



BORDER WINDS ENERGY PROJECT

WEEKLY PROJECT REPORT

Weekly report no:	53
Report for week period ending COB Friday:	07/31/15
Calendar week no:	31

Executive Summary

Week's Highlights

- Glen Davis, CEO, visited the Border Winds project on July 30, 2015;
- The site received 0.36" and 0.26" of rain on July 26 & July 28, 2015;
- RES has received the water quality test results from the samples taken at the O&M building water system; the results show that the water is potable as per the ND Health Department;
- MPT testing at Substation was completed and RES has received the documentation from Siemens;
- Completed one (1) mechanical completion walk down at T24 and started T45.

Week's Key Issues

- One minor injury occurred while cleaning a turbine component and two property damage incidents occurred involving the WTG component delivery trucks;
- Improper storage of oil buckets at the laydown yard was observed. The issue was discussed with the erection crew and it was addressed immediately;
- Wind conditions have resulted in delays to the WTG component deliveries and offload sequence. Partial components are being delivered to multiple sites as opposed to two full WTGs a day;
- WWS production in tower wiring needs to improve. Additional manpower has been requested and production is expected to increase in the next period.



- **Safety**

Type	Lost Time	Recordable Injury (Medical Aid)	Minor Injury (First Aid)	Equipment Property Damage	Near Miss	Safety Walks
Current Period	0	0	1	2	0	6
Project To Date	1	3	13	38	83	614

*Full description of week's Safety Log plus the formulas for TRIR and Safety index calculation in Exhibit 2.

TRIR: Previous Week = 2.46 / Current week = 2.33

RES Safety Index: Previous Week = 0.62 / Current week = 0.65

Weeks Highlights:

- Ricky Montemayor joined the Border Winds team as the site safety supervisor.
- The safety team observed that the JHAs on site contain good details and the hazards are being communicated amongst all workers in the crew. Moreover, the crew approaches the site visitors with the JHAs and provides detailed explanation to ensure they are aware of the hazards.

Weeks Issues:

- All employees on site were reminded to avoid talking on the phone while driving, since it is against the RES policy and considered a major safety violation.
- One minor injury last week for an employee who slipped and fell inside a WTG component section while cleaning the component.
- Two property damage incidents at T4, and T73:
 - Damage to a blade at T4 where the ATI delivery truck ran into the blade. The blade will require replacement.
 - A skid steer backed into a truck at T73 while placing mats; the truck had pulled into an active construction work zone without making eye contact with the operator and waiting to be waved through.

Project Work Hours:

- Weekly Man-hours: 16,755
- Total Project Man-hours: 341,718
- Hours since Last Recordable Injury: 72,090



Environmental

Type	Major Incident	Minor Incident	Near Miss	Observation
Current Period	0	1	1	4
Project to Date	0	75	7	61

*Full description of week's Environmental Report and Rolling Incident Score formula in Exhibit 2.

Rolling Incident Score: Previous week: 0.67 / Current Week: 0.66

Week's Highlights:

- The site received 0.36" and 0.26" of rain on July 26 & July 28, 2015.
- Replaced the contaminated soil bin, the new bin has a thicker liner to avoid any leaks.
- The civil crew completed the silt fence repaired at the substation.

Week's Issues:

- Improper storage of oil buckets at the laydown yard was observed. The issue was discussed with the erection crew and was addressed immediately.
- Observed a minor leak (1 gallon) from an unknown source at the laydown yard. The leak was contained and disposed properly.

Quality

Type	RES Issued NCRs			Client Issued NCRs		
	Issued	Open	Closed	Issued	Open	Closed
Current Period	0	0	0	0	0	0
PTD	4	1	3	9	3	6

*Full description of week’s Quality Report can be found in Exhibit 4

NCRs Issued Details: A response to NCR-2014-038 and NCR-2015-016 was sent back to Xcel for approval.

RES CPARs Issued Details:

Week’s Highlights:

- Building & Earth: Checking densities for collector trench backfills, roads, testing Class 5 material gradations every 2500cy, witnessed proof rolls for crane pads, taking compaction test for crane pad base and lifts and sampling and breaking grout cubes.
- Working on job books and Vestas MC Books.
- Monitor grouting at T-60, T-61, T-62, T-63, T-64, T-65, T-66, T-67 and T-68.
- Inspecting collector trenching backfills.

Week's Issues:

- None.



SCHEDULE STATUS

Project duration	68
No. of weeks into contract	55
Contract time passed (%)	81%

Key Activities (Construction)	Weighted %	Percent Complete		
		Contract Schedule	Construction Schedule	Actual
Design Engineering	2.5%	100.0%	100.0%	100%
Roads & Crane Pads	20.0%	100.0%	87.0%	84%
Foundations	20.0%	100.0%	100.0%	100%
Collection System	21.5%	87.0%	87.0%	85%
Substation	15.0%	100.0%	100.0%	85.2%
O&M Building	6.0%	100.0%	99.0%	98%
WTG Delivery, Erection, & MCC	15.0%	50%	50%	43.2%
Overall Actual Percent Complete				82.7%

PROGRESS REPORT

PERMIT STATUS

Permit Type / Description	County / State	Responsible Group	Date Needed By	Status
FAA NOTAM	Federal	RES	Construction	OPEN
FAA Part 2	Federal	RES	Final Height	OPEN

CONSTRUCTION STATUS

Certificates	Total	Submitted	Signed
Foundation Completion Certificate	75	71	71
Mechanical Completion Certificate	75	2	0
Electrical Works Completion Certificate	1	0	0
Project Mechanical Completion Certificate	1	0	0
Project Substantial Completion Certificate	1	0	0
Project Final Completion	1	0	0

ROADS & CRANE PADS

Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete
Roads	70%	Roads		80.0%	
Rough Grade	30%	137,622	137,622	0	100%
Sub Grade	30%	137,622	137,622	0	100%
1st Lift	20%	137,622	137,622	0	100%
Shoulders	10%	152,837	0	152,837	0.0%
Ditches	10%	152,837	0	152,837	0.0%
Crane Pads	30%	Crane Pads		94.7%	
WTG Site Ready for Delivery	30%	75	67	8	89.3%
Cut & Subgrade Compacted	40%	75	74	1	98.7%
Material Placed & Compacted	30%	75	71	4	94.7%

Road and Crane Pad Progress 84.0%

Comments:

- Continue to maintain roads to support WTG component delivery.
- Completed nine (9) turbine sites for delivery and four (4) crane pads with material.

FOUNDATIONS

Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete
Excavations	10%	75	75	0	100.0%
Mud Mats	5%	75	75	0	100.0%
Bases	40%	75	75	0	100.0%
Pedestals	20%	75	75	0	100.0%
Earthing Kit	5%	75	75	0	100.0%
Backfill	20%	75	75	0	100.0%

Foundation Progress 100%

Comments:

- Completed



COLLECTION SYSTEM

Item	Weighted %	Quantity	Total Received	Total Remaining	Percent Complete
Deliveries	30.0%	Deliveries			100%
MV Cable	50.0%	901,972	314,910	0	100%
Fiber	40.0%	335,107	336,590	0	100%
Junction Boxes	5.0%	28	28	0	100%
Grounding Transformers	5.0%	6	6	0	100%
Installations	50.0%	Installations			91.1%
Trench	40.0%	278,230	270,500	7,730	97.2%
MV & Fiber/Ground Cable	50.0%	297,945	285,670	12,275	95.9%
Junction Boxes	10.0%	28	12	16	43%
Terminations	20.0%	Terminations			48.6%
MV Cable at WTG switch gear	45.0%	75	24	51	32%
Junction Boxes	35.0%	28	13	15	46.4%
Underground MV Splices	20.0%	29	26	3	89.7%

Collection System Progress: 85.3%

Comments:

- Collection crew continue work on Circuit 4 turbine run - Right of Way Clearing -2,899', Trenching – 2,934', Cable Installation – 5,888', Backfill of Trenching – 2,702'
- Landed circuit 1B and 2 at the substation.
- Landed switchgears at 19 turbines.
- Complete VLF testing for 9 turbines.

