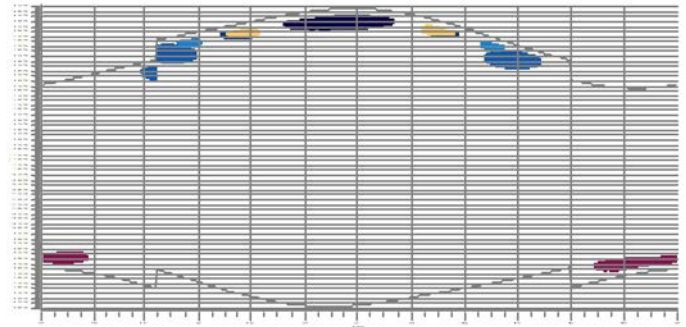
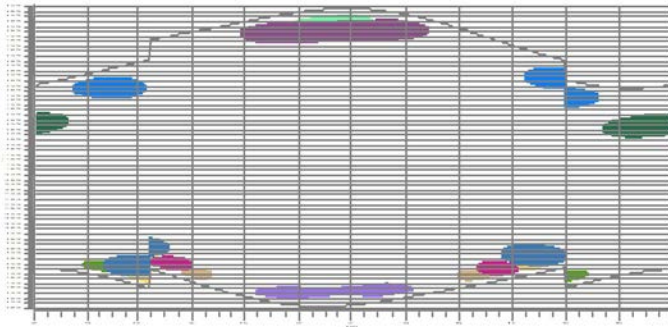
SHADOW - Calendar per WTG, graphical

Calculation: 2014-07-31_Scioto Ridge SFA_M122@89m

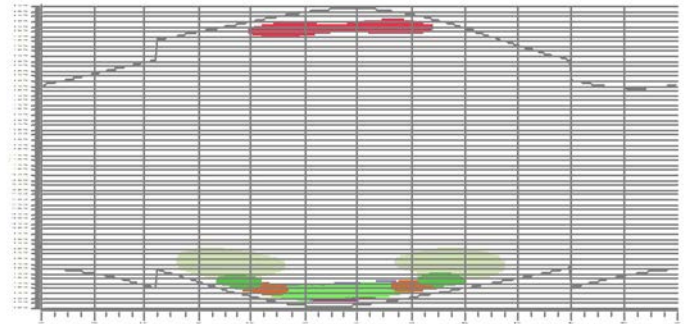
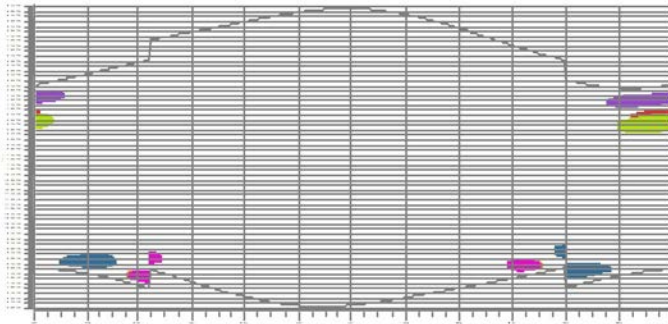
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194: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (667) 195: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (668)



196: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (669) 198: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (697)



Legend: 191: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (665) 193: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (666) 194: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (667) 195: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (668) 196: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (669) 198: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (697)

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2014-07-31_Scioto Ridge SFA_M122_89m

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8/5/2014 5:05 PM / 28

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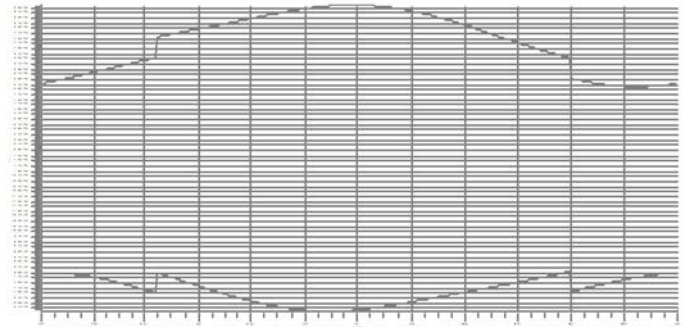
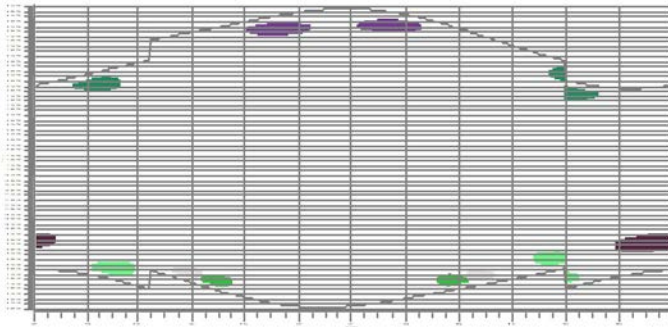
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Calculated:

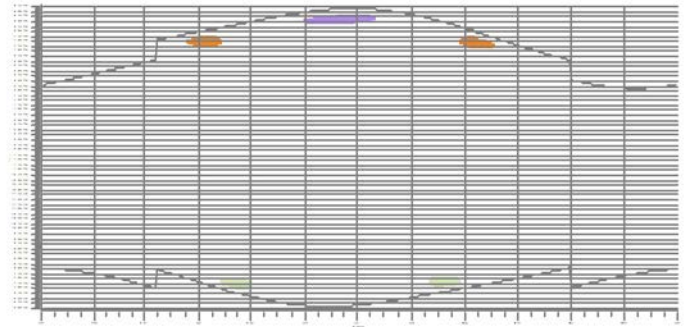
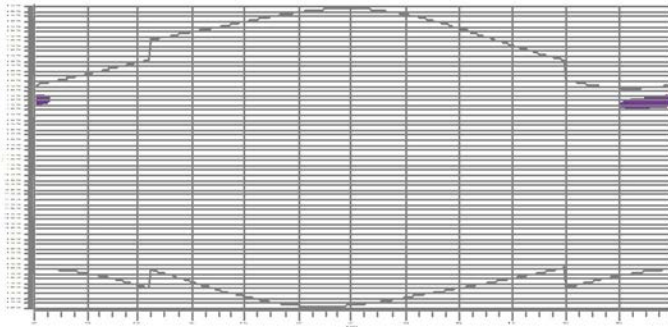
8/1/2014 4:19 PM/2.8.579

SHADOW - Calendar per WTG, graphical**Calculation:** 2014-07-31_Scioto Ridge SFA_M122@89m

