



BORDER WINDS ENERGY PROJECT

WEEKLY PROJECT REPORT

Weekly report no:	28
Report for week period ending COB Friday:	02/06/2015
Calendar week no:	6

Executive Summary

This Week's Highlights

- Wall sheeting began at O&M Building - north side of building completed;
- Design Review Meeting held in Minneapolis on February 4, 2015 with RES, Xcel, and Rosendin regarding 60% drawings submittal;
- Rosendin and Power Grid mobilized to site Wednesday, February 4th to begin staging of equipment and ground heating;
- 802 tons of washed aggregate delivered and placed at 28 turbine sites for blending with previously stockpiled aggregate for crane pads.

This Week's Key Issues

- Downed power lines still remain on-site and repairs by utility are on-going;
- Construction schedule being revised;
- Erection self-perform representatives scheduled to visit the site next week to finalize crane walk pathways;
- Signage on the county roads damaged due to snow and wind being reinstalled;
- O&M work impacted this week due to extreme temperatures.



Safety

*Full description of week's Safety Log can be found in Exhibit 2

Type	Lost Time	Recordable Injury (Medical Aid)	Minor Injury (First Aid)	Equipment Property Damage	Near Miss	3X20 Observation
Current Period	0	0	0	0	0	7
Project To Date	1	0	9	19	65	431

Previous Week TRIR = 1.42 / Current Week TRIR = 1.40

((Lost Time + Medical Aid) * 200,000) / Total Man Hours

Previous Week RES Safety Index = 0.96 / Current Week RES Safety Index = 0.95

((Lost Time * 64) + (Injury * 16) + (Minor Injury * 4) + (Damage * 1) + (Near Miss * 0.25)) / Man Hours * 1000

Weeks Highlights:

- Work continued on restroom shelter - 90% completed;
- Rosendin personnel attended safety orientation prior to beginning work due to extended length of time away from the job site.

Weeks Issues:

- Extreme cold weather, with wind chills in excess of -15F caused O&M subcontractor not to work on Tuesday and Wednesday.

Project Work Hours:

- Weekly Man-hours: 1,101
- PTD Man-hours: 141,871



Environmental

*Full description of week's Environmental Report can be found in Exhibit 2

Type	Major Incident	Minor Incident	Near Miss	Observation
Current Period	0	1	0	1
Project to Date	0	47	3	19

Rolling Incident Score

Previous week: 0.84 Current Week: 0.92

Week's Highlights:

- Frozen ground conditions.
- Temperature remained below freezing through the week. No snow thaw observed.

Week's Issues:

- One (1) quart of oil from generator leaked while operating at the substation entrance. The material was collected into a container for disposal.

Quality

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

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	3	3	0	0	0	7	2	5	0	0	0

Week's Highlights:

- Collecting information for the job books;
- Monitored construction at the O & M Building;
- Transmitted Foundation Completion Punch list to Xcel;
- Submitted Foundation Completion Certificates for execution.

Week's Issues:

- Torque wrench on order for checking bolts at the O & M Building



Schedule Status

Project duration	71
No. of weeks into contract	30
Contract time passed (%)	42%

Key Activities (Construction)	Weighted %	Percent Complete		
		Contract Schedule	Construction Schedule	Actual
Design Engineering	2.5%	100%	100%	100%
Roads	14%	100%	83%	83%
Crane Pads	6%	0%	0%	0%
Foundations	20%	100%	95%	95%
Collection System	20%	46%	30%	30%
Substation	10%	55%	16%	16%
WTG Delivery, Erection, MCC	20%	0%	0%	0%
O&M Building	5%	100%	28%	29%
Completion	2.5%	0%	0%	0%
Overall Actual Percent Complete				41%

Progress Report

Permit Status

Permit Type / Description	County / State	Responsible Group	Date Needed By	Status
O&M Well Permit	ND State	AB Systems	8/30/15	Pending submittal

- RFI pending regarding cost information and available potable water options.