O&M BUILDING

Activity Description	Weighted	Total	Remains	Completed
Design	4.0%	100%	0%	100%
Earthworks	8.0%	100%	0%	100%
Delivery	5.0%	100%	0%	100%
Building Erect and enclose	8.0%	100%	0%	100%
Grading and Drainage	6.0%	100%	10%	90%
Foundation Floor slab	9.0%	100%	0%	100%
Electrical prep, rough-in and trim out	5.0%	100%	0%	100%
Plumbing prep, rough-in and trim out	8.0%	100%	0%	100%
Internal Walls & Ceiling	9.0%	100%	0%	100%
Finishes prep, rough-in and trim out	12.0%	100%	0%	100%
HVAC	8.0%	100%	0%	100%
Septic System	4.0%	100%	0%	100%
Water Service	4.0%	100%	0%	100%
Cleaning and Shop Finish	4.0%	100%	0%	100%
Security System & Fence	4.0%	100%	0%	100%
Landscaping	1.0%	100%	90%	10%
Asphalt	1.0%	100%	100%	0%
Total				98%

Comments:

- The plumbers and electrician were back on site on July 27, 2015 and addressed the remaining punch list items related to their work.
- VTI has completed the security system integration with Xcel's server and equipment.
- RES has received the water quality test results; the results show that the water is potable as per the ND Health Department.
- Finalized all change order claims with AB Systems.

SUBSTATION

Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete
Engineering	10%	Engineering			100%
IFC Drawings	100%	100%	100%	0%	100%
Procurement and Delivery	20%	Procurement and Delivery			100%
Foundation Rebar & Cages	5.00%	100%	100%	0%	100.00%
Breakers - Low and High Sides	15.00%	100%	100%	0%	100.00%
Reactors, Cap Back and Switchers	20.00%	100%	100%	0%	100.00%
MPT 230/34.5kV	10.00%	100%	100%	0%	100.00%
Grounding Transformer	5.00%	100%	100%	0%	100.00%
EEE - Control Building with DC Station	15.00%	100%	100%	0%	100.00%
Grounding Wire, Rods and Accessories	5.00%	100%	100%	0%	100.00%
Dead End and Static Mast	5.00%	100%	100%	0%	100.00%
Structural Steel and Bus	10.00%	100%	100%	0%	100.00%
MET Tower Foundation	5.00%	100%	100%	0%	100.00%
Chain Link Fence and Gates	5.00%	100%	100%	0%	100.00%
Construction	70%	Construction			79%
Site Preparation & Grading	3.00%	100%	95%	5%	95.00%
Site Aggregate and Finishing Rock	3.00%	100%	75%	25%	75.00%
Foundations work for substation	9.00%	100%	100%	0%	100.00%
Breakers, Switches, PTs, CTs	12.00%	100%	90%	10%	90.00%
Reactors, Cap Back and Switchers	8.00%	100%	90%	10%	90.00%
EEE - Energize and Finish	4.00%	100%	85%	15%	85.00%
Ground Grid, Conduits, Trenwa	12.00%	100%	90%	10%	90.00%
Structural Steel, Risers, Bus	12.00%	100%	80%	20%	80.00%
Collection Risers/Feeders and GTs	8.00%	100%	80%	20%	80.00%
EEE Wire Pull, Termination and Test	5.00%	100%	80%	20%	80.00%
SCADA Fiber Optic Cables Pull	4.00%	100%	0%	100%	0.00%
Chain Link Fence, Gates	4.00%	100%	80%	20%	80.00%
MPT Testing and Commissioning	4.00%	100%	90%	10%	90.00%
MET Tower Install, Wiring and Testing	4.00%	100%	40%	60%	40.00%
Substation Commissioning	6.00%	100%	70%	30%	70.00%
Hand over of Job Books	2.00%	100%	0%	100%	0.00%

Substation Progress 85.2%

Comments:

- MPT testing was completed and received all documentation.
- Installed aggregate on the east side of the station. Xcel has verified the elevations and found the work acceptable.
- All equipment has been labeled throughout the substation and EPC has completed all the testing.
- Completed sealing the MPT containment pit by installing slurry around it.
- Continued substation fence installation.
- Started the work on the EEE stair foundations.

TURBINES

Item	Weighted %	Quantity	Total Received	Total Remaining	Percent Complete
Deliveries	20.0%	Deliveries			77.7%
Base	15.0%	75	62	13	82.7%
Mid	14.0%	75	61	14	81.3%
Upper Mid	14.0%	75	57	18	76.0%
Top	14.0%	75	57	18	76.0%
Nacelle	14.0%	75	58	17	77.3%
Hub	14.0%	75	57	18	76.0%
Blades	15.0%	75	56	19	74.7%
Installations	60.0%	Installations			40.9%
Base	17.0%	75	58	17	77.3%
Mid	16.0%	75	39	36	52.0%
Upper Mid	16.0%	75	22	53	29.3%
Top	17.0%	75	22	53	29.3%
Nacelle	17.0%	75	22	53	29.3%
Blades	17.0%	75	21	54	28.0%
MCC & Commissioning	20.0%	Mechanical Completions			3.1%
Walk downs	33.3%	75	3	71	4.0%
MCC Submitted	33.3%	75	2	71	2.7%
MCC Signed	33.4%	75	2	73	2.7%

Turbine Progress: 40.7%

Week's Highlights

- Set eight (8) bases, stacked out five (5) complete WTGs.
- Completed one (1) mechanical completion walk-down at T24 and began T45; winds were too high to complete the hub.
- Ten (10) sites cleaned up and are ready for reclamation work.

Week's Issues

- Three (3) weather delays due to rain and high wind.
- Wind conditions have resulted in disrupting the WTG component deliveries and offload sequence. Partial components are being delivered to multiple sites as opposed to two full WTGs a day.
- Four (4) forklift break downs occurred which resulted in hindering site cleanup activities to allow the civil crews to start reclamation work.
- Vestas shut-down deliveries from 10am-1pm on July 31st, 2015 due to two (2) property damage incidents involving ATI, the WTG component transport company.
- WWS production rate requires improvement. A meeting was held with WWS upper management and an additional crew is scheduled to mobilize to site.

- **Exhibit 1 – Site Photographs**



RES's CEO, Glen Davis, signing the BW safety banner



Substation – Transformer Testing



Turbine location site preparation



Site View



Site view



Exhibit 2 – Safety Log

Formulas for TRIR and RES Safety Index calculation:

$$\text{TRIR} = ((\text{Lost Time} + \text{Medical Aid}) * 200,000) / \text{Total Project Man Hours} \quad ((1+1) * 200,000 / \text{Total Project Man Hours})$$

$$\text{RES Safety Index} = ((\text{Lost Time} * 64) + (\text{Injury} * 16) + (\text{Minor Injury} * 4) + (\text{Damage} * 1) + (\text{Near Miss} * 0.25)) / \text{Man Hours} * 1000$$

$$((1 * 64) + (3 * 16) + (13 * 4) + (38 * 1) + (83 * .25)) / \text{Total Project Man Hours} * 1000$$

#	Date:	Incident Observed During:	Incident Type:	Company Involved:	Incident Details:	Corrective Action Details:	Actions Taken to Prevent Reoccurrence:
751	7/30/2015	Safety Walk	Safe Work Observation	REI	At the substation the fencing had on adequate PPE; however it was suggested that long sleeve shirts and goggles be worn for future concrete placement.	Minor housekeeping deviancies- No major items identified. The fence workers utilized ballast to ensure top rail material was not impacted by high winds and become a moving hazard.	Supervisors at the substation were spoken to about the issues seen in that area.
752	7/17/2015	Safety Walk	Safe Work Observation	RES Erection	At T-2 the blade pick and stab went very well. Tag line crews were well prepared with their PPE and all were focused on the job at hand. Good communication by all personnel.	None required at this time.	Good work being performed by all.
753	7/28/2015	Safety Inspection	Safe Work Observation	RES Lay down yard	3.2 Housekeeping and Sanitation: Inspection of the lay down area showed very little trash not located in dumpsters. High winds for the day made it quite difficult to control but workers were staying on top of it.	Workers in the area were asked to pick up small bags floating around in the yard.	Workers did stop to pick up trash and get the area cleaned up. Minimal cleanup was required.
754	7/28/2015	Safety Inspection	Hazard Observation	RES & Nelson Lay down yard	3.10 Storage of Materials: Fuel cans were improperly stored in the Nelson conex along with some flammable paint cans. RES also had some cans which were not properly stored and laying on their sides.	No one knew who had left these items like this but RES safety requested that they be taken care of immediately.	Both groups were contacted and informed of the proper way to store these items and instructed to take care of it quickly. This situation will be monitored and if it arises again the strikes will be issued and people sent home.