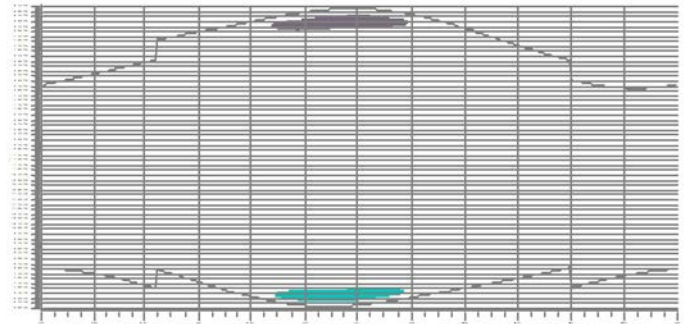
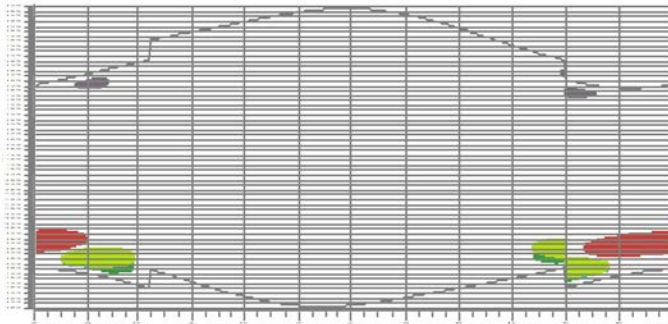
199: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (670) 201: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (671)



202: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (672) 203: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (673)



204: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (674) 205: REpower MM 122 60Hz 1800 122.0 IO! hub: 89.0 m (TOT: 150.0 m) (675)



Legend: 00:00-01:00 01:00-02:00 02:00-03:00 03:00-04:00 04:00-05:00 05:00-06:00 06:00-07:00 07:00-08:00 08:00-09:00 09:00-10:00 10:00-11:00 11:00-12:00 12:00-13:00 13:00-14:00 14:00-15:00 15:00-16:00 16:00-17:00 17:00-18:00 18:00-19:00 19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-00:00

Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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9/8/2014 11:36 AM / 2

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Calculated:

8/1/2014 4:19 PM/2.8.579

SHADOW - Calendar

Calculation: 2014-07-31 Scioto Ridge SFA M122@89mShadow receptor: 19 - Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (1331)

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
0.36 0.42 0.44 0.51 0.56 0.60 0.60 0.60 0.61 0.56 0.37 0.31

Operational time

N NNE NE ENE E ESE SE SSE S SSW SW WSW W WNW NW NNW Sum
356 387 449 404 342 343 460 428 569 1,075 971 861 805 495 443 370 8,758
Idle start wind speed: Cut in wind speed from power curve

July		August		September		October		November		December	
1	06:08	19:40 (46)	06:32	19:35 (46)	07:02	07:57 (69)	07:31	07:54 (69)	07:05	16:47 (50)	07:39
	21:10	38	20:18 (46)	20:53	53	20:28 (46)	20:11	33	08:27 (69)	17:33	23
2	06:09	19:39 (46)	06:33	19:35 (46)	07:03	07:55 (69)	07:32		07:56 (69)	07:06	47
	21:10	39	20:18 (46)	20:52	53	20:28 (46)	20:09	28	08:24 (69)	17:32	20
3	06:09	19:39 (46)	06:34	19:34 (46)	07:04	07:54 (69)	07:33		07:59 (69)	07:07	47
	21:10	40	20:19 (46)	20:51	52	20:26 (46)	20:07	21	08:20 (69)	17:31	16
4	06:10	19:39 (46)	06:35	19:34 (46)	07:05	07:53 (69)	07:34		08:06 (69)	07:09	47
	21:10	40	20:19 (46)	20:49	51	20:25 (46)	20:06	11	18:09 (50)	17:30	11
5	06:10	19:39 (46)	06:36	19:34 (46)	07:06	07:52 (69)	07:36		17:58 (50)	07:10	48
	21:10	41	20:20 (46)	20:48	50	20:24 (46)	20:04	17	18:15 (50)	17:29	48
6	06:11	19:38 (46)	06:37	19:35 (46)	07:07	07:51 (69)	07:37		17:55 (50)	07:11	48
	21:10	42	20:20 (46)	20:47	48	20:23 (46)	20:03	23	18:18 (50)	17:27	48
7	06:12	19:38 (46)	06:38	19:35 (46)	07:08	07:50 (69)	07:38		17:52 (50)	07:12	49
	21:09	43	20:21 (46)	20:46	47	20:22 (46)	20:01	27	18:19 (50)	17:26	49
8	06:12	19:38 (46)	06:39	19:36 (46)	07:09	07:49 (69)	07:39		17:50 (50)	07:13	49
	21:09	43	20:21 (46)	20:45	45	20:21 (46)	19:58	31	18:21 (50)	17:25	48
9	06:13	19:38 (46)	06:40	19:36 (46)	07:10	07:48 (69)	07:40		17:48 (50)	07:14	49
	21:09	44	20:22 (46)	20:44	44	20:20 (46)	19:56	34	18:22 (50)	17:24	49
10	06:14	19:38 (46)	06:41	19:37 (46)	07:11	07:48 (69)	07:41		17:46 (50)	07:16	48
	21:09	44	20:22 (46)	20:42	42	20:19 (46)	19:54	37	18:23 (50)	17:23	48
11	06:14	19:37 (46)	06:42	19:37 (46)	07:12	07:47 (69)	07:42		17:46 (50)	07:17	49
	21:08	45	20:22 (46)	20:41	40	20:17 (46)	19:53	39	18:25 (50)	17:22	49
12	06:15	19:37 (46)	06:43	19:38 (46)	07:13	07:47 (69)	07:43		17:45 (50)	07:18	49
	21:08	46	20:23 (46)	20:40	38	20:16 (46)	19:51	40	18:25 (50)	17:21	49
13	06:16	19:37 (46)	06:44	19:39 (46)	07:14	07:46 (69)	07:44		17:44 (50)	07:19	48
	21:07	47	20:24 (46)	20:38	36	20:15 (46)	19:49	41	18:25 (50)	17:20	48
14	06:16	19:37 (46)	06:45	19:40 (46)	07:15	07:46 (69)	07:45		17:43 (50)	07:20	49
	21:07	48	20:25 (46)	20:37	34	20:14 (46)	19:48	43	18:26 (50)	17:20	49
15	06:17	19:36 (46)	06:46	19:41 (46)	07:16	07:46 (69)	07:46		17:42 (50)	07:21	49
	21:06	48	20:24 (46)	20:36	32	20:13 (46)	19:46	44	18:26 (50)	17:19	49
16	06:18	19:36 (46)	06:46	19:42 (46)	07:17	07:44 (69)	07:47		17:41 (50)	07:23	48
	21:06	49	20:25 (46)	20:34	29	20:11 (46)	19:44	45	18:26 (50)	17:18	48
17	06:19	19:36 (46)	06:47	19:43 (46)	07:18	07:44 (69)	07:48		17:40 (50)	07:24	48
	21:05	50	20:26 (46)	20:33	26	20:09 (46)	19:43	46	18:26 (50)	17:17	48
18	06:20	19:36 (46)	06:48	19:45 (46)	07:19	07:44 (69)	07:49		17:40 (50)	07:25	48
	21:04	50	20:26 (46)	20:32	23	20:08 (46)	19:41	45	18:25 (50)	17:16	49
19	06:20	19:35 (46)	06:49	19:47 (46)	07:20	07:44 (69)	07:50		17:40 (50)	07:26	48
	21:04	51	20:26 (46)	20:30	19	20:06 (46)	19:39	45	18:25 (50)	17:16	49
20	06:21	19:35 (46)	06:50	19:51 (46)	07:21	07:44 (69)	07:51		17:40 (50)	07:27	49
	21:03	51	20:26 (46)	20:29	14	20:05 (46)	19:37	46	18:26 (50)	17:15	49
21	06:22	19:35 (46)	06:51		07:22	07:45 (69)	07:53		17:40 (50)	07:28	49
	21:02	52	20:27 (46)	20:27		08:43 (69)	18:48	45	18:25 (50)	17:14	49
22	06:23	19:35 (46)	06:52		07:22	07:45 (69)	07:54		17:40 (50)	07:30	49
	21:02	52	20:27 (46)	20:26		08:42 (69)	18:46	44	18:24 (50)	17:14	49
23	06:24	19:35 (46)	06:53		07:23	07:45 (69)	07:55		17:40 (50)	07:31	49
	21:01	53	20:28 (46)	20:24		08:41 (69)	18:45	42	18:22 (50)	17:13	49
24	06:25	19:35 (46)	06:54		07:24	07:46 (69)	07:56		17:40 (50)	07:32	49
	21:00	53	20:28 (46)	20:23		08:40 (69)	18:44	40	18:20 (50)	17:12	49
25	06:26	19:34 (46)	06:55	08:14 (69)	07:25	07:46 (69)	07:57		17:41 (50)	07:33	49
	20:59	53	20:27 (46)	20:21	16	08:30 (69)	18:29	39	18:20 (50)	17:12	49
26	06:26	19:34 (46)	06:56	08:10 (69)	07:26	07:47 (69)	07:58		17:41 (50)	07:34	49
	20:58	54	20:28 (46)	20:20	24	08:34 (69)	18:27	37	18:18 (50)	17:11	48
27	06:27	19:34 (46)	06:57	08:07 (69)	07:27	07:48 (69)	07:59		17:42 (50)	07:35	48
	20:57	54	20:28 (46)	20:18	29	08:36 (69)	18:26	35	18:17 (50)	17:11	48
28	06:28	19:34 (46)	06:58	08:05 (69)	07:28	07:49 (69)	08:00		17:42 (50)	07:36	48
	20:57	54	20:28 (46)	20:17	33	08:38 (69)	18:24	33	18:15 (50)	17:11	49
29	06:29	19:34 (46)	06:59	08:03 (69)	07:29	07:50 (69)	08:02		17:43 (50)	07:37	49
	20:56	54	20:28 (46)	20:15	37	08:40 (69)	18:22	42	18:14 (50)	17:10	49
30	06:30	19:34 (46)	07:00	08:01 (69)	07:30	07:52 (69)	08:03		17:45 (50)	07:38	49
	20:55	54	20:28 (46)	20:14	41	08:42 (69)	18:21	38	18:13 (50)	17:10	49
31	06:31	19:34 (46)	07:01	07:59 (69)					17:46 (50)		49
	20:54	54	20:28 (46)	20:12	44	08:43 (69)			18:12 (50)		48
Potential sun hours	458		427		375		345		299		289
Total, worst case	1486		1000		1653		1096		752		1502
Sun reduction	0.60		0.60		0.61		0.56		0.37		0.31
Oper. time red.	1.00		1.00		1.00		1.00		1.00		1.00
Wind dir. red.	0.58		0.59		0.60		0.66		0.59		0.58
Total reduction	0.35		0.35		0.37		0.37		0.22		0.18
Total, real	521		352		605		404		163		269