Construction Status

Certificates	Total	Submitted	Signed
Foundation Completion Certificate	75	71	0
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			69%
Clear and Grub	20%	152,837	152,837	0	100%
Subgrade	25%	152,837	141,346	11,491	92%
Place and Compact Road Base	30%	207,469	185,555	21,914	89%
Shoulders	15%	152,837	0	152,837	0%
Ditches	10%	152,837	0	152,837	0%
Crane Pads	30%	Crane Pads			0%
Shape and Compact Sub Grade	40%	75	0	75	0%
Place and Compact Road Base	60%	75	0	75	0%

Comments:

- Construction of new roads is on hold due to frozen subgrade conditions
 - Road construction planned to resume mid-May, 2015;
- Completed staging Class 5 aggregate for construction of crane pads at first 28 turbine sites in erection sequence;
 - Aggregate was found to be out of specification. Supplier provided 28 loads of clean 1-inch material for blending with the existing aggregate. This remediation has been approved by RES Engineering.

FOUNDATIONS

Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete
Excavations	10%	75	71	4	95%
Mud Mats	5%	75	71	4	95%
Bases	45%	75	71	4	95%
Pedestals	20%	75	71	4	95%
Backfilled	15%	75	71	4	95%
Vestas Ground Kit	5%	75	71	4	95%

Foundation Progress 95%



Comments:

- Foundation construction planned to resume mid-May, 2015

COLLECTION SYSTEM

Item	Weighted %	Quantity	Total Received	Total Remaining	Percent Complete
Deliveries		30.0%	Deliveries		85%
Grounding Transformers	10.0%	6	0	6	0.0%
MV Cable 3/0 AWG AL	15.0%	308,288	314,910	0	100%
MV Cable 350 Kcmil AL	7.5%	140,708	143,964	0	100%
MV Cable 750 Kcmil AL	15.0%	217,740	188,128	29,612	86%
MV Cable 1000 Kcmil AL	7.5%	88,167	90,485	0	100%
MV Cable 1250 Kcmil AL	20.0%	147,069	150,472	0	100%
Fiber 12 count	2.5%	328,520	336,590	0	100%
Fiber 120 count	2.5%	6,587	6,587	0	100%
Ground Cable	10.0%	299,663	299,663	0	100%
Junction Boxes	5.0%	28	28	0	100%
Rubber Goods	5.0%	1420	772	648	54%
Installations		50.0%	Installations		5%
Trench	60%	278,230	24,611	253,619	8%
MV & Fiber/Ground Cable	30%	297,841	31,052	266,789	10%
Grounding Transformers	5%	6	0	6	0.0%
Junction Boxes	5%	28	0	28	0.0%
Terminations		20.0%	Terminations		0.0%
Grounding Transformers	10.0%	6	0	6	0.0%
Junction Boxes	30.0%	28	0	28	0.0%
Turbines	60.0%	75	0	75	0.0%

Collection System Progress: 30%

Comments:

- Awaiting TOV study from RES Engineering for submittal to Xcel. Once reviewed by Xcel, grounding transformers will be approved;
- Began drafting list of materials that were on the BOM, including material for the inside tower grounding and MV cable grounding;
- RES self-perform will be on site Tuesday, February 10th to discuss scheduling and crane walks;
- Scheduled Northern Plains Electric to be on site Thursday, February 12th to address collection line crossing for the line they plan to bury on CR 106;
- Coordinating order completion of rubber goods materials;



- Counted home run, tower to tower footage, and terminations for scheduling; and
- Continued to contact Jeff Richardson in Procurement regarding contracts for Northern Plains Electric and ground grid tester;
- Collector construction planned to resume late March / early April, 2015.

O&M BUILDING

Activity Description	Required	Unit	To Date Total	Remains	% Comp.
Earthworks	100	%	85	15	85%
Foundation	100	%	85	15	85%
Deliver Building	100	%	100	0	100%
Building Enclosed	100	%	73	27	73%
Building Interior Framing	100	%	0	100	0%
Building Electrical	100	%	0	100	0%
Building HVAC	100	%	0	100	0%
Plumbing	100	%	0	100	0%
Building Interior Trim & Finishing	100	%	0	100	0%
Septic System	100	%	0	100	0%
Water Well	100	%	0	100	0%
Fence and Yard Rock	100	%	0	100	0%

O&M Building Progress: 29%

Comments:

- Water sample from nearby well sent on Tuesday, February 3, 2015 for water quality testing;
- PCS completed the wall sheeting on the north side of the O&M Building. Production was impacted due to extreme cold this week. Project Team to work with PCS to ensure the building is closed-in as soon as possible to ensure commencement of interior build-out on schedule; and
- Received the O&M drawings incorporating Xcel final comments. Xcel to review, though comment period has ended and drawings are final.



