



BORDER WINDS ENERGY PROJECT WEEKLY PROJECT REPORT

Weekly report no:	18
Report for week period ending COB Friday:	11/14/14
Calendar week no:	46

Executive Summary

This Week's Highlights

- Site 3x20's increased to 48 from 33 in the previous week. Construction completed 25 of the observations this week;
- Employee Hazard Observation and Near Miss reporting saw dramatic increase with 13 submissions in the week. Continued efforts are being made to encourage employee participation in the program;
- Completed placement of geogrid and aggregate for 153,875 LF out of 174,409 LF of access roads project to date – 88% complete;
- Poured one (1) base for a total of 71 of 75 foundation bases project to date – 95% complete;
- Poured four (4) pedestals for a total of 63 of 75 foundation pedestals project to date – 84% complete;
- Backfilled two (2) foundations for a total of 46 of 75 foundations project to date – 61% complete;
- Placed 31,652 LF of MV cable to date (includes pulls through bores) – 11% complete;
- Received updated Substation drawings from Rosendin, completed RES Construction and Engineering reviews – provided comments back to Rosendin for updates;
- Brian Christianson, Vicki Bush, and Larry Clark were released from the site and employment with RES;
- Bryan Whiteaker has assumed the lead management role for REC self-perform crews;
- Mike Erekson is supporting the REC self-perform operations and assisting in planning remaining work prior to winter demobilization as well as preparation for Spring activities;
- Claus Larsen and Bob Tepp leading site momentum in Safety and overall enthusiasm for achieving site objectives.



This Week's Key Issues

- Issued NCR 23053-003 to AB systems for not having the forms fully covered for the foundation on the O&M Building per the cold weather concrete plan;
- Implemented new form and procedure for issuing NCR's by all RES personnel. Training was held for all RES Quality Inspectors and Management.
- Replaced civil management personnel onsite – new management team is developing plans for winterization of site installations;
- Extreme cold conditions affecting multiple stages of construction:
 - T4 foundation excavation filled due to inability to pump water in current conditions which resulted in saturation of structural fill placed;
 - Foundation base and pedestal pours temporarily halted due to batch plant operability – working with Nelson to identify opportunities for additional concrete placement. Developing plan to ensure subgrade is not frozen for base pours;
 - Backfills are caught up to foundations sealed for backfill – developing plan to ensure material brought in for future backfills is not frozen;
 - Identified alternate material for foundation seal and repairs – approved by engineering and material is in transit to the site;
 - Collector trenching is ceased for the season – equipment demobilized or stored at the laydown yard;
 - Directional bores are ceased for the season – subcontractor is demobilized.
 - Replacement subcontractors to be considered for Spring directional bore work.

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	1	13	40
Project To Date	1	0	8	15	37	330

TRIR = 1.67

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



RES Safety Index = 1.00

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

Week's Highlights:

- Site 3x20's increased to 48 from 33 in the previous week. Construction completed 25 of the observations this week;
- Employee Hazard Observation and Near Miss reporting saw dramatic increase with 13 submissions in the week. Continued efforts are being made to encourage employee participation in the program;
- Employees made excellent use of JSA to identify hazards related to snow and extreme cold and implement control measures.

Week's Issues:

- Extreme cold weather experienced throughout the week;
- A vehicle's rear bumper was damaged as a result of employees hooking up a trailer to the wrong size hitch ball.

Project Work Hours:

- Weekly Man-hours: 6,471.25
- PTD Man-hours: 119,317.95

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	4	0	0
Project to Date	0	42	3	10

Rolling incident Score

Previous week: 0.39 Current Week: 1.39

Week's Highlights:

- Reestablished the silt fence at the substation on Thursday, 11/13/2014.



Week's Issues:

- 0.5 gallon diesel leak from a dozer at T12 access road was cleaned and placed in the special waste bin;
- 0.25 gallon off-road diesel spill while pulling out the hose after fueling the grader was cleaned up and disposed into the special waste bin;
- 0.5 gallon diesel fuel found on the ground in the laydown yard was cleaned up and disposed of in the special waste bin;
- A cup of oil found on the ground under the grader while undergoing routine maintenance was cleaned up and disposed of in the special waste bin.

