BORDER WINDS ENERGY PROJECT

WEEKLY PROJECT REPORT

Weekly report no:	48
Report for week period ending COB Friday:	06/26/15
Calendar week no:	26

Executive Summary

Week's Highlights

- Project received inspection by OSHA on Tuesday, June 23rd. The compliance officer inspected several turbine sites, the O&M building, and the substation. No citations were issued and the compliance officer commented positively regarding the safety culture of the Project;
- Completed environmental site audit by Al Jensen, HSQE manage. No major issues observed;
- Completed the first complete turbine installation at T23;
- Successfully completed the walk through of the O&M Building with Xcel, RES, and ABS. A final punch list was developed and will be used as a tracking tool to achieve final completion;
- Continued working on ground grid, pulling wire throughout sub, terminating wire in EEE;
- Continued collection system installation of Circuits 3 and 2. Completed 14,149' of ROW, 16,496 Trench, 15,516 MV Cable, 10,915 backfill in this period;
- Both 1300 cranes fully assembled, inspected, and operational.

Week's Key Issues

- Afternoon lightning events have interrupted work throughout the site during this period;
- Options being determined for improved radio communication;
- One minor injury where a worker sustained a bruise on his left arm after a geo-grid roll hit his upper arm. This injury was later re-classified as a recordable due to prescribed ibuprofen by attending physician;
- Identified erosion at certain culvert inlets. Rip-rap and/or straw wattles will be installed;
- Deficiencies in nacelles identified including problems with the reduction gear and turning gear motor;
- Blades continue to be delivered with defects requiring correction by Vestas.

Safety

Week's Safety Log Summary.

Type	Lost Time	Recordable Injury (Medical Aid)	Minor Injury (First Aid)	Equipment Property Damage	Near Miss	3X20 Observation
Current Period	0	0	1	1	1	18
Project To Date	1	1	11	30	75	559

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

TRIR: Previous Week = 1.83 / Current week = 1.64

RES Safety Index: Previous Week = 0.64 / Current week = 0.54

Weeks Highlights:

- OSHA compliance officer conducted site inspection. No citations issued;
- Site Safety Supervisor conducted audit on all locations. Few issues found - over all site is performing well;

Weeks Issues:

- Multiple lightning alerts from 50 to 2 miles caused multiple work stoppages on Saturday, June 20th;
- All through this week, lightning in the afternoon has stopped and slowed work down for erection crews. Options to improve radio communication being sought;
- This site incurred one minor injury that was first classified as non-recordable; however, the classification was later altered due to an ibuprofen prescription by the attending physician. The worker sustained a bruise on his left arm after a geo-grid roll struck his upper arm.

Project Work Hours:

- Weekly Man-Hours: 23,833
- Total Project Man-Hours: 241,585
- Hours Since Last Recordable Injury: 64,744

Environmental

Type	Major Incident	Minor Incident	Near Miss	Observation
Current Period	0	4	0	2
Project to Date	0	64	6	52

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

Rolling Incident Score: Previous week: 0.77/ Current Week: 0.76

Week's Highlights:

- Completed environmental site audit by Al Jensen, HSQE manager. Report to be issued in the next period.

Week's Issues:

- Identified erosion at certain culvert inlets. Rip-rap and/or straw wattles will be installed around the culvert inlet/outlet.
- Site experienced four (4) leaks with all of them documented, cleaned and disposed properly in the waste container.
    - 10-gallon hydraulic leak from the crane at T27;
    - 3-gallon leak from the contaminated soil bin due to the oil disposed within the bin;
    - 2-cups of oil from unknown source leaked on ground in front of the Vestas trailer;
    - Can of WD-40 was crushed in the laydown yard.

Quality

Type	RES Issued NCRs			RES Issued CPARs			Client Issued NCRs			Client Issued CPARs		
	Issued	Open	Closed	Issued	Open	Closed	Issued	Open	Closed	Issued	Open	Closed
Current Period	0	0	0	0	0	0	0	0	0	0	0	0
PTD	3	0	3	0	0	0	8	2	6	0	0	0

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

Week's Highlights:

- Building & Earth: Checking densities for collector trench backfills, roads and culverts, testing Class 5 material gradations every 2500cy, witnessed proof rolls for crane pad's T-1/ T-50/ T- 52/ T-58/ T-32/ T-40/ T-39/ T-38 and breaking grout cubes;
- Took compaction test for crane pad final base density compactions after passing subgrade densities for T-1/ T-2 / T-28/ T-32 /T-51 / T-58 all passing;
- Monitored T-4 excavation backfill. All lifts passed density tests;
- Monitored proof roll and density testing on road C2 to T-9, T-10 & T-11, and all densities passed;
- Monitored grouting at T-46, T-46 & T-24;
- Monitored tensioning at T-23 & T-47;
- Inspected collector trenching & backfills.

Week's Issues:

- Submitted TEF for the repair of the concrete damage at T-25;
- Received response for TEF-23053-042 for proof rolling T-27 & T-30 crane pad subgrade.

SCHEDULE STATUS

Project duration	68
No. of weeks into contract	50
Contract time passed (%)	74%

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%	79.0%	66%
Foundations	20.0%	100.0%	100.0%	99%
Collection System	21.5%	74.0%	69.0%	66%
Substation	15.0%	91.0%	87.0%	61%
O&M Building	6.0%	100.0%	97.0%	97%
WTG Delivery, Erection, & MCC	15.0%	9.0%	9.0%	5.3%
Overall Actual Percent Complete				63.0%

PROGRESS REPORT

PERMIT STATUS

Permit Type / Description	County / State	Responsible Group	Date Needed By	Status
-	-	-	-	-

CONSTRUCTION STATUS

Certificates	Total	Submitted	Signed
Foundation Completion Certificate	75	71	71
Mechanical Completion Certificate	75	0	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	152,837	(15,215)	111.1%
Sub Grade	30%	137,622	141,772	(4,150)	103.0%
1st Lift	20%	137,622	153,875	(16,253)	111.8%
Shoulders	10%	152,837	0	152,837	0.0%
Ditches	10%	152,837	0	152,837	0.0%
Crane Pads	30%	Crane Pads			**33.2%**
WTG Site Ready for Delivery	30%	75	23	52	30.7%
Cut & Subgrade Compacted	40%	75	27	48	36.0%
Material Placed & Compacted	30%	75	24	51	32.0%
			Road and Crane Pad Progress		66%

Comments:

- Completed seven (7) crane pads with road base;
- Completed six (6) crane pad sub-grade and proof roll tests;
- Continue maintaining 52nd Ave., 106th St, 108th St;
- Worked on the turning radii at Hwy 30 & T19, 107st/County road 23, 103rd St and 54th Ave.