#	Date:	Incident Observed During:	Incident Type:	Company Involved:	Incident Details:	Corrective Action Details:	Actions Taken to Prevent Reoccurrence:
755	7/28/2015	Safety Walk	Safe Work Observation	Fencing Crew and electrical crew	Both the fencing crew and the crew putting down the resistivity rock for the substation were working in unison with one another. Both teams were working slowly and communicating well with each other.	None required at this time.	Supervisors at the substation were commended on the work being conducted and to keep up the good work.
756	7/28/2015	Safety Walk	Safe Work Observation	American Wind Transport	At the turbine component staging area the rigs which were parked there had the quite clean and in order. Foreman did ask if it was possible to smoke in the area but seeing as how they were out in the open it was ruled against.	No actions required.	Drivers at the staging area were quite friendly and ready to follow the site rules for the site. Good drivers and good foreman communicating well with each other.
757	7/28/2015	Safety Walk	Safe Work Observation	RES Electrical	The MV cable crew working just north of the compound was having a difficult time working in the muddy conditions. Ground was quite damp and made it hard to walk without nearly falling every time.	Crew was asked to take their time and get the work done safely.	There is not much that can be done to avoid the wet conditions due to rain and the soil absorbing and retaining water like it does. Crew does have on proper foot wear and PPE.
758	7/28/2015	Safety Walk	safe Work Observation	RES Electrical	The other crew pulling on the southern end were having just as much trouble trying to get the MV cable to pull thru the bore pipes and having the pull rope just about maxed out. Everyone knew to stand to one side in case the rope was to break.	Work slow and steady.	The MV cable did manage to get all lines pulled thru the bore pipes safely without anyone getting hurt.
759	7/30/2015	Normal Work Activities	Injury	RES	REC employee was washing the inside of the lower mid-section and as he went to step over a ladder bracket slipped and fell on the left side of his head and left shoulder. Employee stated it felt like grinding glass when he tried to move his shoulder.	First responders were unable to tell if he had any broken bones or a possible rotator cuff, so the decision was made to take the injured employee to the local hospital.	Doctor prescribed 7 days of light duty and for his left arm to remain in a sling. Diagnoses were a strain or bruise to the arm.



#	Date:	Incident Observed During:	Incident Type:	Company Involved:	Incident Details:	Corrective Action Details:	Actions Taken to Prevent Reoccurrence:
760	7/30/2015	Normal Work Activities	Damage	ATI	An American Wind Transport employee arrived at T-73 during a base mid erection. Employee was attempting to drive behind the tower at the same time that a RES employee was unloading crane mats. AWT employee said he saw the RES employee stop and drove behind the skid steer being used. Skid steer did not know there was another vehicle in the area and backed up striking the back quarter panel of the truck and damaging the tire as well.	Upon striking the vehicle the crane operator and the skid steer operator stopped all actions and contacted RES safety.	Delivery drivers and entire site will be spoken to about non-essential personnel driving near towers where they should not be. Making eye contact with the operator and being signaled to proceed before moving into the area.
761	7/30/2015	Normal Work Activities	Damage	ATI	At T-4 the RES crew had a blade which had just been unloaded suspended in the air and was waiting for the driver to drive out of the back side of the tower. The person steering the back end of the trailer for the driver of the rig was positioned where they did not have a clear field of vision and did not notice that they were turning the rear end of the trailer mechanism into a blade which had been previously landed on the ground. RES crew yelled for all actions to stop but by the time they did stop blade was damaged by the steering mechanism.	Vestas called for a site wide stand down on off loads and deliveries to turbine sites. RES crew contacted their supervisors along with RES Safety.	It was discussed at the morning tail gate meeting with the RES crews that they have the authority to stop any action on site that they might consider a hazard to property, equipment and workers. Do not hesitate to make the call was pushed with the crews. Pilot car operator who caused the damage has been removed from site and will not be allowed to return. Driver was a sub of Vestas and was released following the incident and no UA was administered.



Exhibit 3 – Environmental Log

Formula for the Rolling Incident Score =

$$((\text{Major Incident} * 16) + (\text{Minor Incident} * 4) + (\text{Near Miss} * 0.25) + (\text{Observation} * 0)) * 1000 / \text{Total Man Hours}$$

#	CLASS	SUB-CAT	CONTRACTOR	DATE	INCIDENT DETAILS	ACTION TAKEN TO CORRECT SITUATION	ACTION TAKEN TO PREVENT REOCCURANCE
98	Observation	Weather Event	Other	7/26/2015	Received 0.36" of rain	Ongoing RAMET Inspection performed to check BMP's.	
99	Observation	Trash or other Refuse	RES	7/27/2015	Special waste bin for contaminated soil is taken off site by Waste Management Inc. to Spruce Ridge Landfill. The new bin has a thicker liner to prevent leaks from the bin	No action required	No action required. Replacement special waste bin already on site.
100	Minor Incident (Below RQ)	Equipment Failure or leak	RES	7/27/2015	1 gallon of oil from unknown source found on the ground in the laydown yard.	The spoil was collected in a 3 gallon container	Advised everyone to inspect their vehicle for leaks every morning.
101	Observation	Weather Event	Other	7/28/2015	Received 0.26" of rain	Ongoing RAMET Inspection performed to check BMP's.	
102	Near Miss	Improper Chemical Storage or Use	Turbine Erection	7/28/2015	Improper storage of oil buckets in the laydown yard. Oil buckets were left uncovered with some oil in them, which could have leaked if the rain filled up the buckets	The oil was disposed properly and the buckets were moved and stored covered in a proper location	A meeting with the erection team manager and supervisors to review the near miss and ensure that better procedures are followed when storing material
103	Observation	Informational	Electrical - Substation	7/29/2015	One porta potty tipped over due to high winds.	The porta potty was put upright. And secured against the wind	move porta potty against wind



Exhibit 4 – Quality Log

- Incidents - None
- CPARs - 1
- NCRs - 9

NCR log

Description of Material	NCR Opened (Current Period)	NCR Closed (Current Period)	Total NCR Open (As of this Week)	Total NCR Closed (As of this Week)
Totals			4	6
NCR CPAR 23053-004 Sent to Vestas concerning the high rate of damage to the turbine blades during shipping			X	
NCR-2015-024 Concerning tower door to be facing south.			X	
NCR-2015-016 Backfills and compactions of the turbine bases in freezing conditions			X	
NCR-2014-38, T3 grounding was not installed per specifications			X	



Exhibit 5 – RFI Log

Outgoing RFIs

	Generated By	Company	Sent To	Company	Subject	Date Sent	Response Requested By	Type: Civil, Electrical, etc.	Status / Comments	Date Closed
23053-030	Shabeeb Khader	RES	Bradley Morrison	Xcel Energy - Generation	Install crushed aggregate on the substation site	10/31/14	11/6/14	Civil	Xcel Responded. RES to perform density test.	
23053-092	Emad Alaydi	RES	Jayne Orrock	Xcel Energy - Generation	Fiber termination inside the turbine	06/16/15	06/22/15	Turbine	Xcel response received 6/17/15- RES responded 7/22/15	07/30/15
23053-096	Emad Alaydi	RES	Ritchie Farmer	Vestas	Ice detection documentation	06/22/15	06/29/15	SCADA	Vestas responded on 6/23/15. Awaiting additional info	
23053-098	Emad Alaydi	RES	Ritchie Farmer	Vestas	VPN Tunnel in tunnel communication	06/25/15	07/02/15	Turbine		
23053-100	Emad Alaydi	RES	Chris Ayika	Xcel Transmission	Fiber Transceiver	06/30/15	07/08/15	BW Substation	Xcel responded 7/1/2015. RES responded on 7/13/15. Response was sent in an email format	
23053-102	Shabeeb Abdul Khader	RES	Peter Doherty	Xcel Energy - Generation	Access Road Adjustment to T9, T10, T11	07/16/15	07/23/15	Civil		07/29/15
25035-104	Emad Alaydi	RES	Sean Simmons	Vestas	Fiber Installation in the Turbines	07/23/15	07/31/15	Turbine		07/29/15
23053-105	Kyler Leen	RES	Kyle Louis	REI	Feeder Fault Clearing Time	7/27/2015	7/29/2015	Substation		