Quality

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

	NCRs			Incidents			CPARs		
	Issued	Open	Closed	Issued	Open	Closed	Issued	Open	Closed
Weekly	0	0	0	0	0	0	0	0	0
Total	7	3	4	0	0	0	0	0	0

Week's Highlights:

- On-going - Sieve testing, concrete breaks, and turbine foundation backfills;
- On-going – Monitored concrete placement for turbine pedestals;
- On-going Daily Quality Meeting, the purpose of the meeting is to convey any quality construction issues between the RES quality team, RES management and Xcel.

Work Area Inspections conducted:

- Inspection of pedestal reinforcing steel for T7, T9, T17 & T37;
- Monitored turbine pedestal concrete placement for T7, T9, T17 and T37;
- Inspection of back fills for T13 – Acceptable for back fill.

Week's Issues through 11/14/2014:

- Issued NCR 23053-003 to AB systems for not having the forms fully covered for the foundation on the O&M Building per the cold weather concrete plan;



- Cherie Mecca, HSQE Manager conducted an audit of the job books;
 - Audit report is forthcoming; however, documentation for books was generally found to be satisfactory
 - QA/QC Team was provided guidance for identifying missing documents and establishing a schedule for assembling documentation and bringing job books to current status
 - QA/QC Team identified improvements for daily Quality meeting and quality issue tracking and resolution
- Implemented new form and procedure for issuing NCR's by all RES personnel. Training was held for all RES Quality Inspectors and Management.

Schedule Status

Project duration	68
No. of weeks into contract	19
Contract time passed (%)	28 %

Key Activities (Construction)	Weighted %	Percent Complete		
		Contract Schedule	Construction Schedule	Actual
Design Engineering	2.5%	100%	100%	100%
Roads	14%	90%	74%	69%
Crane Pads	6%	0%	0%	0%
Foundations	20%	95%	95%	89%
Collection System	20%	46%	33%	23%
Substation	10%	42%	31%	16%
WTG Delivery, Erection, MCC	20%	0%	0%	0%
O&M Building	5%	45%	35%	21%
Completion	2.5%	0%	0%	0%
Overall Actual Percent Complete				37%



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
O&M Septic Permit	ND State	AB Systems	8/30/15	Working with ND State HD

Comments:

- Identifying costs associated with potential installation of rural water in place of well;
- State of North Dakota Health Department reviewing location for placement of septic system drain field at O&M site.

Construction Status

Certificates	Total	Submitted	Signed
Foundation Completion Certificate	75	0	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:

- Road construction advanced to ensure foundation corridors are accessible for concrete construction – going back now to upgrade areas that were only rough graded to facilitate this;
- Encountering frozen subgrade conditions – worked with engineering to enable aggregate placement on T9-11 access road that had already been compacted and proof rolled;
- Completing grading and installation of culverts for spring drainage;
- Working with landowners to identify drainage patterns and ditch requirements.

Foundations

Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete
Excavations	10%	75	74	1	99%
Mud Mats	5%	75	74	1	99%
Bases	45%	75	71	4	95%
Pedestals	20%	75	63	12	84%
Backfilled	15%	75	46	29	61%
Vestas Ground Kit	5%	75	74	1	99%
Foundation Progress					89%

Comments:

- Filled excavation at T4 due to inability to pump water in extreme cold – water level saturated structural fill that had been placed – will look for opportunity to complete foundation at this location; however, placement of the remaining four (4) foundation locations is likely to be scheduled for 2015. Batch plant capabilities to support aggregate heating for mass pours is limited. Placement of the remaining 8 pedestals will be scheduled prior to Thanksgiving, weather permitting;
- Extreme cold weather has started to freeze soil creating issues with backfill of foundations – working on plan for backfill and protection of concrete/subgrade from freeze/thaw;
- Extreme cold impacted batch plant ability to supply concrete for basis and pedestals - completed 0 excavations, 1 mud mats, 1 bases, 4 pedestals, and 2 backfills in the current period. No concrete pours completed in latter half of current period;
- Nelson has identified and shipped an alternate patch/seal material to enable completion of patching/sealing in cold weather;
- Shrink-wrap protection of grout troughs scheduled for commencement during first week of December.