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	72	3	96.0%
			Foundation Progress		**99%**

Comments:

- Completed backfill on T4 and ongoing backfill on T11.

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**		**60.1%**
Trench	40.0%	278,230	169,421	108,809	60.9%
MV & Fiber/Ground Cable	50.0%	297,945	195,746	102,199	65.7%
Junction Boxes	10.0%	28	8	20	28.6%
Terminations	**20.0%**		**Terminations**		**27.7%**
MV Cable at WTG switch gear	45.0%	75	0	75	0.0%
Junction Boxes	35.0%	28	8	20	28.6%
Underground MV Splices	20.0%	26	23	3	88.5%
			Collection System Progress:		**65.6%**

Comments:

- Completed 14,149' of ROW, 16,496 Trench, 15,516 MV Cable, 10,915 backfill;
- Completed seven splices;
- Staged JB on circuit # 4 for installation.

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%	5%	95%
Cleaning and Shop Finish	4.0%	100%	0%	100%
Security System & Fence	4.0%	100%	18%	82%
Landscaping	1.0%	100%	100%	0%
Asphalt	1.0%	100%	100%	0%
			Total	**97%**

Comments:

- Connected the well to the building water line and took a water sample to test the water quality;
- Completed the installation of the back-up generator, the HVAC wiring, and electrical fixtures. This completes all electrical work at the O&M;
- Completed the fence and main gate installation. Two man-gate installations to be completed on Monday, June 29, 2015;
- All plumbing and HVAC installation has been completed and the systems were tested on Thursday June 25, 2015;
- VTI installed all security cameras and intercom and will resume on Tuesday with installing all card readers;
- Successfully completed the walk through with Xcel, RES, and ABS (Substantial Completion). A final punch list was developed and will be used as a tracking tool to achieve final completion;
- Remaining grading work outside the fence will commence in early July and landscaping work will follow;
- Asphalt work will be performed in mid-August.

SUBSTATION

SUBSTATION								
#	Org	Activity Description	TIME Weight	QTY PLANNED	QTY DONE	QTY REMAINING	% Completed	Unit
1	REI	Engineering	**5.0%**				**100.0%**	%
2	REI	*Submittal & Approval Drawings*	*40.0%*	100	100	0	*100.0%*	%
3	REI	*Issue of Construction Drawings*	*60.0%*	100	100	0	*100.0%*	%
4	REI	Procurement & Delivery	**40.0%**				**88.0%**	
6	REI	*69kV DEAD TANK CIRCUIT BREAKER, 3000A*	*5.0%*	4	4	0	*100.0%*	EA
7	REI	*69kV DEAD TANK CIRCUIT BREAKER, 1200A*	*5.0%*	4	4	0	*100.0%*	EA
8	REI	*253kV CIRCUIT BREAKER, 2000A*	*5.0%*	1	1	0	*100.0%*	EA
9	REI	*CONTROL BUILDING*	*5.0%*	1	1	0	*100.0%*	EA
10	REI	*DC Station Service Charger, Batteries, Rack...*	*5.0%*	1	1	0	*100.0%*	EA
11	REI	*34.5kV 3-Phase Reactor-10 MVAr (3 X 3.333mVAR)*	*5.0%*	1	1	0	*100.0%*	EA
12	REI	*CAP BANK, 34.5kV, 11MVAR, with Stand*	*5.0%*	100	100	0	*100.0%*	EA
13	REI	*INRUSH Current Limiting Reactor*	*5.0%*	100	100	0	*100.0%*	EA
14	REI	*CAP BANK, Switcher*	*5.0%*	100	100	0	*100.0%*	EA
15	REI	*POWER TRANSFORMER 230/34.5KV*	*12.0%*	1	0	1	*0.0%*	EA
16	REI	*SUBSTATION STEEL / FITTINGS*	*5.0%*	100	100	0	*100.0%*	EA
18	REI	*Dead End & Static Mast*	*10.0%*	100	100	0	*100.0%*	%
19	REI	*Structural Steel*	*12.0%*	100	100	0	*100.0%*	%
20	REI	*Grounding Transformer*	*8.0%*	100	100	0	*100.0%*	%
21	REI	*MET Tower*	*8.0%*	100	100	0	*100.0%*	%
22	REI	Construction	**55.0%**				**38.8%**	
23	REI	*Site Preparation & Grading*	*5.0%*	100	95	5	*95.0%*	%
23	REI	*Site Aggregate & Finishing rock*	*2.0%*	100	0	100	*0.0%*	%
25	REI	*Flat Foundations*	*6.0%*	18	18	0	*100.0%*	EA
26	REI	*Main Power Transformer*	*6.0%*	100	0	100	*0.0%*	EA
27	REI	*Piers*	*6.0%*	78	78	0	*100.0%*	EA
28	REI	*Grounding Grid*	*8.0%*	100	60	40	*60.0%*	%
30	REI	*Conduits Installation*	*4.0%*	100	60	40	*60.0%*	%
31	REI	*Trenwa Installation*	*5.0%*	100	30	70	*30.0%*	%
32	REI	*Structural Steel*	*5.0%*	100	65	35	*65.0%*	%
33	REI	*Dead End & Static Mast*	*5.0%*	100	85	15	*85.0%*	%
34	REI	*Collection Circuits Risers*	*5.0%*	100	50	50	*50.0%*	%
35	REI	*Place Equipment and Bus*	*8.0%*	100	35	65	*35.0%*	%
36	REI	*Install Cables & Control Wiring*	*6.0%*	100	0	100	*0.0%*	%
37	REI	*Grounding Transformer*	*4.0%*	100	0	100	*0.0%*	%
38	REI	*MET Tower*	*5.0%*	100	10	90	*10.0%*	%
39	REI	*Commissioning and Testing*	*7.0%*	100	0	100	*0.0%*	%
40	REI	*Sub. Substantial Completion*	*9.0%*	100	0	100	*0.0%*	%
41	REI	*Hand Over of Job Books*	*4.0%*	100	0	100	*0.0%*	%
		Substation SubcontractorTotals	**100.0%**	100	**0**	**0**	**61.5%**	%

Comments:

- Continued installing trenwa on HV side of substation;
- Drilled and poured met tower foundation;
- Continued steel installation;
- Poured main power transformer foundation containment walls;
- Continued work on ground grid;
- Continued pulling wire throughout sub;
- Continued terminating wire in EEE;
- Removed containment wall (south wall) in preparation for MPT installation.