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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9/8/2014 11:36 AM / 5

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Calculated:

8/1/2014 4:19 PM/2.8.579

SHADOW - Calendar**Calculation:** 2014-07-31 Scioto Ridge SFA M122@89mShadow receptor: 34 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (1333)**Assumptions for shadow calculations**

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.42	0.44	0.51	0.56	0.60	0.60	0.60	0.61	0.56	0.37	0.31

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
356	387	449	404	342	343	460	428	569	1,075	971	861	805	495	443	370	8,758

Idle start wind speed: Cut in wind speed from power curve

	January	February	March	April	May	June
1	07:59 17:19	07:46 17:53	07:11 18:26	07:21 20:00	06:36 20:30	19:31 (-30) 20:08 (-30)
2	08:00 17:20	07:45 17:54	07:09 18:28	07:19 20:00	06:34 20:31	19:31 (-30) 20:09 (-30)
3	08:00 17:21	07:44 17:55	07:08 18:29	07:17 20:01	06:33 20:32	19:30 (-30) 20:10 (-30)
4	08:00 17:22	07:43 17:57	07:06 18:30	07:16 20:02	06:32 20:33	19:29 (-30) 20:10 (-30)
5	08:00 17:23	07:42 17:58	07:05 18:31	07:14 20:03	06:31 20:34	19:28 (-30) 20:11 (-30)
6	08:00 17:23	07:41 17:59	07:03 18:32	07:13 20:04	06:29 20:35	19:28 (-30) 20:12 (-30)
7	08:00 17:24	07:40 18:00	07:01 18:33	07:11 20:05	06:28 20:36	19:28 (-30) 20:13 (-30)
8	07:59 17:25	07:39 18:02	07:00 18:34	07:09 20:06	06:27 20:37	19:28 (-30) 20:13 (-30)
9	07:59 17:26	07:38 18:03	07:58 18:35	07:08 20:07	06:26 20:38	19:28 (-30) 20:14 (-30)
10	07:59 17:27	07:37 18:04	07:57 18:36	07:06 20:08	06:25 20:39	19:28 (-30) 20:14 (-30)
11	07:59 17:28	07:35 18:05	07:55 18:38	07:05 20:09	06:24 20:40	19:28 (-30) 20:14 (-30)
12	07:59 17:30	07:34 18:06	07:53 18:39	07:03 20:10	06:23 20:41	19:28 (-30) 20:14 (-30)
13	07:58 17:31	07:33 18:08	07:52 18:40	07:01 20:11	06:22 20:42	19:28 (-30) 20:13 (-30)
14	07:58 17:32	07:32 18:09	07:50 18:41	07:00 20:12	06:21 20:43	19:28 (-30) 20:13 (-30)
15	07:58 17:33	07:30 18:10	07:49 18:42	06:58 20:13	06:20 20:44	19:28 (-30) 20:13 (-30)
16	07:57 17:34	07:29 18:11	07:47 18:43	06:57 20:14	06:19 20:45	19:28 (-30) 20:13 (-30)
17	07:57 17:35	07:28 18:12	07:45 18:44	06:55 20:15	06:18 20:46	19:28 (-30) 20:12 (-30)
18	07:56 17:36	07:26 18:14	07:44 18:45	06:54 20:16	06:17 20:47	19:28 (-30) 20:12 (-30)
19	07:56 17:37	07:25 18:15	07:42 18:46	06:52 20:17	06:16 20:48	19:30 (-30) 20:12 (-30)
20	07:55 17:38	07:24 18:16	07:40 18:47	06:51 20:18	06:15 20:49	19:30 (-30) 20:12 (-30)
21	07:55 17:40	07:22 18:17	07:39 18:48	06:49 20:19	06:14 20:50	19:30 (-30) 20:11 (-30)
22	07:54 17:41	07:21 18:18	07:37 18:49	06:48 20:20	06:14 20:51	19:30 (-30) 20:11 (-30)
23	07:53 17:42	07:20 18:19	07:35 18:50	06:46 20:22	06:13 20:52	19:32 (-30) 20:11 (-30)
24	07:53 17:43	07:18 18:21	07:34 18:51	06:45 20:23	06:12 20:52	19:32 (-30) 20:10 (-30)
25	07:52 17:44	07:17 18:22	07:32 18:52	06:44 20:24	06:11 20:53	19:32 (-30) 20:09 (-30)
26	07:51 17:46	07:15 18:23	07:30 18:53	06:42 20:25	06:11 20:54	19:33 (-30) 20:10 (-30)
27	07:51 17:47	07:14 18:24	07:29 18:54	06:41 20:26	06:10 20:55	19:34 (-30) 20:09 (-30)
28	07:50 17:48	07:12 18:25	07:27 18:56	06:40 20:27	06:10 20:56	19:35 (-30) 20:09 (-30)
29	07:49 17:49		07:26 18:57	06:38 20:28	06:09 20:57	19:35 (-30) 20:08 (-30)
30	07:48 17:50		07:24 18:58	06:37 20:29	06:08 20:58	19:36 (-30) 20:08 (-30)
31	07:47 17:52		07:22 18:59	06:36 20:30	06:08 20:59	19:37 (-30) 20:07 (-30)
Potential sun hours	299	298	370	398	447	451
Total, worst case			395	1134	1266	243
Sun reduction			0.44	0.51	0.56	0.60
Oper. time red.			1.00	1.00	1.00	1.00
Wind dir. red.			0.58	0.62	0.58	0.58
Total reduction			0.26	0.32	0.33	0.35
Total, real			101	361	415	85