Collection System

Item	Weighted %	Quantity	Total Received	Total Remaining	Percent Complete
Deliveries		30.0%	Deliveries		63%
Grounding Transformers	10.0%	6	0	6	0.0%
MV Cable 3/0 AWG AL	15.0%	297,896	37,912	259,984	13%
MV Cable 350 Kcmil AL	7.5%	140,708	50,821	95,583	35%
MV Cable 750 Kcmil AL	15.0%	205,038	95,460	91,677	51%
MV Cable 1000 Kcmil AL	7.5%	88,167	90,485	0	100%
MV Cable 1250 Kcmil AL	20.0%	147,069	133,520	13,549	91%
Fiber 12 count	2.5%	328,520	336,590	0	100%
Fiber 120 count	2.5%	6,587	0	6,587	0.0%
Ground Cable	10.0%	299,663	299,663	0	100%
Junction Boxes	5.0%	25	0	25	0.0%
Rubber Goods	5.0%	1420	772	648	54%
Installations		50.0%	Installations		9%
Trench	60%	288,150	24,552	263,598	9%
MV & Fiber/Ground Cable	30%	288,150	31,652	257,098	11%
Grounding Transformers	5%	6	0	6	0.0%
Junction Boxes	5%	25	0	25	0.0%
Terminations		20.0%	Terminations		0.0%
Grounding Transformers	10.0%	6	0	6	0.0%
Junction Boxes	30.0%	25	0	25	0.0%
Turbines	60.0%	75	0	75	0.0%

Collection System Progress: 23%

Comments:

- Receiving MV cable;
- Extreme cold weather has impacted ability to bore, trench, and place cable. Directional boring and trenching/cable placement crews are demobilized;
- Completing splicing;
- Filling bore pits – will hydrovac and complete bore infill next spring.



O&M Building

Activity Description	Required	Unit	To Date Total	Remains	% Comp.
Earthworks	100	%	75	25	75%
Foundation	100	%	75	25	75%
Deliver Building	100	%	100	0	100%
Building Enclosed	100	%	0	100	0%
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: 21%

- Building footings and foundation walls have been poured and forms are stripped;
- Footing excavation still tented and heated to support backfill;
- Working with AB Systems on submittals required for interior build out;
- Requested lift plans for building erection - targeting start of building erection for December 1, 2014;
- Construction planned to continue through the winter.



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%

- Received Rosendin submittal of updated design drawings, conducted RES site and engineering reviews, and provided comments. Rosendin to update prior to RES sending to Xcel for review;
- Identified area of Substation pad near gate that needs further work;
- Rosendin is demobilized from site pending drawing completions – targeting December 1st for remobilization to start foundation work.