TURBINES

Item	Weighted %	Quantity	Total Received	Total Remaining	Percent Complete
Deliveries	**20.0%**		**Deliveries**		**15.8%**
Base	15.0%	75	11	64	14.7%
Mid	14.0%	75	12	63	16.0%
Upper Mid	14.0%	75	10	65	13.3%
Top	14.0%	75	10	65	13.3%
Nacelle	14.0%	75	14	61	18.7%
Hub	14.0%	75	15	60	20.0%
Blades	15.0%	75	11	64	14.7%
Installations	**50.0%**		**Installations**		**3.6%**
Base	17.0%	75	7	68	9.3%
Mid	16.0%	75	3	72	4.0%
Upper Mid	16.0%	75	2	73	2.7%
Top	17.0%	75	2	73	2.7%
Nacelle	17.0%	75	1	74	1.3%
Blades	17.0%	75	1	74	1.3%
MCC & Commissioning	**50.0%**		**Terminations**		**0%**
Walkdowns	33.3%	75	0	75	0.0%
MCC Submitted	33.3%	75	0	75	0.0%
MCC Signed	33.4%	75	0	75	0.0%
				Turbine Progress:	**5.3%**

Highlights

- Completed the first full turbine installation at T23;
- Received Components;
  - Monday 22 – 12 trucks
  - Tuesday 23 – 17 trucks
  - Wednesday 24 – 15 trucks
  - Thursday 25 – 6 trucks
  - Friday 26 – 8 trucks
- Both 1300 cranes are operational;
- Lieibherr LTM 1220-5.2 hydraulic truck crane taken off rent on 6/27/15;

Issues

- Vestas delivering turbines unlevelized and out-of-sequence;
- Deficiencies in Nacelles identified including issues with the reduction gear (shaft had burrs and were stuck in the generator) and turning gear motor for MK7 tower;
- Lightning stand downs almost every day;
- Landowner delayed crane walks on Thursday 6/25/15;
- Vestas deliveries are slower than planned.

- **Exhibit 1 – Site Photographs**

Substation

O&M Building

O&M Building

Turbine installation – T23

Base installation T47

Main Crane - T25

Exhibit 2 – Safety Log

Formulas for TRIR and RES Safety Index calculation:

TRIR = ((Lost Time + Medical Aid) * 200,000) / Total Project Man Hours ((1+1) *200,000/ Total Project Man Hours
RES Safety Index = ((Lost Time*64) + (Injury*16) + (Minor Injury*4) + (Damage * 1) + (Near Miss*0.25))/Man Hours*1000
((1*64)+(1*16)+(10*4)+(26*1)+(74*.25)) / Total Project Man Hours * 1000

#	Date:	Incident Observed During:	Incident Type:	Company Involved:	Incident Details:	Corrective Action Details:	Actions Taken to Prevent Reoccurrence:
668	6/14/15	Safety Walk	Hazard Observation	RES Americas	Small dent noticed on the boom of LR 1600 at pad 23.	Third part inspector was contacted, the small dent was evaluated and found to be within limitations.	Operator and team members were made aware of the dent and informed that it has been evaluated and found to be acceptable.
669	6/15/15	Safety Walk	Hazard Observation	RES Americas	During an inspection of components a hub lug was found to have bad threads.	New lugs were put in place of the bad ones.	Team members were reminded that pre inspections of tools, components and equipment can prevent injuries and incidents.
670	6/20/15	Safety Walk	Safe Work Observation	RES Earth and Cable	An operator supervisor left the site with the JHA. The roller operator then drafter a new JHA.	None, this was a Safe Observation.	None, this was a Safe Observation.
671	6/20/15	Safety Walk	Hazard Observation	RES Earth and Cable	A pick-up truck arrived on site and the operator exited the vehicle and did not deploy cones.	Roller operator reminded vehicle operator to deploy cones.	All team members reminded of the requirement to deploy cones when vehicles are parked.
672	6/22/15	Safety Walk	Safe Work Observation	RES Americas	When backing into a parking spot, vehicle used spotter even though not required.	None, this was a Safe Observation.	None, this was a Safe Observation.
673	6/23/15	Safety Walk	Safe Work Observation	RES Americas	OSHA inspector visited site. Site deemed in compliance by OSHA inspector.	None, this was a Safe Observation.	None, this was a Safe Observation.
674	6/23/15	Safety Walk	Hazard Observation	RES Erections	Team member working in a man lift 6-8 feet above the ground was not tied	Team member was reminded that RES has a 100% tie off	During the 24Jun15 all hands meeting all team

#	Date:	Incident Observed During:	Incident Type:	Company Involved:	Incident Details:	Corrective Action Details:	Actions Taken to Prevent Reoccurrence:
					off.	policy at all times when working at height.	members were reminded of the importance of using 100%tie off at all times.
675	6/23/15	Safety Walk	Safe Work Observation	RES Erections	Team members using simple green in the field had spray bottles labeled properly with the chemicals contents.	None, this was a Safe Observation.	None, this was a Safe Observation.
676	6/23/15	Safety Walk	Safe Work Observation	RES Earth and Cable	Cable crew properly sloped the sides of a excavation in order to access the bottom of a trench.	None, this was a Safe Observation.	None, this was a Safe Observation.
677	6/23/15	Safety Walk	Safe Work Observation	A.B. Systems	Before any excavation was to take place for the installation of a LP line that crossed a electrical line. Construction Director contacted Site Safety to find day lighting methods to be used.	None, this was a Safe Observation.	None, this was a Safe Observation.
678	6/20/15	Safety Inspection	Safe Work Observation	RES Americas	Section 22 RES Staff Training completed. Adequate at the time of inspection.	None, this was a Safe Observation.	None, this was a Safe Observation.
679	6/22/15	Safety Inspection	Safe Work Observation	RES Americas	Section 21 Vehicle Safety completed. Adequate at the time of inspection.	None, this was a Safe Observation.	None, this was a Safe Observation.
680	6/24/15	Safety Inspection	Safe Work Observation	RES Americas	Section 8 ladder inspection. Adequate at the time of inspection.	None, this was a Safe Observation.	None, this was a Safe Observation.
681	6/24/15	Safety Inspection	Safe Work Observation	RES Americas	Section 12 Flammable gases and liquids. All Chemicals and cabinets adequate at time of inspection.	None, this was a Safe Observation.	None, this was a Safe Observation.
682	6/24/15	Safety Inspection	Safe Work Observation	RES Americas	Section 17 working at heights. T-23 and T-47 all climbers and climbing gear Adequate at time of inspection.	None, this was a Safe Observation.	None, this was a Safe Observation.
683	6/24/15	Safety Inspection	Safe Work Observation	RES Americas	Section 15 SDS on site. SDS Book's in safety office and tool trailer Adequate at time of inspection.	None, this was a Safe Observation.	None, this was a Safe Observation.