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
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Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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9/8/2014 11:36 AM / 7

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Calculated:

8/1/2014 4:19 PM/2.8.579

SHADOW - Calendar**Calculation:** 2014-07-31 Scioto Ridge SFA M122@89mShadow receptor: 53 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (1341)**Assumptions for shadow calculations**

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.42	0.44	0.51	0.56	0.60	0.60	0.60	0.61	0.56	0.37	0.31

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
356	387	449	404	342	343	460	428	569	1,075	971	861	805	495	443	370	8,758

Idle start wind speed: Cut in wind speed from power curve

	January		February		March		April		May		June			
1	07:59	15:17 (38)	07:46	15:25 (38)	07:11	16:10 (38)	07:21	18:54 (30)	06:36	06:08				
	17:19	89	16:46 (38)	17:53	93	16:58 (38)	18:26	11	16:21 (38)	20:00	44	19:38 (30)	20:30	20:59
2	07:59	15:17 (38)	07:45	15:25 (38)	07:09	16:19	18:53 (30)	06:34	06:07					
	17:20	89	16:46 (38)	17:54	93	16:58 (38)	18:28	20:00	47	19:40 (30)	20:31	21:00		
3	08:00	15:18 (38)	07:44	15:26 (38)	07:08	16:17	18:52 (30)	06:33	06:07					
	17:21	89	16:47 (38)	17:55	92	16:58 (38)	18:29	20:01	48	19:40 (30)	20:32	21:00		
4	08:00	15:18 (38)	07:43	15:27 (38)	07:06	16:16	18:52 (30)	06:32	06:06					
	17:22	89	16:47 (38)	17:57	91	16:58 (38)	18:30	20:02	50	19:42 (30)	20:33	21:01		
5	08:00	15:18 (38)	07:42	15:27 (38)	07:05	16:14	18:49 (30)	06:31	06:06					
	17:23	90	16:48 (38)	17:58	91	16:58 (38)	18:31	20:03	52	19:42 (30)	20:34	21:02		
6	08:00	15:18 (38)	07:41	15:28 (38)	07:03	16:13	18:49 (30)	06:29	06:06					
	17:24	90	16:48 (38)	17:59	90	16:58 (38)	18:32	20:04	53	19:42 (30)	20:35	21:03		
7	08:00	15:18 (38)	07:40	15:29 (38)	07:01	16:11	18:49 (30)	06:28	06:05					
	17:25	90	16:48 (38)	18:00	89	16:58 (38)	18:33	20:05	54	19:43 (30)	20:36	21:03		
8	07:59	15:19 (38)	07:39	15:30 (38)	08:00	16:09	18:48 (30)	06:27	06:05					
	17:26	90	16:49 (38)	18:02	87	16:57 (38)	19:34	20:06	54	19:42 (30)	20:37	21:04		
9	07:59	15:19 (38)	07:38	15:31 (38)	07:58	16:08	18:48 (30)	06:26	06:05					
	17:26	91	16:50 (38)	18:03	86	16:57 (38)	19:35	20:07	55	19:43 (30)	20:38	21:04		
10	07:59	15:19 (38)	07:37	15:31 (38)	07:57	16:06	18:48 (30)	06:25	06:05					
	17:28	92	16:51 (38)	18:04	85	16:56 (38)	19:36	20:08	54	19:42 (30)	20:39	21:05		
11	07:59	15:19 (38)	07:35	15:32 (38)	07:55	16:05	18:47 (30)	06:24	06:05					
	17:29	92	16:51 (38)	18:05	84	16:56 (38)	19:38	20:09	54	19:41 (30)	20:40	21:05		
12	07:59	15:20 (38)	07:34	15:33 (38)	07:53	16:03	18:47 (30)	06:23	06:05					
	17:30	92	16:52 (38)	18:06	82	16:55 (38)	19:39	20:10	55	19:42 (30)	20:41	21:06		
13	07:58	15:20 (38)	07:33	15:34 (38)	07:52	16:01	18:47 (30)	06:22	06:05					
	17:31	93	16:53 (38)	18:08	81	16:55 (38)	19:40	20:11	54	19:41 (30)	20:42	21:07		
14	07:58	15:20 (38)	07:32	15:34 (38)	07:50	16:00	18:47 (30)	06:21	06:04					
	17:32	93	16:53 (38)	18:09	79	16:53 (38)	19:41	20:12	54	19:41 (30)	20:43	21:07		
15	07:58	15:20 (38)	07:30	15:36 (38)	07:49	16:58	18:47 (30)	06:20	06:04					
	17:33	94	16:54 (38)	18:10	77	16:53 (38)	19:42	20:13	53	19:40 (30)	20:44	21:07		
16	07:57	15:20 (38)	07:29	15:37 (38)	07:47	16:57	18:47 (30)	06:19	06:04					
	17:34	93	16:53 (38)	18:11	75	16:53 (38)	19:43	20:14	53	19:40 (30)	20:45	21:08		
17	07:57	15:21 (38)	07:28	15:38 (38)	07:45	16:55	18:47 (30)	06:18	06:05					
	17:35	94	16:55 (38)	18:12	73	16:51 (38)	19:44	20:15	51	19:38 (30)	20:46	21:08		
18	07:56	15:21 (38)	07:26	15:40 (38)	07:44	16:54	18:48 (30)	06:17	06:05					
	17:36	94	16:55 (38)	18:14	70	16:50 (38)	19:45	20:16	50	19:38 (30)	20:47	21:09		
19	07:56	15:21 (38)	07:25	15:41 (38)	07:42	16:52	18:48 (30)	06:16	06:05					
	17:37	95	16:56 (38)	18:15	68	16:49 (38)	19:46	20:17	49	19:37 (30)	20:48	21:09		
20	07:55	15:21 (38)	07:24	15:42 (38)	07:40	16:51	18:49 (30)	06:15	06:05					
	17:39	95	16:56 (38)	18:16	65	16:47 (38)	19:47	20:18	47	19:36 (30)	20:49	21:09		
21	07:55	15:21 (38)	07:22	15:44 (38)	07:39	16:49	18:49 (30)	06:15	06:05					
	17:40	95	16:56 (38)	18:17	62	16:46 (38)	19:48	20:19	46	19:35 (30)	20:50	21:09		
22	07:54	15:22 (38)	07:21	15:46 (38)	07:37	16:48	18:50 (30)	06:14	06:05					
	17:41	95	16:57 (38)	18:18	58	16:44 (38)	19:49	20:20	44	19:34 (30)	20:51	21:10		
23	07:53	15:22 (38)	07:20	15:48 (38)	07:35	16:47	18:52 (30)	06:13	06:05					
	17:42	95	16:57 (38)	18:20	55	16:43 (38)	19:50	20:22	41	19:33 (30)	20:51	21:10		
24	07:53	15:22 (38)	07:18	15:50 (38)	07:34	16:45	18:52 (30)	06:12	06:06					
	17:43	95	16:57 (38)	18:21	50	16:40 (38)	19:51	20:23	39	19:31 (30)	20:52	21:10		
25	07:52	15:23 (38)	07:17	15:53 (38)	07:32	19:11 (30)	16:44	18:53 (30)	06:12	06:06				
	17:44	95	16:58 (38)	18:22	45	16:38 (38)	19:52	17	19:28 (30)	20:24	37	19:30 (30)	20:53	21:10
26	07:51	15:23 (38)	07:15	15:56 (38)	07:31	19:07 (30)	16:42	18:55 (30)	06:11	06:06				
	17:46	95	16:58 (38)	18:23	40	16:36 (38)	19:53	24	19:31 (30)	20:25	34	19:29 (30)	20:54	21:10
27	07:50	15:23 (38)	07:14	15:59 (38)	07:29	19:04 (30)	16:41	18:56 (30)	06:10	06:07				
	17:47	95	16:58 (38)	18:24	33	16:32 (38)	19:54	30	19:34 (30)	20:26	30	19:26 (30)	20:55	21:10
28	07:50	15:24 (38)	07:12	16:03 (38)	07:27	19:01 (30)	16:40	18:58 (30)	06:10	06:07				
	17:48	94	16:58 (38)	18:25	25	16:28 (38)	19:56	33	19:34 (30)	20:27	26	19:24 (30)	20:56	21:10
29	07:49	15:24 (38)			07:26	18:59 (30)	16:38	19:01 (30)	06:09	06:08				
	17:49	94	16:58 (38)		19:57	36	19:35 (30)	20:28	21	19:22 (30)	20:57	21:10		
30	07:48	15:24 (38)			07:24	18:58 (30)	16:37	19:04 (30)	06:09	06:08				
	17:51	94	16:58 (38)		19:58	39	19:37 (30)	20:29	14	19:18 (30)	20:57	21:10		
31	07:47	15:25 (38)			07:22	18:56 (30)								
	17:52	93	16:58 (38)		19:59	41	19:37 (30)							
Potential sun hours	299		298		370		398		447		450			
Total, worst case	2874		2019		231		1363							
Sun reduction	0.36		0.42		0.44		0.51							
Oper. time red.	1.00		1.00		1.00		1.00							
Wind dir. red.	0.69		0.69		0.61		0.61							
Total reduction	0.25		0.29		0.27		0.31							
Total, real	722		592		63		426							