Exhibit 6 - Change Order Request Log

CO No.	Date Identified	Date Submitted	Date Executed	Description	Value of CO	Comments
1	06/11/15			Change in the landscaping design - larger trees for windbreak at O&M	\$ 3,176.00	RES and Xcel agreed to split total cost of \$6,352.00
2	06/11/15			Storm shelter changes at O&M	\$ 11,907.00	RES to request additional information from ABS on who directed the changes
3	06/11/15			Changes in final design vs specification of electrical layout at O&M	\$ 2,300	RES is still working through the changes
4	06/11/15			Changes in security system at O&M	\$ 8,936.00	Xcel requested breakdown of changes and the delta
5	06/11/15			Changes in the Control Building - Increasing the station service transformer, additional switch requests, and additional landings at entrance doors	\$ 36,141.00	<p>Station Service transformer sizing – Original station service transformer sizing was done at 50kVA. This was based on historic numbers initially and was later proven by station service calculations. Xcel requested to change this to 100kVA, since that is the Xcel standard (was requested at the 90% design review meeting). RES reviewed the Xcel standards provided and did not see this requirement anywhere in the standards provided. This increase in station service size also required upgrading multiple disconnect and safety switches from 200A to 400A rating in order to meet the requirements of the 100kVA station service transformer to be installed per the Xcel direction/request.</p> <p>Additional switch requests - Xcel requested during the 90% design review meeting that safety disconnect switches be moved from inside the control building to the outside. This requires the installation of waterproof cabinets for the switches. Xcel also requested an additional yard cabinet to connect and supply larger equipment from the AC system.</p> <p>Addition of landings at entrance doors – this was added at the 90% design review meeting per Xcel request and was not evident for the provided Xcel specifications.</p>



CO No.	Date Identified	Date Submitted	Date Executed	Description	Value of CO	Comments
6	06/11/15			Upgrade from SEL351 to SEL421 relay and bus relays at the substation	\$ 163,789.00	Industry standard for wind farm collection circuits are to install SEL351 relays (O/C & G/F) relays to protect the collector systems. Collection systems (although balanced) are considered distribution circuits, since they are four wire systems, with a ground reference transformer connected to each circuit. The collection circuits are insulated to 150kV BIL, which is further evidence that they are considered as distribution feeders (compared to the 200kV BIL insulation levels typically associated with transmission lines/circuits). Xcel identified the requirement to install SEL 351 relays on Distribution feeders. During design review meetings, Xcel classified these as transmission lines and required the installation of step distance protection (SEL421 relays). This resulted in additional cost. The 34.5kV bus differential relays subsequently were also upgraded from distribution bus relays to transmission class bus diff relays with 100% redundancy
7	06/11/15			Addition of three additional shield masts at the substation	\$ 73,838.00	The original substation design utilized a combination of shield masts and shield wires in order to establish a lightning shielding system for the substation equipment. During the 60% design review meeting Xcel indicated they do not allow shield wires to span over top of equipment and requested that the shield wires be removed and that lightning shielding protection be done with shield masts. This requirement is not seen in any of the supplied specifications. This required the addition of 3 additional shield masts and thus additional cost.
8	06/11/15			Addition of anchor/rigging points for the oil containment based on the change to above ground containment system at the substation	\$ 36,907.00	Xcel required an above grade containment system with a removable wall and built in rigging/anchor points in the containment system. This was not evident in any of the provided specifications or the contract agreement. The above grade construction as such does not add cost, but the inclusion of the removable wall and the addition of the anchor/rigging points that is integrated into the oil containment system does add cost
9	06/11/15			Addition of separate relay/plc controller to control the capacitor banks at the substation	\$ 23,510.00	Typical capacitor bank controls on wind farms are done by the wind farm controller through the SCADA system. Xcel requested during the 90% design review not to control the equipment through the SCADA system, but rather have a separate relay/plc controller to control the capacitor banks. This required the installation of an additional relay in order to have a dedicated controller for the capacitor banks. This was not evident from any of the supplied specifications, since Xcel does not have a standard specification for 34.5kV capacitor banks.

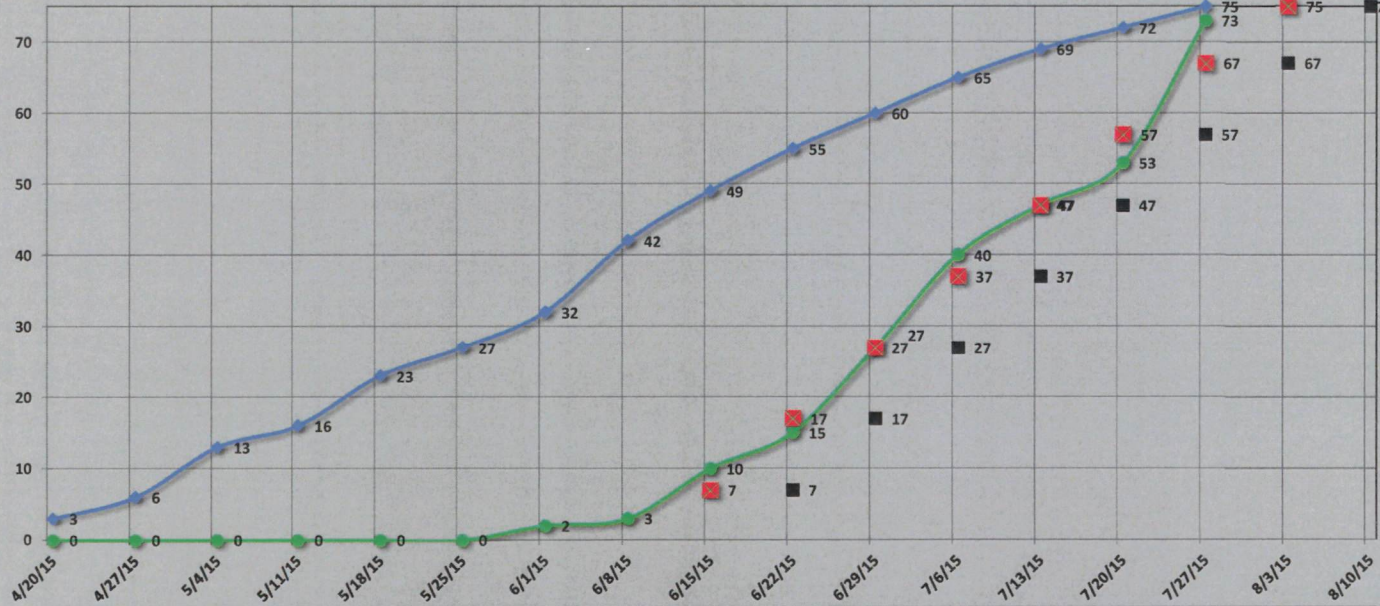


CO No.	Date Identified	Date Submitted	Date Executed	Description	Value of CO	Comments
10	06/11/15			Upgrade to the capacitor bank interlock system	\$ 10,846.00	Typical interlocks for capacitor banks only include a time delay after opening the associated capacitor/circuit switched to release a key that will unlock the ground switch and lock the switcher in the open position. Xcel requires a much more elaborate system, which in turn costs more. This was not identified in any of the supplied standard and was determined as designs progressed.
TOTAL					\$ 379,294.00	