#	Date:	Incident Observed During:	Incident Type:	Company Involved:	Incident Details:	Corrective Action Details:	Actions Taken to Prevent Reoccurrence:
684	6/24/15	Safety Walk	Hazard Observation	Rosendin Electric	During my safety walk of the substation an open trench with no barricades was observed.	Brought violation up with the Rosendin foreman and safety manager to correct barricade issue.	Rosendin corrected barricade issue.
685	6/24/15	Safety Walk	Hazard Observation	Rosendin Electric	RES Safety (Vernon George) observed Evergreen worker's trying to load a fork lift on to a flatbed truck using the wrong equipment.	Work was stopped and proper loading equipment was brought over JHA reviewed, changed, forklift was properly loaded.	Training provided to crew on using the proper equipment and job planning to help prevent recurrence.
686	6/24/15	Safety Walk	Safe Work Observation	RES Americas	RES Safety (Vernon George) when arriving at T-23 a RES employee approached me with a JHA explained the hazards before I signed, good job.	None, this was a Safe Observation.	None, this was a Safe Observation.
687	6/24/15	Safety Walk	Hazard Observation	RES Americas	Improper barricade around main erection crane.	Talking to the RES Erection Foreman about OHSA requirement for barricade around main erection crane,	Talking to all erection crews on proper crane barricades.
688	6/24/15	Safety Walk	Hazard Observation	RES Americas	Workers installing studs in root end of blade, electrical cords, power tools, did not have the monthly color code, tools not properly inspected.	Workers were instructed to make sure and inspected and color code all cords, tool, and ladders before using.	Workers are new to the project and were not aware there cords and tools had not had their monthly inspection. No strikes issued.
689	6/24/15	Safety Walk	Safe Work Observation	RES Americas	No traffic cones on 4 RES cable trucks.	None, this was a Safe Observation.	None, this was a Safe Observation.
690	6/25/15	Normal Work Activities	Injury	RES Americas	Two RES employees were lifting a role of geo-grid off the a pile in the laydown yard, both had lifted each end of the geo-grid one employee tripped and dropped his end of the roll, the other employee his end of the roll hit his upper right arm on the	The Employee who dropped his end of the geo-grid said he tripped on weeds that had grown around the pile of the geo-grid, workers have been asked to look at their footing and any trip hazards, remove	Employees will need to remove any trip hazards before performing job task, in our morning all hands meeting with the crews this will be addressed.

#	Date:	Incident Observed During:	Incident Type:	Company Involved:	Incident Details:	Corrective Action Details:	Actions Taken to Prevent Reoccurrence:
					inside above the elbow causing a bruise.	trip hazards before performing job task.	
691	6/26/15	Normal Work Activities	Damage	RES Americas	Res employee was driving a small front end loader/skid steer around off loaded turbine components, operator failed to get a spotter and hit the mid-section scrapping the paint causing damage to the mid-section (lower) no damage to the equipment he was driving.	Work was stopped at T-26 were incident took place, RES Safety Supervisor(Vernon George) went to pad got witness statements and took operator in for D/A test, worker will have to go through retraining on using a spotter in a tight area.	Operator will have to go through retraining with his supervisor.

Exhibit 3 – Environmental Log

Formula for the Rolling Incident Score =

((Major Incident * 16) + (Minor Incident * 4) + (Near Miss * 0.25) + (Observation * 0)) * 1000 / Total Man Hours

#	CLASS	SUB-CAT	CONTRACTOR	DATE	INCIDENT DETAILS	ACTION TAKEN TO CORRECT SITUATION	ACTION TAKEN TO PREVENT REOCCURANCE
71	Minor Incident (Below RQ)	Equipment Failure or leak	RES	6/21/2015	Approximately 10 gallons of hydraulic fluid leaked on the ground from the crane that was being set up for turbine deliveries at T27.	The leak was controlled immediately using spill kits and absorbents. The contaminated soil was disposed in to the special waste bin in the laydown yard.	Equipment is removed from operation until fixed.
72	Minor Incident (Below RQ)	Equipment Failure or leak	RES	6/25/2015	2 gallons of Hydraulic fluid leaked on the ground that was disposed into the contaminated soil bin. The liner was torn due to the bins placed into the bin. There was not enough unsaturated soil in the bin to absorb the oil disposed in to the bin.	Additional dirt and drain pillow was placed into the contaminated bin to absorb the remaining fluid. The spoil was collected using a back hoe into the contaminated soil bin.	Advised everyone to inspect their vehicle for leaks every morning.
73	Minor Incident (Below RQ)	Equipment Failure or leak	All	6/25/2015	Spotted a can of WD 40 that was crushed by a vehicle and remains spread on the ground	The spoil was collected using a shovel into a 5 gallon container (0.5 ft3)	Instructed everyone to dispose of all trash properly.
74	Observation	Lack of or Damaged BMP	All	6/24/2015	Identified erosion around the culvert inlets.	Install rip rap or straw wattle to stabilize the gravel around the culverts	Working to install rip rap or straw wattle to stabilize the gravel around the culverts
75	Minor Incident (Below RQ)	Equipment Failure or leak	All	6/26/2015	1 cup of oil from unknown source found on the ground in the laydown yard.	The spoil was collected in a 5 gallon container (0.25 ft3)	Advised everyone to inspect their vehicle for leaks every morning.

Exhibit 4 – Quality Log

- Incidents - None
- CPARs - None
- NCRs - 8

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			2	6
NCR-15-016 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
23053-30	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.	
23053-091	Lester Archer	RES	Brad Morrison	Xcel Energy - Generation	Low side bus ground	06/05/15	06/12/15	Substation		06/23/15
23053-093	Lester Archer	RES	Chris Ayika	Xcel Energy - Transmission	Xcel End to End Tests	06/17/15	06/23/15	Turbine		
23053-094	Emad Alaydi	RES	Peter Doherty	Xcel Energy - Generation	Tunnel in tunnel communication	06/22/15	06/29/15	Turbine		06/23/15
23053-095	Emad Alaydi	RES	Peter Doherty	Xcel Energy - Generation	Ice detection units	06/22/15	06/29/15	SCADA		06/23/15
23053-096	Emad Alaydi	RES	Ritchie Farmer	Vestas	Ice detection documentation	06/22/15	06/29/15	SCADA	Vestas responded on 6/23/15. Requested additional information from RES	
23053-097	Lester Archer	RES	Pete Doherty	Xcel Energy - Generation	Low side bus ground	06/23/15	06/30/15	Substation		06/24/15
23053-098	Emad Alaydi	RES	Ritchie Farmer	Vestas	VPN Tunnel in tunnel communication	06/25/15	07/02/15	Substation		