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	(WTG causing flicker first time)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
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Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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EDR

217 Montgomery St.
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

8/1/2014 4:19 PM/2.8.579

SHADOW - Calendar

Calculation: 2014-07-31 Scioto Ridge SFA M122@89mShadow receptor: 53 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (1341)

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.42	0.44	0.51	0.56	0.60	0.60	0.60	0.61	0.56	0.37	0.31

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
356	387	449	404	342	343	460	428	569	1,075	971	861	805	495	443	370	8,758

Idle start wind speed: Cut in wind speed from power curve

	July	August	September	October	November	December
1	06:08 21:10	06:32 20:53	07:02 20:11	18:47 (30) 19:19	07:05 17:33	15:00 (38) 17:10
2	06:09 21:10	06:33 20:52	07:03 20:09	18:46 (30) 19:17	07:06 17:32	16:26 (38) 17:09
3	06:09 21:10	06:34 20:50	07:04 20:07	18:45 (30) 19:16	07:07 17:31	14:59 (38) 17:09
4	06:10 21:10	06:35 20:49	07:05 20:06	18:45 (30) 19:14	07:08 17:30	14:59 (38) 17:09
5	06:11 21:10	06:36 20:48	07:06 20:04	18:45 (30) 19:13	07:10 17:29	14:58 (38) 17:09
6	06:11 21:10	06:37 20:47	07:07 20:02	18:45 (30) 19:11	07:11 17:27	14:57 (38) 17:09
7	06:12 21:09	06:38 20:46	07:08 20:01	18:45 (30) 19:09	07:12 17:26	14:57 (38) 17:09
8	06:12 21:09	06:39 20:45	07:09 19:58	18:46 (30) 19:08	07:13 17:25	14:57 (38) 17:09
9	06:13 21:09	06:40 20:43	07:10 19:56	18:46 (30) 19:06	07:14 17:24	14:56 (38) 17:09
10	06:14 21:08	06:41 20:42	07:11 19:54	18:46 (30) 19:05	07:16 17:23	14:56 (38) 17:09
11	06:14 21:08	06:42 20:41	07:12 19:53	18:47 (30) 19:03	07:17 17:22	14:56 (38) 17:09
12	06:15 21:08	06:43 20:40	19:18 (30) 19:21 (30)	07:13 19:51	07:18 17:21	14:56 (38) 17:09
13	06:16 21:07	06:44 20:38	19:11 (30) 19:27 (30)	07:14 19:49	16:40 (38) 17:20	14:56 (38) 17:09
14	06:17 21:07	06:45 20:37	19:08 (30) 19:30 (30)	07:15 19:48	16:34 (38) 17:20	14:56 (38) 17:09
15	06:17 21:06	06:46 20:36	19:05 (30) 19:33 (30)	07:16 19:46	16:30 (38) 17:19	14:56 (38) 17:10
16	06:18 21:06	06:47 20:34	19:03 (30) 19:34 (30)	07:17 19:44	16:26 (38) 17:18	14:56 (38) 17:10
17	06:19 21:05	06:48 20:33	19:02 (30) 19:36 (30)	07:18 19:43	16:23 (38) 17:17	14:56 (38) 17:10
18	06:20 21:04	06:49 20:32	18:59 (30) 19:36 (30)	07:19 19:41	16:21 (38) 17:16	14:56 (38) 17:10
19	06:20 21:04	06:49 20:30	18:57 (30) 19:37 (30)	07:20 19:39	16:18 (38) 17:14	14:56 (38) 17:11
20	06:21 21:03	06:50 20:29	18:56 (30) 19:38 (30)	07:21 19:37	16:17 (38) 17:16	14:57 (38) 17:11
21	06:22 21:02	06:51 20:27	18:55 (30) 19:39 (30)	07:22 19:36	16:14 (38) 17:17	14:57 (38) 17:12
22	06:23 21:02	06:52 20:26	18:54 (30) 19:40 (30)	07:23 19:34	16:12 (38) 17:18	14:57 (38) 17:12
23	06:24 21:01	06:53 20:24	18:53 (30) 19:40 (30)	07:23 19:32	16:11 (38) 17:19	14:57 (38) 17:13
24	06:25 21:00	06:54 20:23	18:52 (30) 19:41 (30)	07:24 19:31	16:09 (38) 17:20	14:58 (38) 17:13
25	06:26 20:59	06:55 20:21	18:51 (30) 19:41 (30)	07:25 19:29	16:07 (38) 17:21	14:59 (38) 17:14
26	06:27 20:58	06:56 20:20	18:50 (30) 19:41 (30)	07:26 19:27	16:07 (38) 17:22	14:59 (38) 17:15
27	06:27 20:57	06:57 20:18	18:49 (30) 19:42 (30)	07:27 19:26	16:05 (38) 17:23	14:59 (38) 17:15
28	06:28 20:57	06:58 20:17	18:49 (30) 19:42 (30)	07:28 19:24	16:04 (38) 17:23	15:00 (38) 17:16
29	06:29 20:56	06:59 20:15	18:48 (30) 19:42 (30)	07:29 19:22	16:03 (38) 17:24	15:00 (38) 17:17
30	06:30 20:55	07:00 20:14	18:48 (30) 19:42 (30)	07:30 19:21	16:02 (38) 17:25	15:01 (38) 17:17
31	06:31 20:54	07:01 20:12	18:47 (30) 19:42 (30)	07:31 19:21	16:01 (38) 17:26	15:01 (38) 17:18
Potential sun hours	458	427	375	345	299	289
Total, worst case		809	799	1163	2786	2735
Sun reduction		0.60	0.61	0.56	0.37	0.31
Oper. time red.		1.00	1.00	1.00	1.00	1.00
Wind dir. red.		0.61	0.61	0.69	0.69	0.69
Total reduction		0.37	0.37	0.39	0.26	0.22
Total, real		298	299	454	719	591