Last Updated: 8/1/2015

Border Winds - Crane Pad Completion Progress Chart

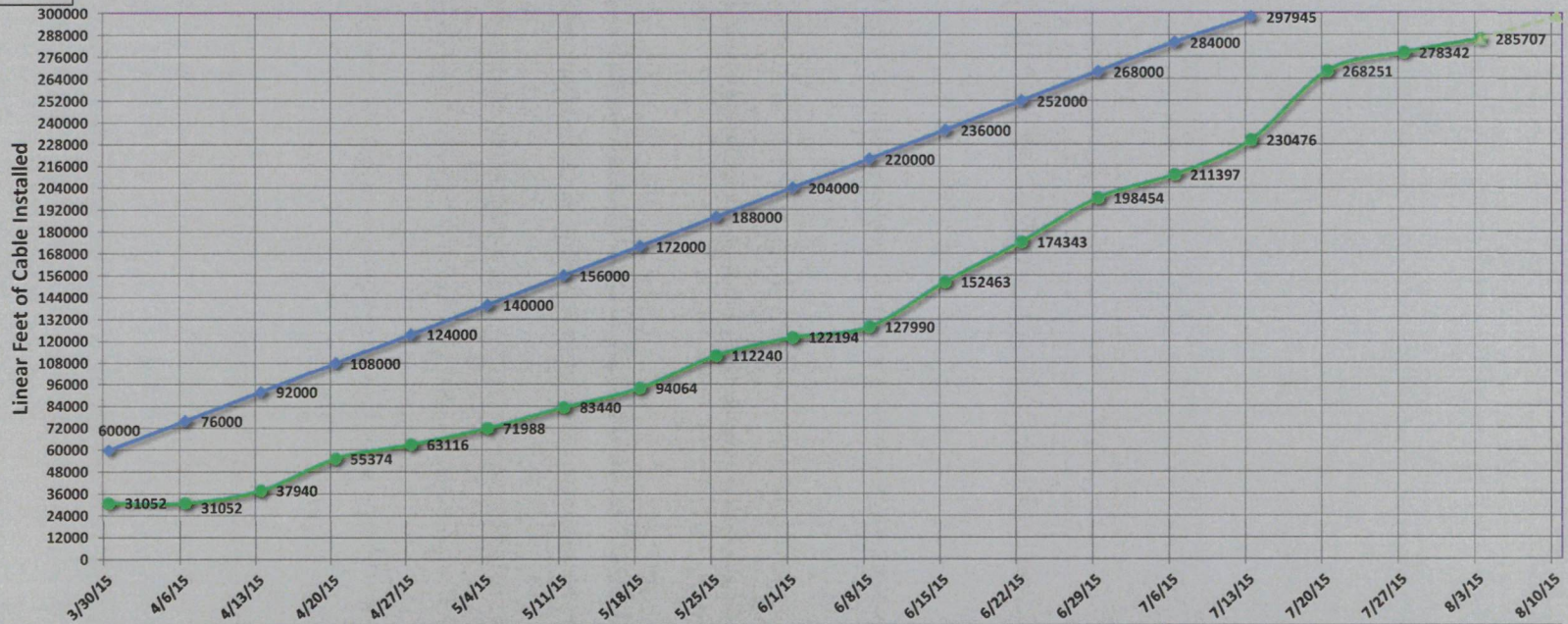
Number of Crane Pads Complete



	4/20/15	4/27/15	5/4/15	5/11/15	5/18/15	5/25/15	6/1/15	6/8/15	6/15/15	6/22/15	6/29/15	7/6/15	7/13/15	7/20/15	7/27/15	8/3/15	8/10/15
Planned Crane Pads Complete	3	6	13	16	23	27	32	42	49	55	60	65	69	72	75		
Actual Crane Pads Complete	0	0	0	0	0	0	2	3	10	15	27	40	47	53	73		
Anticipated WTG Deliveries									7	17	27	37	47	57	67	75	
Guaranteed WTG Deliveries										7	17	27	37	47	57	67	75

Last Updated: 8/1/2015

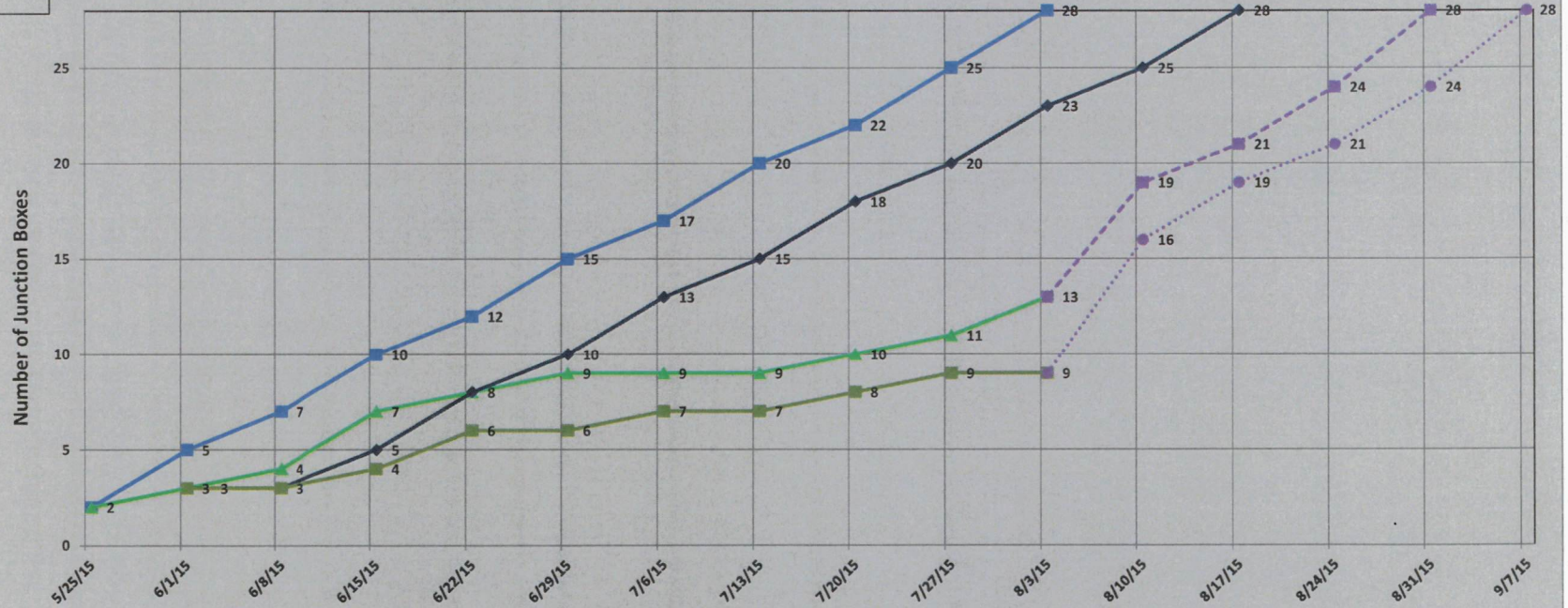
Border Winds - Cable Installation Progress Chart



	3/30/15	4/6/15	4/13/15	4/20/15	4/27/15	5/4/15	5/11/15	5/18/15	5/25/15	6/1/15	6/8/15	6/15/15	6/22/15	6/29/15	7/6/15	7/13/15	7/20/15	7/27/15	8/3/15	8/10/15	
Planned Cable Installation	60000	76000	92000	108000	124000	140000	156000	172000	188000	204000	220000	236000	252000	268000	284000	297945					
Actual Cable Installed	31052	31052	37940	55374	63116	71988	83440	94064	112240	122194	127990	152463	174343	198454	211397	230476	268251	278342	285707		
Forecast																				285707	297945