Exhibit 6 - Change Order Request Log

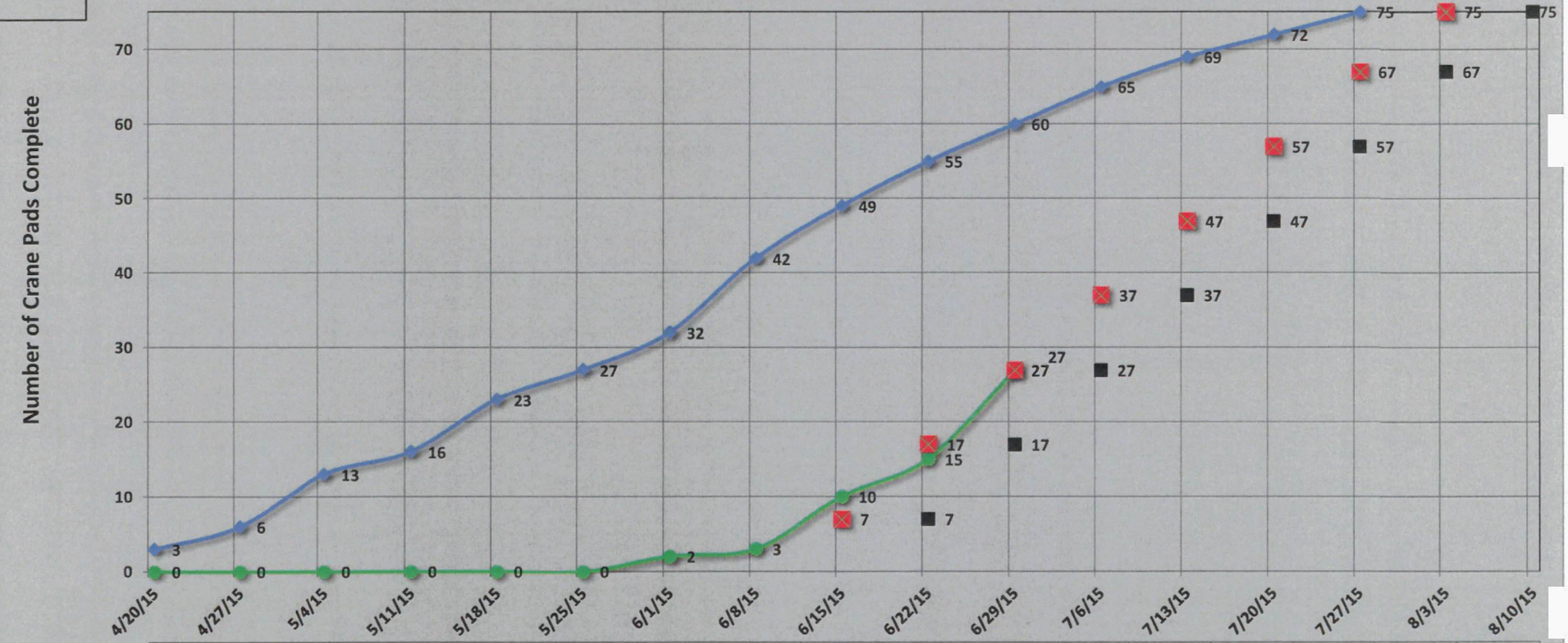
CO No.	Date Identified	Date Submitted	Date Executed	Description	Value of CO	Comments
1	06/11/15			Change in the landscaping design - larger trees for windbreak at O&M	$ 3,176.00	RES and Xcel agreed to split total cost of $6,352.00
2	06/11/15			Storm shelter changes at O&M	$ 11,000.00	RES to request additional information from ABS on who directed the changes
3	06/11/15			Changes in final design vs specification of electrical layout at O&M	$ 11,151.00	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	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. 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. 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.

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 th 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

CO No.	Date Identified	Date Submitted	Date Executed	Description	Value of CO	Comments
						not evident form any of the supplied specifications, since Xcel does not have a standard specification for 34.5kV capacitor banks.
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 tha' 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: 6/29/2015

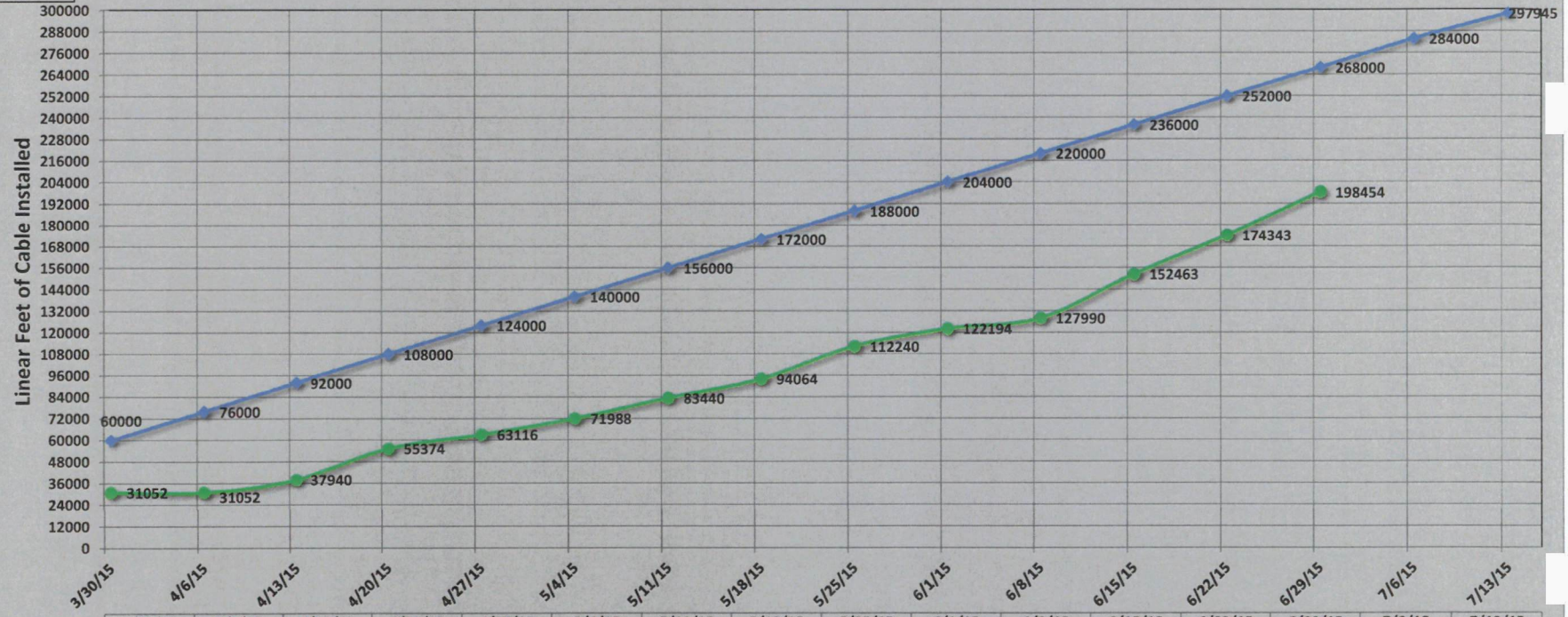
Border Winds - Crane Pad Completion Progress Chart