Exhibit 1 – Site Photographs



Border Winds – Culvert Installation on 106th Street



Border Winds – T37 Foundation Pedestal Formed for Pour



Border Winds – T32 Culvert Installation



Border Winds - T10 Foundation Rebar Placed



Border Winds – Vehicle Coned Off for Safety



Border Winds – Splice Pit Tent



Exhibit 2 – Safety log

#	DATE	INCIDENT OBSERVED DURING:	CLASS	CONTRACTOR	INCIDENT DETAILS	CORRECTIVE ACTION DETAILS	ACTION TAKEN TO PREVENT REOCCURRENCE
79	11/8/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Crew truck did not deploy cones when parked.	Safety Supervisor went and placed cones out at the front and rear of truck.	All crews were reminded of vehicle policy when parking vehicle on site.
80	11/8/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Crew truck did not have beacon or flashers on when parked.	Safety Supervisor went and turned on beacon light.	All crews were reminded of vehicle policy when parking vehicle on site.
81	11/8/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Equipment operator did not ground bucket when truck arrived.	Operator was reminded of the need to ground equipment bucket when vehicle is in the area.	All operators were reminded that they need to ground buckets on equipment when vehicles are around or passing.
82	11/8/2014	Safety Walk	Hazard Observation	RES Earth and Cable	T posts did not have caps on them.	Superintendent was directed to ensure that crews cap t-posts when placed.	All crews were informed of where t post caps are located and reminded to use them on site.
83	11/8/2014	Safety Walk	Hazard Observation	Pinkys Aggregate	Due to not enough signage on site a driver got lost on sight and had to reverse without a spotter.	Driver was provided directions to correct site.	Senior Project Manager will inform Site team about the need to get signs put up on site.
84	11/8/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Good use of horns when signaling truck driver.	None, this was a Safe Observation.	None, this was a Safe Observation.
85	11/8/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Truck driver did not sign onto JHA.	Crews will have drivers that coming to the same spot should sign onto the local JHA.	Crews will be told that if the same driver keeps coming to the site they should sign onto JHA.
86	11/8/2014	Safety Walk	Safe Work Observation	RES Americas	Safety Supervisor Rhine had a JHA for daily activities.	None, this was a Safe Observation.	None, this was a Safe Observation.
87	11/8/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Loader operator was driving and reached for a radio, operator should have pulled to the side and stopped.	Operators was told about operating equipment safely.	All employees will be talked to about safe operation of equipment.
88	11/8/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Vehicles using a spotter in tight areas.	None, this was a Safe Observation.	None, this was a Safe Observation.
89	11/8/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	All workers wearing needed PPE for task.	None, this was a Safe Observation.	None, this was a Safe Observation.
90	11/8/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Hard hats were blowing off due to high winds.	Workers came to Site Safety and were given hard hat chin straps to secure hard hat to employees head.	Site Safety Supervisor brought it up in morning meeting that we had hard hat straps and employees needed to get a strap for their hard hats to ensure they do not blow off.



91	11/8/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Crew had 4 JHA's among the crew covering all hazards and tasks being undertaken.	None, this was a Safe Observation.	None, this was a Safe Observation.
92	11/8/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	With high winds, vehicles parked into the wind to prevent doors slamming on equipment or employees.	None, this was a Safe Observation.	None, this was a Safe Observation.
93	11/8/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Cold weather conditions and high winds on site.	Employees came to work in layered clothing for conditions and work tasks.	All employees have been reminded to dress in layers to keep warm. All employees were briefed on RASWP - 026 on 4Nov2014.
94	11/10/2014	Normal Work Activities	Near Miss	RES Earth and Cable	An employee driving a company vehicle was driving at an excessive speed in the laydown yard while a ground crew was working.	An investigation will be held as to the employee who was operating the vehicle and he will be addressed as to the proper speed limit in the laydown yard.	Employee's will be addressed in the next mornings safety talk as to the proper speed limit in they lay down yard and when operating near ground crews.
95	11/10/2014	Safety Walk	Safe Work Observation	Nelson Wind	The crane operator was able to control his load when a gust of wind blew in and safely set it down until the wind stopped.	None, this was a Safe Observation.	None, this was a Safe Observation.
96	11/10/2014	Safety Walk	Hazard Observation	Nelson Wind	The rod buster did not have secure footing when walking on the rebar mat.	Employee was immediately advised as how to properly walk on top of a rebar mat.	The issue will be brought up in the next all hand meeting this week.
97	11/10/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	The track hoe operator made sure there were no obstructions within his turn radius before turning his cab.	None, this was a Safe Observation.	None, this was a Safe Observation.
98	11/10/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	The smooth drum roller operator made sure to use 3 points of contact when getting into the cab of the machine.	None, this was a Safe Observation.	None, this was a Safe Observation.
99	11/11/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	With snow and ice conditions present, employees shoveled off deck and steps. Then applied "de-ice" to melt ice and prevent slips and falls.	None, this was a Safe Observation.	None, this was a Safe Observation.
100	11/11/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Employees did not have task for shoveling and applying "de-ice" to JHA.	Individuals were reminded that there efforts were appreciated but the risks associated with it the task should have been listed on	At the next safety meeting all employees will be reminded of the importance of adding tasks to the JHA's. We will also