Substation

Item	Weighted	Required	Total Completed	Total Remaining	Percent Complete
Design	20%	Design			
Design Drawings	20%	100	70	30	70.0%
Deliveries	35%	Deliveries			
Structural Steel	5%	100	0	100	0.0%
Main Transformer	15%	100	0	100	0.0%
Control House	5%	100	0	100	0.0%
Relay Panel	2.5%	100	0	100	0.0%
Arrestors	2.5%	100	0	100	0.0%
Switches	2.5%	100	0	100	0.0%
Breakers	2.5%	100	0	100	0.0%
Construction	45%	Construction			
Grading & Drainage	5%	100	75	25	75.0%
Foundations	10%	100	0	100	0.0%
Underground/Grounding	5%	100	0	100	0.0%
Structural Steel Work	5%	100	0	100	0.0%
Equipment Installation	5%	100	0	100	0.0%
Control Building/Wiring	5%	100	0	100	0.0%
Transformer Fit Out	5%	100	0	100	0.0%
Commission	5%	100	0	100	0.0%
Fence, Gravel, & Clean Up	2.5%	100	0	100	0.0%

Substation Progress: 16%

Comments:

- Design Review Meeting held in Minneapolis on February 4, 2015 with RES, Xcel, and Rosendin regarding 60% drawings submittal;
- Rosendin and Power Grid mobilized to site Wednesday, February 4th to begin staging of equipment and ground heating;
- Held SCADA conference call with RES, Xcel, Rosendin, and Vestas on Friday, February 6th;
- Foundation excavation scheduled to commence Tuesday, February 10th with slurry backfill placement.

Exhibit 1 – Site Photographs



Employee Parking/Laydown Yard



Washed Rock Delivery



Rosendin Arriving for Mobilization



O&M Building Wall Sheeting



Exhibit 2 – Safety log

#	Date:	Incident Observed During:	Incident Type:	Company Involved:	Incident Details:	Corrective Action Details:	Actions Taken to Prevent Reoccurrence:
389	02/05/2015	Safety Walk	Safe Work Observation	PCS	Employee separated all of the cordless tools that did not meet inspection to a location where they will not be used until repaired.	None, this was a Safe Observation.	None, this was a Safe Observation.
390	02/05/2015	Safety Walk	Safe Work Observation	PCS	Foreman made sure to address to all employees before getting on the scissor lift to properly tie off.	None, this was a Safe Observation.	None, this was a Safe Observation.
391	02/05/2015	Safety Walk	Safe Work Observation	Rosendin	Rosendin's first day on site and had their JHA filled out properly and listed all hazard and mitigation procedures.	None, this was a Safe Observation.	None, this was a Safe Observation.
392	02/05/2015	Safety Walk	Hazard Observation	Rosendin	Wind was gusting up pretty bad which forced Rosendin to sit in their trucks for 20 minutes until the wind died down.	Foreman was advised that for future purposes that the same procedure be followed.	Foreman was advised that for future purposes that the same procedure be followed.
393	02/05/2015	Safety Walk	Safe Work Observation	PCS	All harnesses that were in use were inspected properly.	None, this was a Safe Observation.	None, this was a Safe Observation.
394	02/05/2015	Safety Walk	Safe Work Observation	Rosendin	Employees showed great use of communication when running equipment in work area.	None, this was a Safe Observation.	None, this was a Safe Observation.
395	02/05/2015	Safety Walk	Safe Work Observation	PCS	Employees showed great understanding of job site and its hazards.	None, this was a Safe Observation.	None, this was a Safe Observation.
396	02/05/2015	Safety Walk	Safe Work Observation	Rosendin	Employee came up to manager and showed him his passport so that the manager would see he was allowed on the job site.	None, this was a Safe Observation.	None, this was a Safe Observation.
397	02/06/2015	Safety Walk	Safe Work Observation	Rosendin	Employees were in a controlled work area and had all PPE needed for each task.	None, this was a Safe Observation.	None, this was a Safe Observation.