	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						
Anticipated WTG Deliveries									7	17	27	37	47	57	67	75	
Guaranteed WTG Deliveries										7	17	27	37	47	57	67	75

Last Updated: 6/29/2015

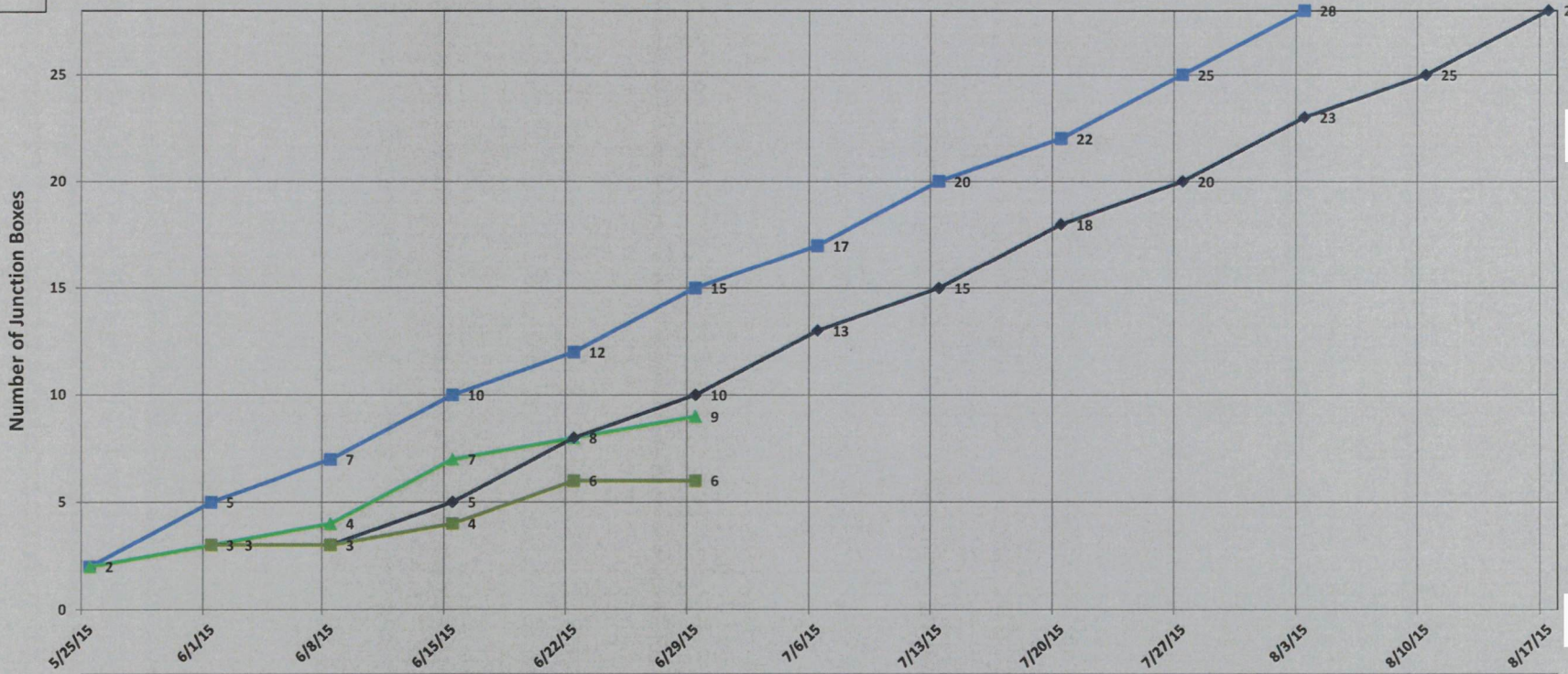
Border Winds - Cable Installation Progress Chart



	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
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		

Last Updated: 6/29/2015

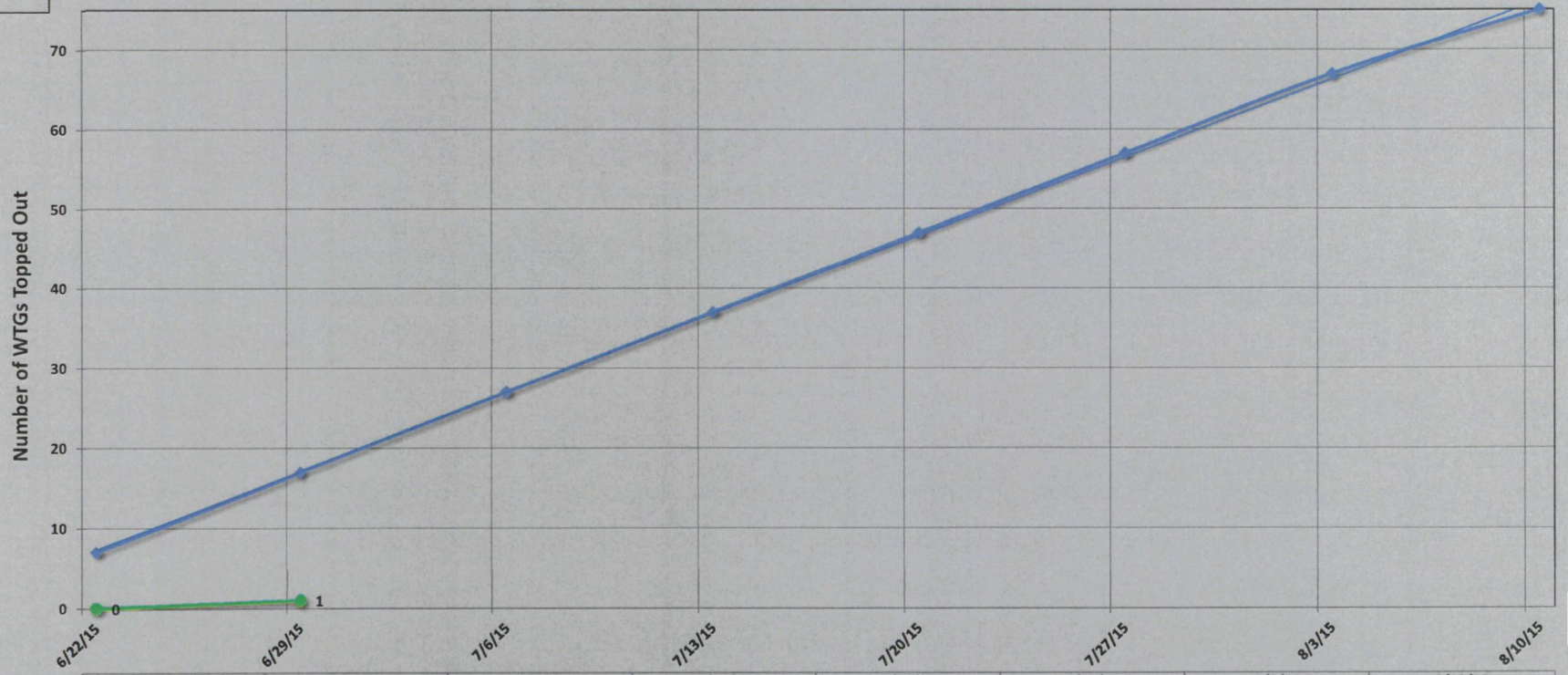
Border Winds - Junction Box Progress Chart