Last Updated: 8/1/2015

Border Winds - Junction Box Progress Chart

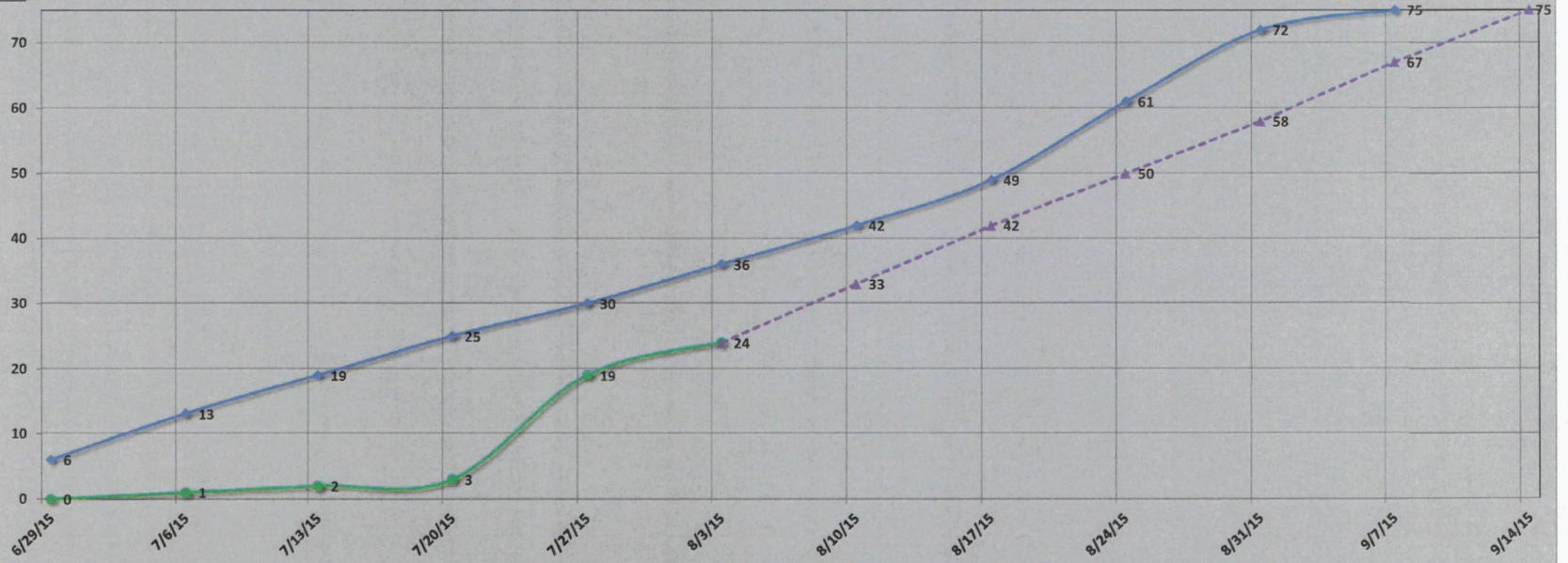


	5/25/15	6/1/15	6/8/15	6/15/15	6/22/15	6/29/15	7/6/15	7/13/15	7/20/15	7/27/15	8/3/15	8/10/15	8/17/15	8/24/15	8/31/15	9/7/15
Planned JB Setting	2	5	7	10	12	15	17	20	22	25	28					
Actual JB Setting	2	3	4	7	8	9	9	9	10	11	13					
Planned JB Terminations			3	5	8	10	13	15	18	20	23	25	28			
Actual JB Terminated		3	3	4	6	6	7	7	8	9	9					
Forecast JB Setting											13	19	21	24	28	
Forecast JB Termed											9	16	19	21	24	28

Last Updated: 8/1/2015

Border Winds- WTG Switchgear Terminations Progress Chart

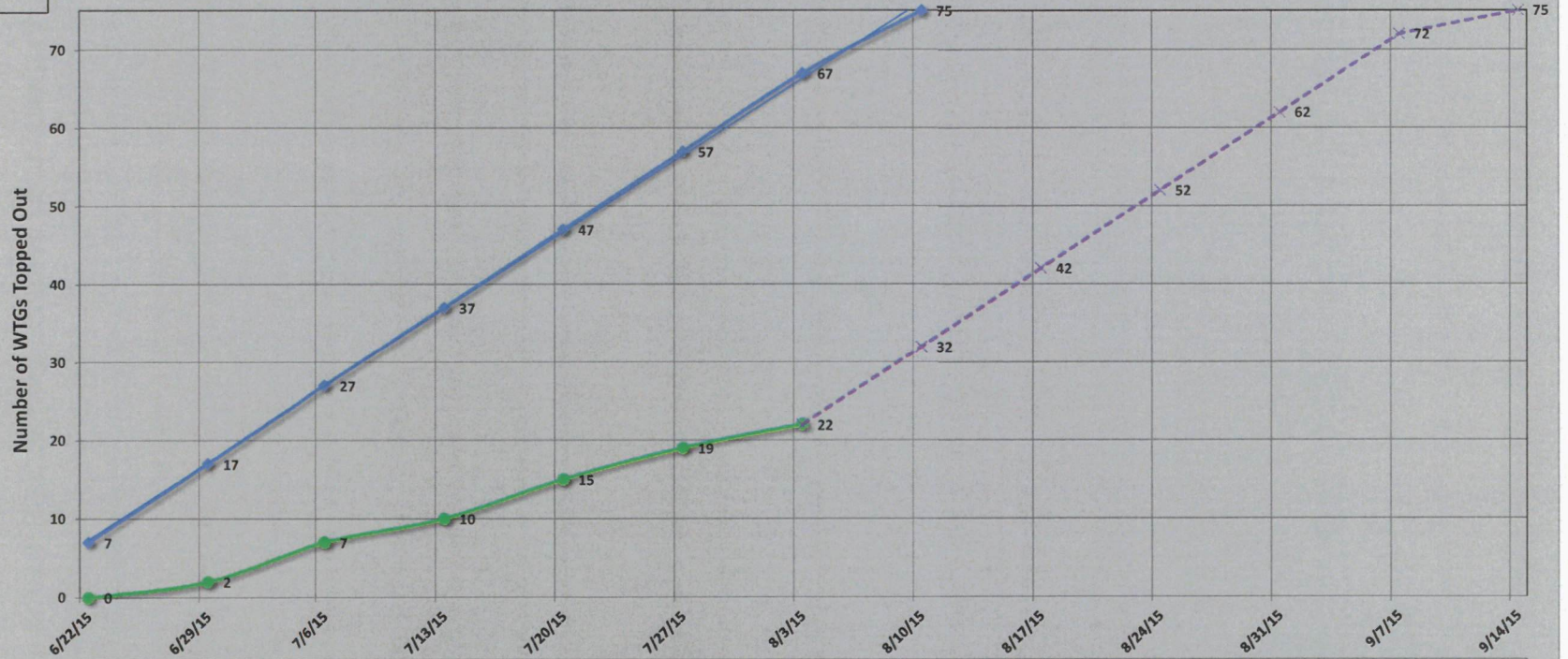
Number of WTG Switchgears Terminated



	6/29/15	7/6/15	7/13/15	7/20/15	7/27/15	8/3/15	8/10/15	8/17/15	8/24/15	8/31/15	9/7/15	9/14/15
Planned Switchgear Terminations	6	13	19	25	30	36	42	49	61	72	75	75
Actual Switchgear Terminations	0	1	2	3	19	24						
Forecast						24	33	42	50	58	67	75