Exhibit 3 – Environmental Log

#	CLASS	SUB-CAT	CONTRACTOR	DATE	INCIDENT DETAILS	ACTION TAKEN TO CORRECT SITUATION	ACTION TAKEN TO PREVENT REOCCURANCE
23053-15-20	Minor Incident (Below RQ)	Equipment Failure or Leak	Rosendin	02/04/2015	Oil leak from a generator at the substation entrance. Drain valve opened while operating.	The affected soil was collected in a container using a backhoe.	Advised to inspect all equipment for any leaks. Equipment shutdown until fixed later in the day.
23053-15-21	Observation	Weather Event	All	02/06/2015	Frozen subgrade. No snow thaw observed. Temperature below freezing.	No action required.	--



Exhibit 4 – Quality Log

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

Material Receipt

Description of Material	Delivery Date	Vendor	Quantity	Cumulative Qty	Balance

Description of Material	NCR Opened (Current Period)	NCR Closed (Current Period)	Total NCR Open (As of this Month)	Total NCR Closed (As of this month)
Totals			2	6
NCR-2014-34, Topsoil beneath subgrade fill material at the Substation			X	
NCR-2014-38, T3 grounding was not installed per specifications			X	



**FIELD QUALITY CONTROL PROGRAM
DEFICIENCY REPORT REGISTER**

No.	Description i.e. Roads, Foundations, Electrical	LOCATION	Turbine #	Test Document No:	DEFICIENCY DESCRIPTION	DATE ENTERED	DATE CLEARED
1	Roads, Culverts	Road K2 Sta. 21+00	T-28/T-29	USCF-001	Incorrect Culvert Installation	9/29/2014	11/24/2014
2	Roads, Culverts	Road W# Sta. 00+12	T-59	USCF-001	Incorrect Culvert Installation	9/29/2014	
3	Foundations	T-49 Base	T-49	USCF-002	Foundation not protected for cold weather per ACI 306	10/08/2014	11/05/2014
4	Roads, Culverts	105 th Ave Sta. 15+25		USCF-001	Geogrid not replace after installation	10/14/2014	
5	Roads, Culverts	Access Road T2	T-74	USCF-001	Road alignment incorrect, Culverts missing	9/30/2014	
6	Roads, Culverts	N1 00+00	T-45	USCF-001	Culvert installation not per specifications	11/05/2014	
7	Roads, Culverts	108 th Ave. at T-24		USCF-001	Geogrid is showing through the class 5 material	11/10/2014	
8	Roads, Culverts	Access roads to T-9, T-10, T-11, T-34, T-35 & T-71		USCF-001	Class 5 material is out of specification.	11/13/2014	
9	Roads, Culverts	Access road to T-37 Sta. 8+00	T-13	USCF-001	Geogrid is damaged	11/13/2014	
10	Roads, Culverts	Culvert at T-26	T-26	USCF-001	Needs to be extended on west end	11/23/2014	
11	Roads, Culverts	Access Road C2	T-10	USCF-001	The access road needs to be re-aligned per the land owner's request	12/03/2014	
12	Foundations	O&M Building		USCF-002	Stoop footer at S/E end of building has wrong backfill material	12/05/2014	



Exhibit 5 – RFI Log

*Open RFIs and RFIs closed last week

	Generated By	Company	Sent To	Company	Subject	Date Sent	Response Requested By	Type: Civil, Electrical, etc.	Status / Comments	Date Closed
23053-30	Shabeeb Abdul Khader	RES	Bradley Morrison	Xcel Energy - Generation	Install crushed aggregate on the substation site	10/31/2014	11/6/2014	Civil	Xcel Responded; RES to test in the Spring.	
23053-40	Emad Alaydi	RES	Brad Morrison	Xcel Energy - Generation	Border Winds- O&M Building Color & Finishes Selection	1/16/2015	1/22/2015	O&M	Xcel coordinating with AB system	
23053-42	Emad Alaydi	RES	Tim Boardman	AB Systems	Potable Water - O&M	1/22/2014	1/29/2015	O&M	Water sample sent for testing	