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
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Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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Licensed user:

EDR

217 Montgomery St.
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

8/1/2014 4:19 PM/2.8.579

SHADOW - Calendar**Calculation:** 2014-07-31 Scioto Ridge SFA M122@89mShadow receptor: 54 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (1342)**Assumptions for shadow calculations**

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.42	0.44	0.51	0.56	0.60	0.60	0.60	0.61	0.56	0.37	0.31

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
356	387	449	404	342	343	460	428	569	1,075	971	861	805	495	443	370	8,758

Idle start wind speed: Cut in wind speed from power curve

	January	February	March	April	May	June
1	07:59 17:19	07:46 17:53	07:11 18:26	07:21 20:00	06:36 20:30	19:12 (38) 20:01 (38)
2	07:59 17:20	07:45 17:54	07:09 18:28	07:19 20:00	06:34 20:31	19:12 (38) 20:01 (38)
3	08:00 17:21	07:44 17:55	07:08 18:29	07:17 20:01	06:33 20:32	19:12 (38) 20:01 (38)
4	08:00 17:22	07:43 17:57	07:06 18:30	07:16 20:02	06:32 20:33	19:13 (38) 20:01 (38)
5	08:00 17:23	07:42 17:58	07:05 18:31	07:14 20:03	06:31 20:34	19:12 (38) 20:00 (38)
6	08:00 17:24	07:41 17:59	07:03 18:32	07:13 20:04	06:29 20:35	19:13 (38) 20:12 (30)
7	07:59 17:25	07:40 18:00	07:01 18:33	07:11 20:05	06:28 20:36	19:13 (38) 20:13 (30)
8	07:59 17:25	07:39 18:02	08:00 19:34	07:09 20:06	06:27 20:37	19:14 (38) 20:14 (30)
9	07:59 17:26	07:38 18:03	07:58 19:35	07:08 20:07	06:26 20:38	19:14 (38) 20:16 (30)
10	07:59 17:28	07:37 18:04	07:57 19:36	07:06 20:08	06:25 20:39	19:15 (38) 20:16 (30)
11	07:59 17:29	07:35 18:05	07:55 19:38	07:05 20:09	06:24 20:40	19:16 (38) 20:17 (30)
12	07:59 17:30	07:34 18:06	07:53 19:39	07:03 20:10	06:23 20:41	19:17 (38) 20:18 (30)
13	07:58 17:31	07:33 18:08	07:52 19:40	07:01 20:11	06:22 20:42	19:17 (38) 20:19 (30)
14	07:58 17:32	07:32 18:09	07:50 19:41	07:00 20:12	06:21 20:43	19:18 (38) 20:20 (30)
15	07:58 17:33	07:30 18:10	07:49 19:42	06:58 20:13	06:20 20:44	19:19 (38) 20:21 (30)
16	07:57 17:34	07:29 18:11	07:47 19:43	06:57 20:14	06:19 20:45	19:20 (38) 20:22 (30)
17	07:57 17:35	07:28 18:12	07:45 19:44	06:55 20:15	06:18 20:46	19:21 (38) 20:22 (30)
18	07:56 17:36	07:26 18:14	07:44 19:45	06:54 20:16	06:17 20:47	19:23 (38) 20:23 (30)
19	07:56 17:37	07:25 18:15	07:42 19:46	06:52 20:17	06:16 20:48	19:25 (38) 20:25 (30)
20	07:55 17:39	07:24 18:16	07:40 19:47	06:51 20:18	06:15 20:49	19:27 (38) 20:25 (30)
21	07:55 17:40	07:22 18:17	07:39 19:48	06:49 20:19	06:15 20:50	19:29 (38) 20:26 (30)
22	07:54 17:41	07:21 18:18	07:37 19:49	06:48 20:20	06:14 20:51	19:33 (38) 20:27 (30)
23	07:53 17:42	07:20 18:20	07:35 19:50	06:47 20:21	06:13 20:51	19:35 (30) 20:28 (30)
24	07:53 17:43	07:18 18:21	07:34 19:51	06:45 20:23	06:12 20:52	19:55 (30) 20:28 (30)
25	07:52 17:44	07:17 18:22	07:32 19:52	06:44 20:24	06:12 20:53	19:55 (30) 20:27 (30)
26	07:51 17:46	07:15 18:23	07:30 19:53	06:42 20:25	06:11 20:54	19:56 (30) 20:28 (30)
27	07:50 17:47	07:14 18:24	07:29 19:54	06:41 20:26	06:10 20:55	19:56 (30) 20:28 (30)
28	07:50 17:48	07:12 18:25	07:27 19:56	06:40 20:27	06:10 20:56	19:57 (30) 20:28 (30)
29	07:49 17:49		07:26 19:57	06:38 20:28	06:09 20:57	19:56 (30) 20:27 (30)
30	07:48 17:51		07:24 19:58	06:37 20:29	06:09 20:57	19:57 (30) 20:28 (30)
31	07:47 17:52		07:22 19:59	06:36 20:30	06:08 20:58	19:57 (30) 20:27 (30)
Potential sun hours	299	298	370	398	447	450
Total, worst case				752	1450	670
Sun reduction				0.51	0.56	0.60
Oper. time red.				1.00	1.00	1.00
Wind dir. red.				0.58	0.58	0.58
Total reduction				0.30	0.33	0.35
Total, real				224	473	234