						JHA and hazards identified.	be inspecting JHA's to ensure other employees and crews are adding tasks.
101	11/11/2014	Safety Walk	Hazard Observation	RES Americas	Employee was not wearing Hi-Vis Vest or Hard Hat in the lay down yard.	Employee was called back to the trailers and reminded that when in the lay down yard he still needed to have on all of the required PPE.	Employees will all be reminded to wear proper PPE at all times on the site.
102	11/11/2014	Safety Walk	Safe Work Observation	RES Americas	Office Admin's have electronic devices setup and distributed among wall outlets and in surge protectors in compliance with NFPA 70E.	None, this was a Safe Observation.	None, this was a Safe Observation.
103	11/8/2014	Normal Work Activities	Near Miss	Pinkys Aggregate	Aggregate truck was speeding down 52nd Ave. on a narrowed access road with ground work being done.	The truck driver was stopped and addressed as to the proper speed limit here at Border Winds.	The owner of the aggregate trucking company will be notified and reminded to reiterate to his truckers the speed limit here on the Border Winds project.
104	11/11/2014	Normal Work Activities	Damage	RES Earth and Cable	Employee's hooked a trailer to the wrong size hitch and while in motion the trailer unhooked and caused damage to the back bumper of the vehicle.	The employee's were addressed as to RASWP 011 RES Americas Vehicle Operation Guide Sec. 6.7.4 / Trailers and Components.	RASWP 011 RES Americas Vehicle Operation Guide Sec. 6.7.4 / Trailers and Components will be addressed in the next all hands meeting which will be on 12Nov2014.
105	11/12/2014	Normal Work Activities	Near Miss	Pinkys Aggregate	While driving a crew truck on site in a narrow section of 46th Ave a aggregate truck failed to slow down or yield to a vehicle already in the narrow section of road, the crew truck got over as far as possible but due to the narrow size of the road he was almost forced into the pond on the side of the road.	Aggregate company's owner was called and told that he needs to hold a stand down with his employees about speeds on site, vehicle operations and driving on site where conditions presents a hazard and vehicles need to adjust speeds.	Owner of the aggregate truck will be asked to hold a Safety Stand Down with his drivers for vehicle speeds and operations on site.
106	11/9/2014	Safety Walk	Hazard Observation	Dolan Directional Drilling	Crews working at two locations working on single JHA.	Although crews were signed onto the same JHA at the first location, the second crew was asked to complete a JHA for their work, tasks and location.	All crews were reminded about the importance of filling out JHA's and having them at the work locations.



107	11/9/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Good control of site and operations taking place.	None, this was a Safe Observation.	None, this was a Safe Observation.
108	11/9/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Uneven working/ walking surface.	Operators and laborers were reminded to use situational awareness and to watch their footing when walking in the area.	During the all hands safety meeting crews were made aware that with changing weather conditions they needed to be extra cautious when walking on uneven ground.
109	11/9/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Employee grabbed culvert by the end edge when guiding it into place.	Employee was informed about proper hand placement when handling the culvert.	Employees were reminded about proper hand position and PPE use when handling culverting.
110	11/11/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Operator stopped equipment and grounded blade as individual approached.	None, this was a Safe Observation.	None, this was a Safe Observation.
111	11/11/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Visitor vehicle did not have cones deployed.	Visitor was informed that when their vehicle is parked they need to deploy cones.	A inspection of all vehicles was conducted to ensure cones were deployed.
112	11/12/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Operator brought JHA out for review and signature.	None, this was a Safe Observation.	None, this was a Safe Observation.
113	11/12/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Operator stepped out of equipment without first putting on safety glasses.	At the time, the operator was told to stop and get his PPE before doing anything else.	All employees had PPE inspected at the Safety Stand Down for incidents and injuries to ensure they have it and it is in working condition.
114	11/11/2014	Normal Work Activities	Near Miss	RES Earth and Cable	A subcontractor was pulling a piece of pvc pipe out of a bundle and the pipe slipped and made contact with his jaw.	The subcontractor was advised as to using the proper tools for his job.	In the next all hands meeting the employees will be addressed as to using the right tool for the job.
115	11/11/2014	Normal Work Activities	Near Miss	Nelson Wind	An employee of Nelson Wind was speeding at the intersection of T-7 going about 60-70 mph.	An employee from REC addressed the employee as to watching his speed here on site.	Employee's will be addressed in the next mornings safety talk as to the proper speed limit in they lay down yard and when operating near ground crews.
116	11/13/2014	Normal Work Activities	Near Miss	RES Americas	A metal stair platform leading into the main office was loose and starting to fail.	The entire platform was replaced.	The office personnel were all advised that the steps were fixed and safe to use.
117	11/13/2014	Normal Work Activities	Near Miss	Dolan Directional Drilling	A trailer was observed hauling a piece of equipment that was not secured to the trailer.	The truck was stopped and the operators were directed to secure the load.	All crews were informed that they need to have all loads secured when equipment is loaded on trailers.