Last Updated: 8/1/2015

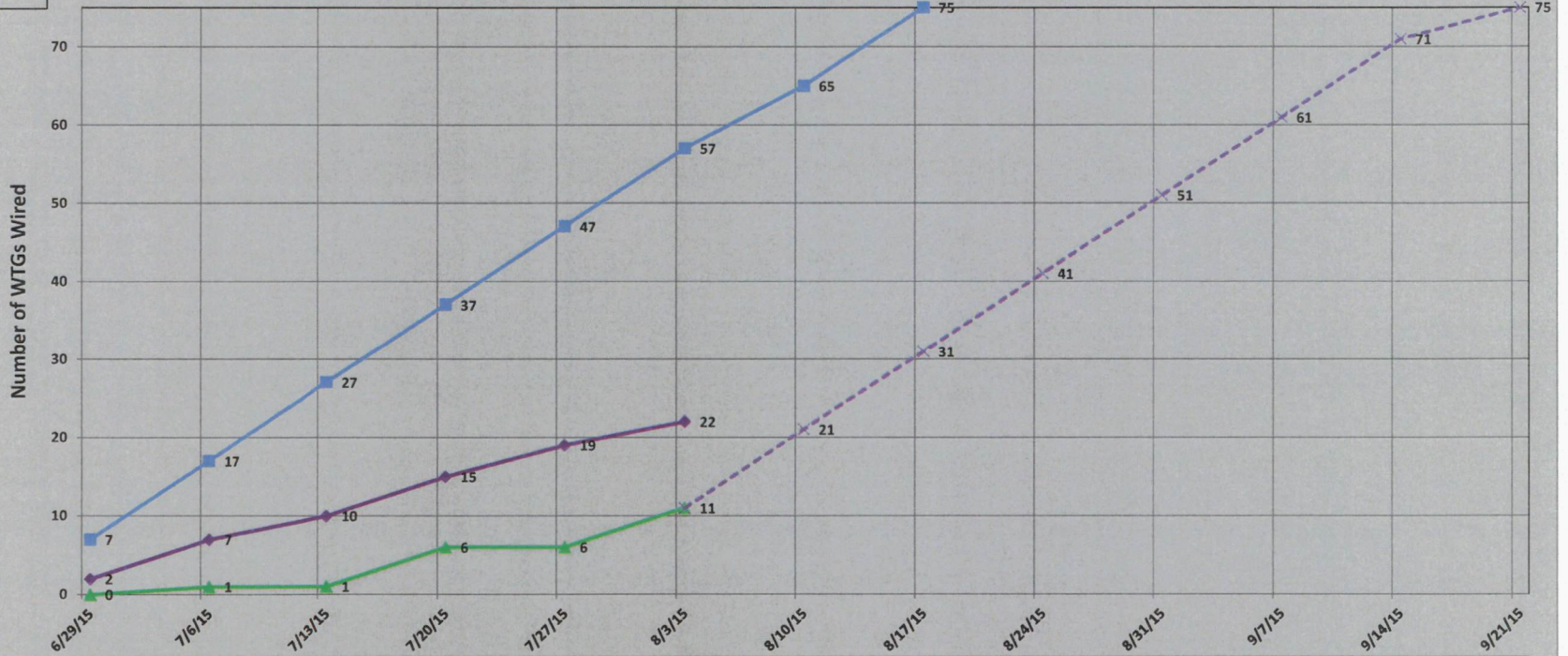
Border Winds - WTG Top Out Progress Chart



	6/22/15	6/29/15	7/6/15	7/13/15	7/20/15	7/27/15	8/3/15	8/10/15	8/17/15	8/24/15	8/31/15	9/7/15	9/14/15
Planned WTGs Topped Out	7	17	27	37	47	57	67	75					
Actual WTGs Topped Out	0	2	7	10	15	19	22						
WTGs Ready to Wire													
Forecast							22	32	42	52	62	72	75

Last Updated: 8/1/2015

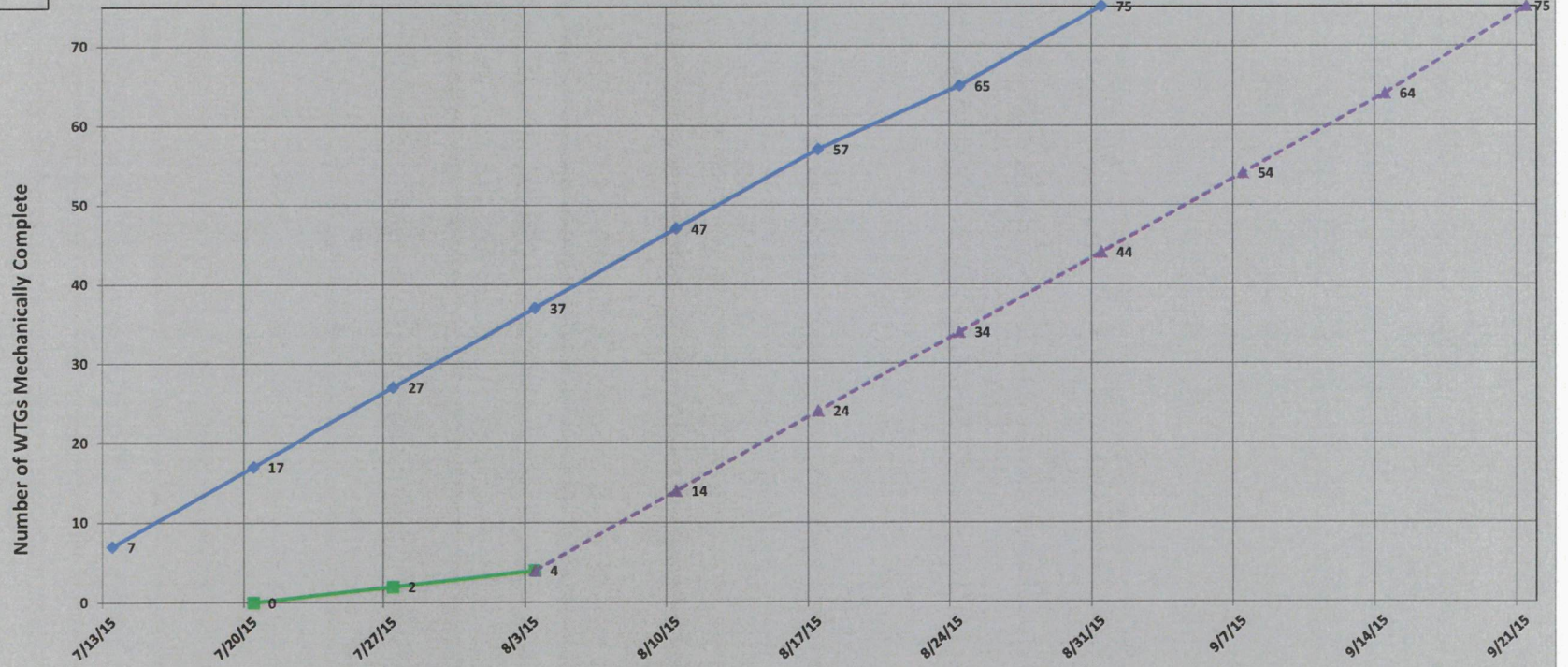
Border Winds - WTG Wiring Progress Chart



	6/29/15	7/6/15	7/13/15	7/20/15	7/27/15	8/3/15	8/10/15	8/17/15	8/24/15	8/31/15	9/7/15	9/14/15	9/21/15
WTGs Ready to Wire	2	7	10	15	19	22							
Planned WTG Wiring Completion	7	17	27	37	47	57	65	75					
Actual WTG Wiring Completed	0	1	1	6	6	11							
Forecast						11	21	31	41	51	61	71	75