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
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Project:

2014-07-31_Scioto Ridge SFA_M122_89m

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(315) 471 0688

Calculated:

8/1/2014 4:19 PM/2.8.579

SHADOW - Calendar**Calculation:** 2014-07-31 Scioto Ridge SFA M122@89mShadow receptor: 54 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (1342)**Assumptions for shadow calculations**

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.42	0.44	0.51	0.56	0.60	0.60	0.60	0.61	0.56	0.37	0.31

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
356	387	449	404	342	343	460	428	569	1,075	971	861	805	495	443	370	8,758

Idle start wind speed: Cut in wind speed from power curve

July		August		September		October	November	December		
1	06:08	20:08 (30)	06:32	19:27 (38)	07:02	07:31	07:05	07:39		
	21:10	22	20:30 (30)	20:53	59	20:29 (30)	20:11	19:19	17:33	17:10
2	06:09	20:07 (30)	06:33	19:26 (38)	07:03	07:32	07:06	07:40		
	21:10	23	20:30 (30)	20:51	59	20:28 (30)	20:09	19:17	17:32	17:09
3	06:09	20:07 (30)	06:34	19:25 (38)	07:04	07:33	07:07	07:41		
	21:10	24	20:31 (30)	20:50	58	20:26 (30)	20:07	19:16	17:31	17:09
4	06:10	20:07 (30)	06:35	19:24 (38)	07:05	07:34	07:08	07:42		
	21:10	24	20:31 (30)	20:49	58	20:25 (30)	20:06	19:14	17:30	17:09
5	06:11	20:07 (30)	06:36	19:23 (38)	07:06	07:35	07:10	07:43		
	21:10	25	20:32 (30)	20:48	56	20:24 (30)	20:04	19:13	17:29	17:09
6	06:11	20:06 (30)	06:37	19:23 (38)	07:07	07:37	07:11	07:44		
	21:10	26	20:32 (30)	20:47	54	20:23 (30)	20:02	19:11	17:27	17:09
7	06:12	20:07 (30)	06:38	19:22 (38)	07:08	07:38	07:12	07:45		
	21:09	26	20:33 (30)	20:46	47	20:09 (38)	20:01	19:09	17:26	17:09
8	06:12	20:07 (30)	06:39	19:22 (38)	07:09	07:39	07:13	07:46		
	21:09	27	20:34 (30)	20:45	47	20:09 (38)	19:58	19:08	17:25	17:09
9	06:13	20:06 (30)	06:40	19:21 (38)	07:10	07:40	07:14	07:47		
	21:09	28	20:34 (30)	20:43	49	20:10 (38)	19:56	19:06	17:24	17:09
10	06:14	20:06 (30)	06:41	19:21 (38)	07:11	07:41	07:15	07:48		
	21:08	29	20:35 (30)	20:42	49	20:10 (38)	19:54	19:04	17:23	17:09
11	06:14	20:06 (30)	06:42	19:21 (38)	07:12	07:42	07:17	07:49		
	21:08	30	20:36 (30)	20:41	49	20:10 (38)	19:53	19:03	17:22	17:09
12	06:15	20:06 (30)	06:43	19:20 (38)	07:13	07:43	07:18	07:49		
	21:08	29	20:35 (30)	20:40	50	20:10 (38)	19:51	19:01	17:21	17:09
13	06:16	20:06 (30)	06:44	19:20 (38)	07:14	07:44	07:19	07:50		
	21:07	30	20:36 (30)	20:38	50	20:10 (38)	19:49	19:00	17:20	17:09
14	06:17	20:06 (30)	06:45	19:20 (38)	07:15	07:45	07:20	07:51		
	21:07	31	20:37 (30)	20:37	50	20:10 (38)	19:48	18:58	17:20	17:09
15	06:17	20:05 (30)	06:46	19:20 (38)	07:16	07:46	07:21	07:52		
	21:06	31	20:36 (30)	20:36	50	20:10 (38)	19:46	18:57	17:19	17:10
16	06:18	20:05 (30)	06:47	19:20 (38)	07:17	07:47	07:23	07:52		08:55 (73)
	21:06	32	20:37 (30)	20:34	49	20:09 (38)	19:44	18:55	17:18	17:10 5 09:00 (73)
17	06:19	20:05 (30)	06:48	19:20 (38)	07:18	07:48	07:24	07:53		08:55 (73)
	21:05	32	20:37 (30)	20:33	49	20:09 (38)	19:43	18:54	17:17	17:10 7 09:02 (73)
18	06:20	20:05 (30)	06:48	19:19 (38)	07:19	07:49	07:25	07:54		08:55 (73)
	21:04	33	20:38 (30)	20:32	49	20:08 (38)	19:41	18:52	17:16	17:10 9 09:04 (73)
19	06:20	20:05 (30)	06:49	19:19 (38)	07:20	07:50	07:26	07:54		08:54 (73)
	21:04	32	20:37 (30)	20:30	47	20:06 (38)	19:39	18:51	17:16	17:11 10 09:04 (73)
20	06:21	20:05 (30)	06:50	19:19 (38)	07:21	07:51	07:27	07:55		08:55 (73)
	21:03	33	20:38 (30)	20:29	46	20:05 (38)	19:37	18:49	17:15	17:11 10 09:05 (73)
21	06:22	20:05 (30)	06:51	19:20 (38)	07:22	07:52	07:28	07:55		08:55 (73)
	21:02	32	20:37 (30)	20:27	44	20:04 (38)	19:36	18:48	17:14	17:12 10 09:05 (73)
22	06:23	19:41 (38)	06:52	19:20 (38)	07:22	07:54	07:29	07:56		08:56 (73)
	21:02	43	20:37 (30)	20:26	42	20:02 (38)	19:34	18:46	17:14	17:12 10 09:06 (73)
23	06:24	19:38 (38)	06:53	19:21 (38)	07:23	07:55	07:31	07:56		08:56 (73)
	21:01	48	20:36 (30)	20:24	40	20:01 (38)	19:32	18:45	17:13	17:13 10 09:06 (73)
24	06:25	19:37 (38)	06:54	19:21 (38)	07:24	07:56	07:32	07:57		08:57 (73)
	21:00	50	20:36 (30)	20:23	38	19:59 (38)	19:31	18:44	17:13	17:13 10 09:07 (73)
25	06:26	19:34 (38)	06:55	19:22 (38)	07:25	07:57	07:33	07:57		08:58 (73)
	20:59	53	20:34 (30)	20:21	36	19:58 (38)	19:29	18:42	17:12	17:14 9 09:07 (73)
26	06:26	19:33 (38)	06:56	19:23 (38)	07:26	07:58	07:34	07:58		08:58 (73)
	20:58	55	20:33 (30)	20:20	34	19:57 (38)	19:27	18:41	17:12	17:14 8 09:06 (73)
27	06:27	19:32 (38)	06:57	19:24 (38)	07:27	07:59	07:35	07:58		09:01 (73)
	20:57	56	20:33 (30)	20:18	31	19:55 (38)	19:26	18:40	17:11	17:15 6 09:07 (73)
28	06:28	19:30 (38)	06:58	19:25 (38)	07:28	08:00	07:36	07:58		09:03 (73)
	20:56	58	20:32 (30)	20:17	29	19:54 (38)	19:24	18:38	17:11	17:16 2 09:05 (73)
29	06:29	19:29 (38)	06:59	19:27 (38)	07:29	08:02	07:37	07:59		
	20:56	59	20:31 (30)	20:15	25	19:52 (38)	19:22	18:37	17:10	17:17
30	06:30	19:29 (38)	07:00	19:29 (38)	07:30	08:03	07:38	07:59		
	20:55	59	20:30 (30)	20:14	22	19:51 (38)	19:21	18:36	17:10	17:17
31	06:31	19:28 (38)	07:01	19:33 (38)		08:04		07:59		
	20:54	59	20:29 (30)	20:12	16	19:49 (38)		18:34		17:18
Potential sun hours	458		427		375		345	299		289
Total, worst case	1139		1382							106
Sun reduction	0.60		0.60							0.31
Oper. time red.	1.00		1.00							1.00
Wind dir. red.	0.58		0.58							0.58
Total reduction	0.35		0.35							0.18
Total, real	398		483							19