	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
Planned JB Setting	2	5	7	10	12	15	17	20	22	25	28		
Actual JB Setting	2	3	4	7	8	9							
Planned JB Terminations			3	5	8	10	13	15	18	20	23	25	28
Actual JBs Terminated		3	3	4	6	6							

Last Updated: 6/29/2015

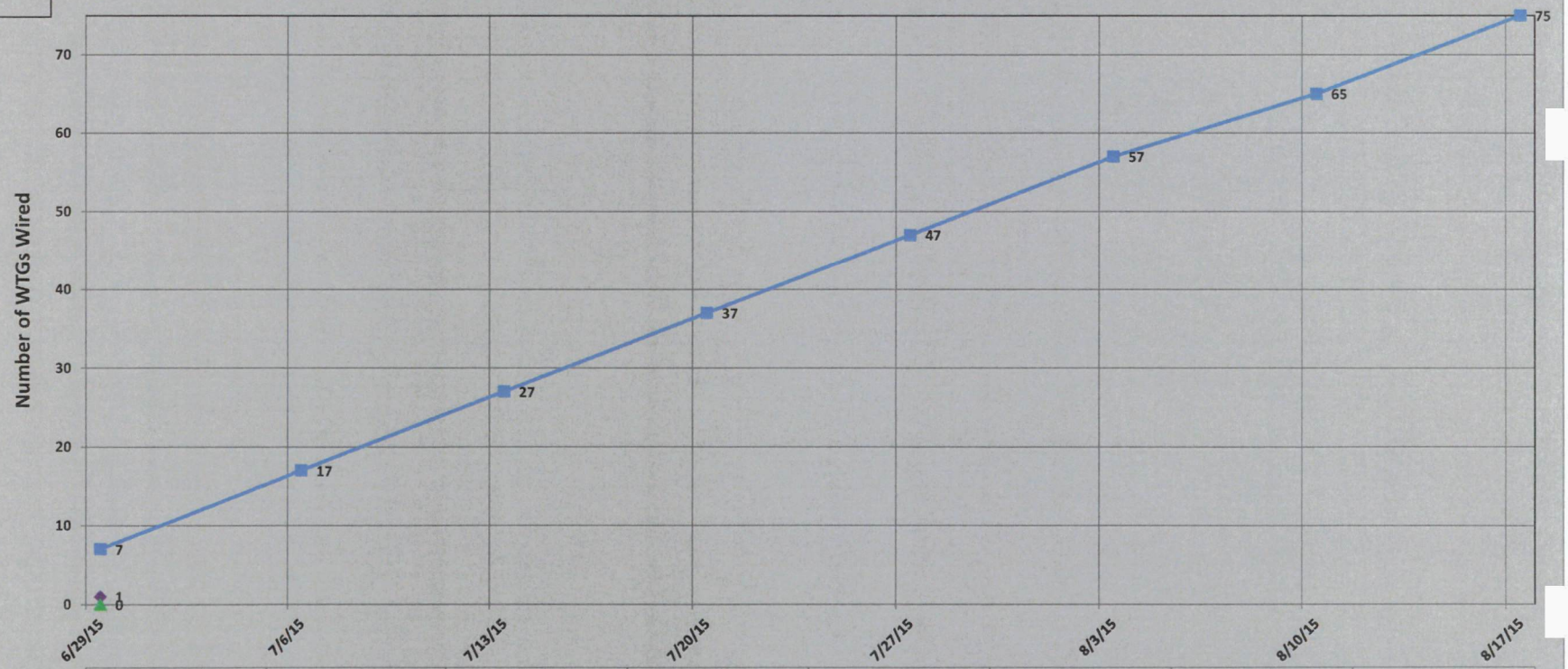
Border Winds - WTG Top Out Progress Chart



	6/22/15	6/29/15	7/6/15	7/13/15	7/20/15	7/27/15	8/3/15	8/10/15
Planned WTGs Topped Out	7	17	27	37	47	57	67	75
Actual WTGs Topped Out	0	1						
WTGs Ready to Wire								