Last Updated: 8/1/2015

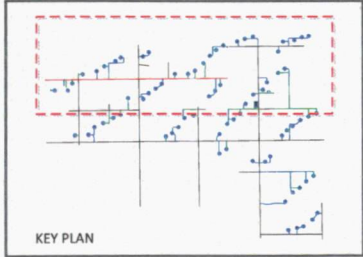
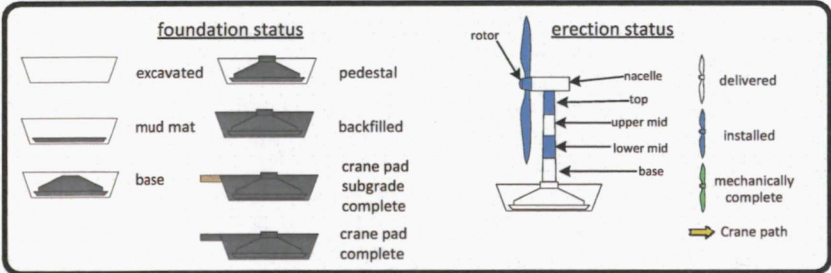
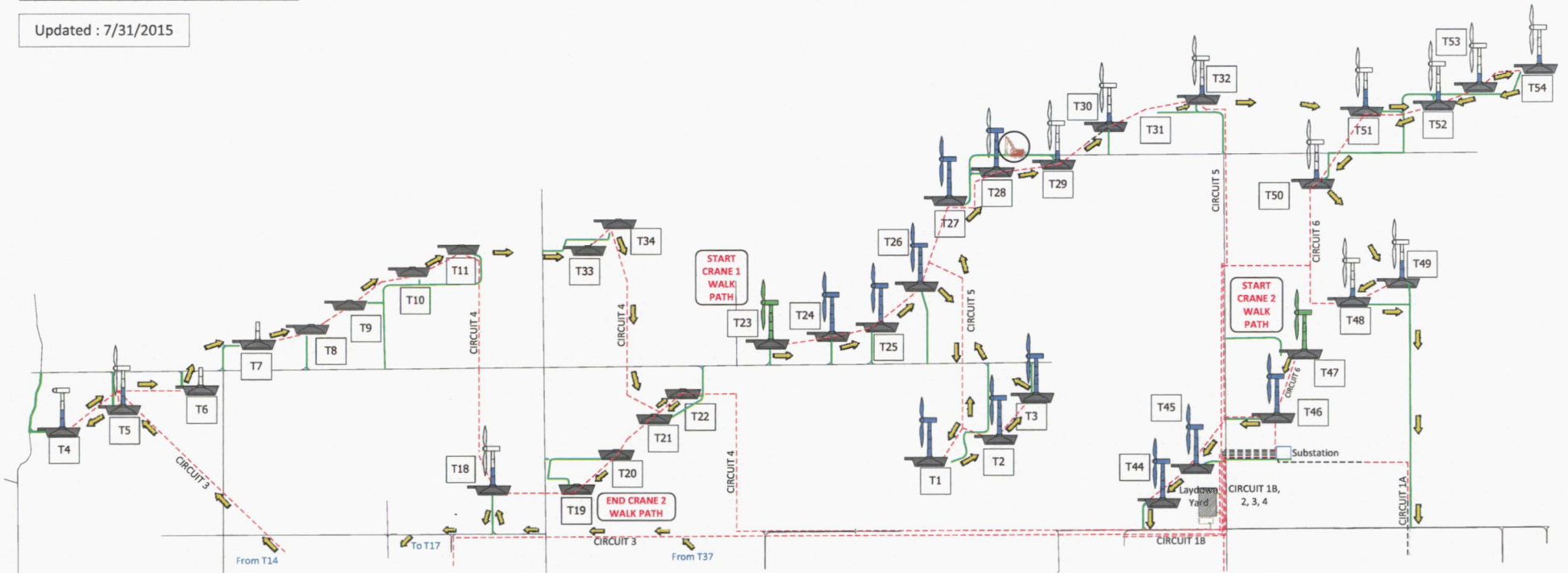
Border Winds - WTG Mechanical Completion Progress Chart



	7/13/15	7/20/15	7/27/15	8/3/15	8/10/15	8/17/15	8/24/15	8/31/15	9/7/15	9/14/15	9/21/15
Planned WTGs Mechanically Complete	7	17	27	37	47	57	65	75			
Actual WTGs Mechanically Complete		0	2	4							
Forecast				4	14	24	34	44	54	64	75

Updated : 7/31/2015

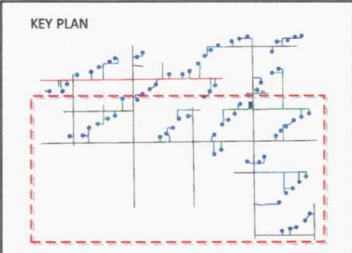
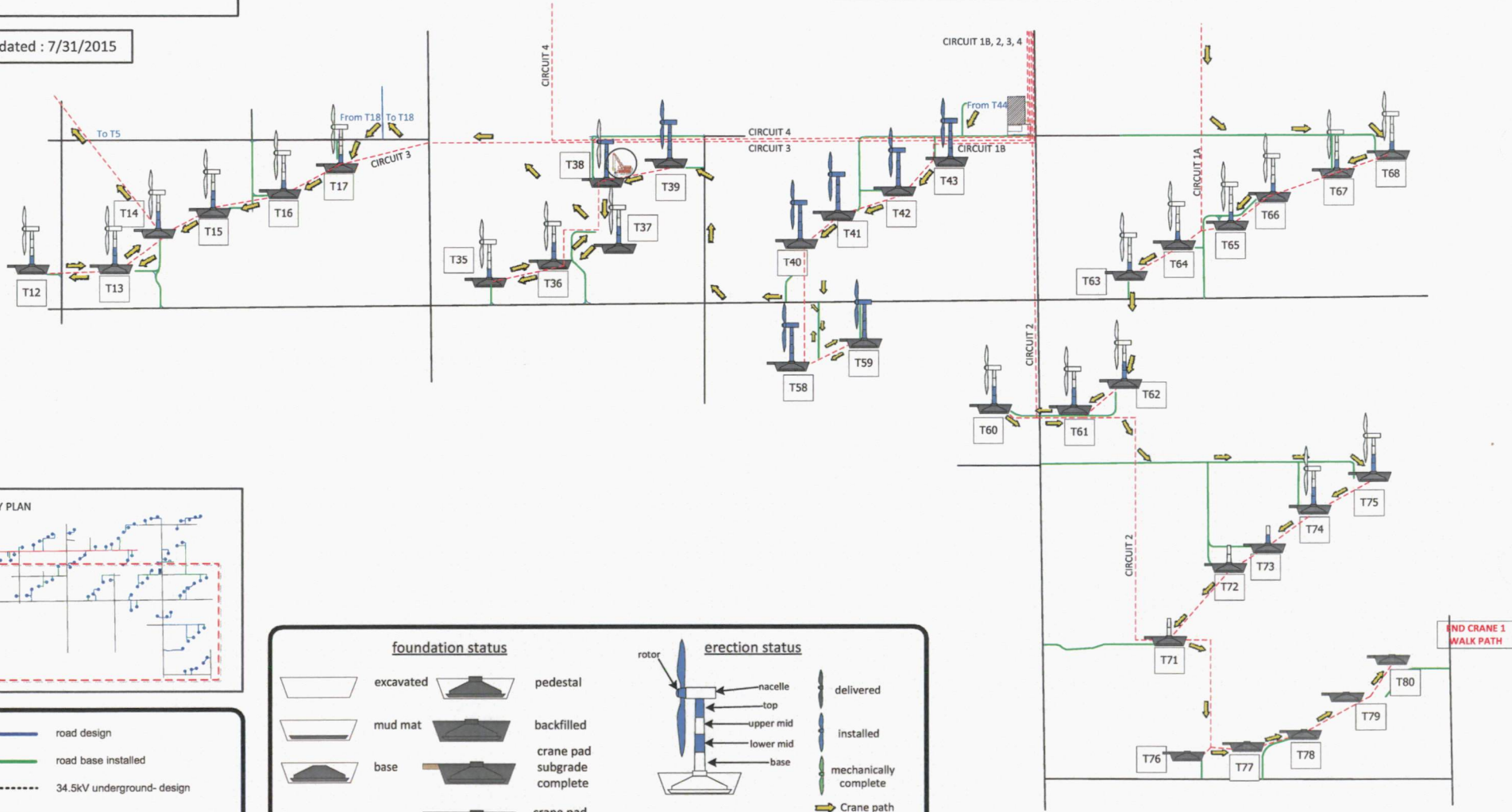
Border Winds – North Construction Progress Status Map





Border Winds – South Construction Progress Status Map

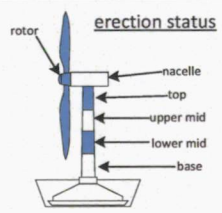
Updated : 7/31/2015



- road design
- road base installed
- 34.5kV underground- design
- 34.5kV underground- installed

foundation status		erection status	
	excavated		pedestal
	mud mat		backfilled
	base		crane pad subgrade complete
			crane pad complete

erection status	
	delivered
	installed
	mechanically complete
	Crane path



END CRANE 1 WALK PATH