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
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Project:

2014-07-31_Scioto Ridge SFA_M122_89m

Printed/Page

9/8/2014 11:36 AM / 11

Licensed user:

EDR

217 Montgomery St.
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

8/1/2014 4:19 PM/2.8.579

SHADOW - Calendar**Calculation:** 2014-07-31 Scioto Ridge SFA_M122@89mShadow receptor: 136 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (1352)**Assumptions for shadow calculations**

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.42	0.44	0.51	0.56	0.60	0.60	0.60	0.61	0.56	0.37	0.31

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
356	387	449	404	342	343	460	428	569	1,075	971	861	805	495	443	370	8,758

Idle start wind speed: Cut in wind speed from power curve

	January	February	March	April	May	June
1	07:59 17:19	15:57 (174) 16:31 (174)	07:46 17:53	08:14 (187) 18:26	07:30 (196) 19:59	06:07 20:29
2	07:59 17:20	15:57 (174) 16:31 (174)	07:45 17:54	08:13 (187) 18:27	07:28 (196) 20:00	06:07 20:59
3	07:59 17:21	15:58 (174) 16:31 (174)	07:44 17:55	08:13 (187) 18:28	07:27 (196) 20:00	06:07 21:00
4	07:59 17:21	15:59 (174) 16:31 (174)	07:43 17:56	08:13 (187) 18:29	07:25 (196) 20:01	06:06 21:01
5	07:59 17:22	16:00 (174) 16:31 (174)	07:42 17:58	08:12 (187) 18:31	07:23 (196) 20:02	06:06 21:01
6	07:59 17:23	16:01 (174) 16:31 (174)	07:41 17:59	08:12 (187) 18:32	07:22 (196) 20:04	06:06 21:02
7	07:59 17:24	16:02 (174) 16:31 (174)	07:40 18:00	08:11 (187) 18:33	07:20 (196) 20:05	06:05 21:03
8	07:59 17:25	16:03 (174) 16:31 (174)	07:39 18:01	08:11 (187) 18:34	07:19 (196) 20:06	06:05 21:03
9	07:59 17:26	16:04 (174) 16:30 (174)	07:37 18:03	08:11 (187) 18:35	07:17 (196) 20:07	06:05 21:04
10	07:59 17:27	16:05 (174) 16:30 (174)	07:36 18:04	08:11 (187) 18:36	07:16 (196) 20:08	06:05 21:05
11	07:58 17:28	16:07 (174) 16:30 (174)	07:35 18:05	08:11 (187) 18:37	07:14 (196) 20:09	06:04 21:05
12	07:58 17:29	16:09 (174) 16:29 (174)	07:34 18:06	08:10 (187) 18:38	07:13 (196) 20:10	06:04 21:06
13	07:58 17:30	16:10 (174) 16:28 (174)	07:33 18:07	08:11 (187) 18:39	07:11 (196) 20:11	06:04 21:06
14	07:58 17:32	16:13 (174) 16:26 (174)	07:31 18:09	08:11 (187) 18:40	07:09 (196) 20:12	06:04 21:07
15	07:57 17:33	16:16 (174) 16:23 (174)	07:30 18:10	08:11 (187) 18:42	07:07 (196) 20:13	06:04 21:07
16	07:57 17:34	16:17 (174) 16:24 (174)	07:29 18:11	08:11 (187) 18:43	06:58 20:14	06:04 21:07
17	07:56 17:35	16:18 (174) 16:25 (174)	07:27 18:12	08:11 (187) 18:44	06:55 20:15	06:04 21:08
18	07:56 17:36	16:19 (174) 16:26 (174)	07:26 18:13	08:12 (187) 18:45	06:54 20:16	06:04 21:08
19	07:55 17:37	16:20 (174) 16:27 (174)	07:25 18:14	08:12 (187) 18:46	06:52 20:17	06:05 21:08
20	07:55 17:38	16:21 (174) 16:28 (174)	07:24 18:15	08:13 (187) 18:47	06:51 20:18	06:05 21:09
21	07:54 17:39	16:22 (174) 16:29 (174)	07:23 18:16	08:12 (187) 18:48	06:49 20:19	06:05 21:09
22	07:54 17:41	16:23 (174) 16:30 (174)	07:22 18:17	08:13 (187) 18:49	06:48 20:20	06:05 21:09
23	07:53 17:42	16:24 (174) 16:31 (174)	07:21 18:18	08:14 (187) 18:50	06:46 20:21	06:05 21:09
24	07:52 17:43	16:25 (174) 16:32 (174)	07:20 18:19	08:15 (187) 18:51	06:45 20:22	06:06 21:10
25	07:52 17:44	16:26 (174) 16:33 (174)	07:19 18:20	08:16 (187) 18:52	06:43 20:23	06:06 21:10
26	07:51 17:45	16:27 (174) 16:34 (174)	07:18 18:21	08:17 (187) 18:53	06:42 20:24	06:06 21:10
27	07:50 17:47	16:28 (174) 16:35 (174)	07:17 18:22	08:18 (187) 18:54	06:41 20:25	06:07 21:10
28	07:49 17:48	16:29 (174) 16:36 (174)	07:16 18:23	08:19 (187) 18:55	06:39 20:26	06:07 21:10
29	07:48 17:49	16:30 (174) 16:37 (174)	07:15 18:24	08:20 (187) 18:56	06:38 20:27	06:07 21:10
30	07:48 17:50	16:31 (174) 16:38 (174)	07:14 18:25	08:21 (187) 18:57	06:37 20:28	06:08 21:10
31	07:47 17:52	16:32 (174) 16:39 (174)	07:13 18:26	08:22 (187) 18:58	06:36 20:29	06:08 21:10
Potential sun hours	299	298	370	398	447	450
Total, worst case	904	2042	419			
Sun reduction	0.36	0.42	0.44			
Oper. time red.	1.00	1.00	1.00			
Wind dir. red.	0.62	0.59	0.58			
Total reduction	0.23	0.25	0.26			
Total, real	204	511	108			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
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Commission of Ohio Docketing Information System on

9/11/2014 4:09:01 PM

in

Case No(s). 14-1557-EL-BGA

Summary: Application to Amend -- Exhibit C (Part 5 of 6) electronically filed by Mrs. Gretchen L. Petrucci on behalf of Hardin Wind LLC