Last Updated: 6/29/2015

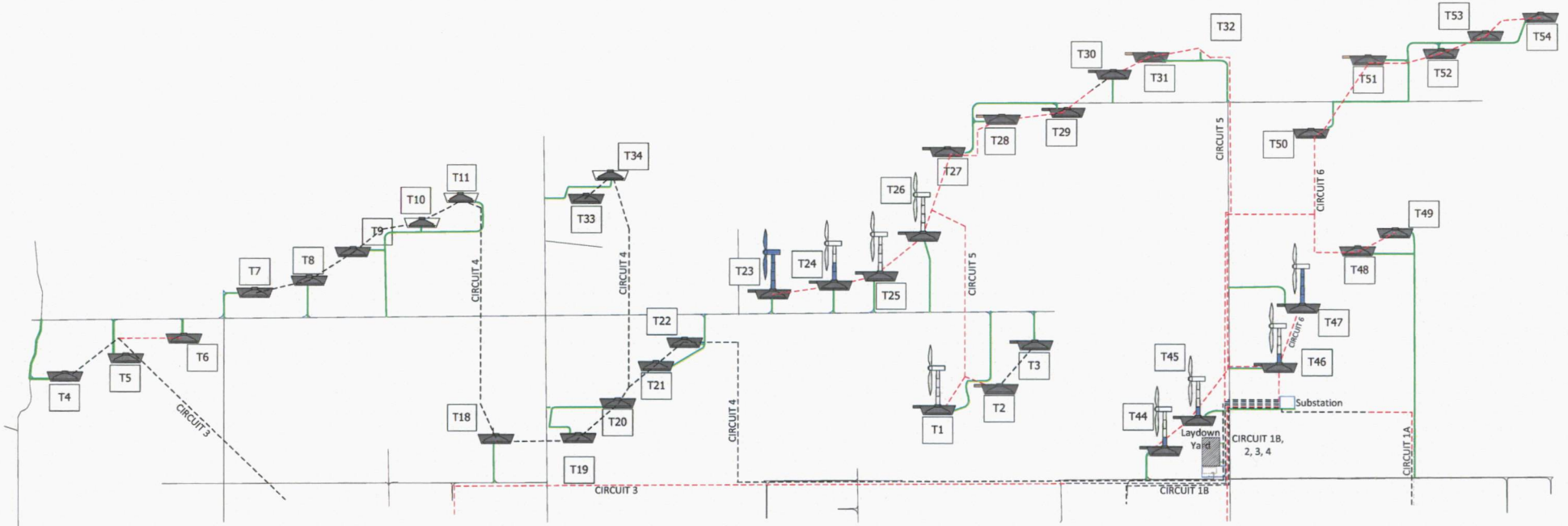
Border Winds - WTG Wiring Progress Chart



	6/29/15	7/6/15	7/13/15	7/20/15	7/27/15	8/3/15	8/10/15	8/17/15
WTGs Ready to Wire	1							
Planned WTG Wiring Completion	7	17	27	37	47	57	65	75
Actual WTG Wiring Completed	0							

Border Winds – North
Construction Progress Status Map

Updated – 06/26/2015

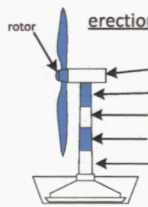


road design
road base installed
34.5kV underground- design
34.5kV underground- installed

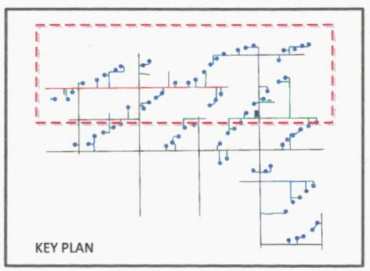
foundation status

excavated
pedestal
mud mat
backfilled
base
crane pad subgrade complete
crane pad complete

erection status

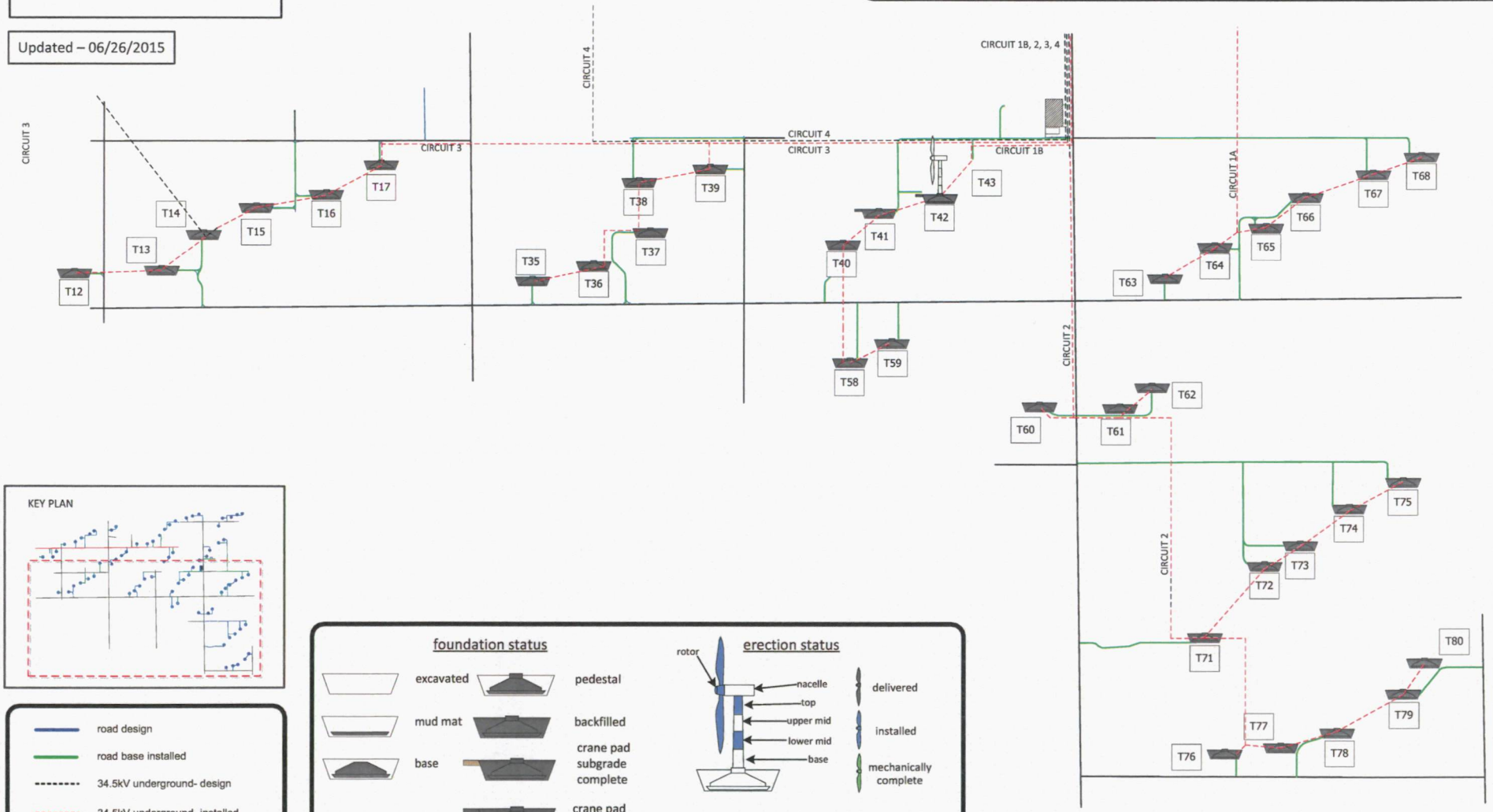


delivered
installed
mechanically complete



Border Winds – South
Construction Progress Status Map

Updated – 06/26/2015



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

foundation status

excavated
mud mat
base
pedestal
backfilled
crane pad subgrade complete
crane pad complete

erection status

delivered
installed
mechanically complete