118	11/13/2014	Normal Work Activities	Near Miss	RES Earth and Cable	A crew truck and trailer entered the laydown yard and did not use a spotter to turn around.	The driver was informed that when hooked up to a trailer a spotter is always used.	All crews were reminded of the policy that if there is limited visibility a spotter must be used.
119	11/13/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Discussed observing other employees during cold weather.	None, this was a Safe Observation.	None, this was a Safe Observation.
120	11/13/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Operator was very aware of surrounding vehicle movement.	None, this was a Safe Observation.	None, this was a Safe Observation.
121	11/13/2014	Normal Work Activities	Near Miss	RES Earth and Cable	Employee driving into site was following to close for weather conditions.	Brought it up at morning safety meeting.	All drivers were made aware of driving in weather conditions.
122	11/13/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Crewman talked with aggregate driver to ensure proper placement of materials.	None, this was a Safe Observation.	None, this was a Safe Observation.
123	11/13/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Crew Changed work practices when task switched to a two man operation.	None, this was a Safe Observation.	None, this was a Safe Observation.
124	11/13/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Land owner observing operation parked his vehicle off the road way to ensure he wasn't in the way.	None, this was a Safe Observation.	None, this was a Safe Observation.
125	11/13/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Rolls of geo grid laying on the side of the road were covered by snow drifts making them hard to see.	Superintendent was advised of the hazard and he assigned personnel to move the rolls to the top of spoil piles out of the way.	Crews were informed that geo-grid needs to be placed in a position so that if it is covered by snow it will not present a hazard.
126	11/13/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Driver exited truck with out hard hat or vest.	Driver was provided PPE and informed to wear it at all times.	Sub contractor management was informed he needs to ensure his personnel all have the correct PPE when on the job site.
127	11/12/2014	Normal Work Activities	Hazard Observation	Pinkys Aggregate	An aggregate truck broke down on County Rd. 108 and was blocking access to T-9. The driver of the truck did not put cones out as is stated in our procedures.	An employee of REC communicated the importance of putting cones out if the vehicle was going to be blocking the road.	The hazard observation was brought up in the next safety talk as to proper procedures of vehicle operations on site.
128	11/11/2014	Normal Work Activities	Near Miss	RES Earth and Cable	There was rebar that was covered under snow drift and could've possibly been damaged if not spotted by the employee right away.	An employee of Nelson Wind came through the site and did some housekeeping.	The issue was addressed in the next safety tool box talk.
129	11/13/2104	Safety Walk	Safe Work Observation	RES Earth and Cable	A build up of ice causing an obstruction	An employee of REC removed the	The observation will be brought up in the



					on the steps to the main trailers.	obstruction as soon as it was reported.	next safety talk.
130	11/13/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	The employees had road signs in place while working adjacent to the county road.	None, this was a Safe Observation.	None, this was a Safe Observation.
131	11/13/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	The employees dressed in layers for the cold weather as was addressed in all of our safety talks.	None, this was a Safe Observation.	None, this was a Safe Observation.
132	11/12/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Employees set up a proper barricade around their work area which was in an excavation.	None, this was a Safe Observation.	None, this was a Safe Observation.
133	11/12/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Employees did not have their generator grounded.	Employee's were addressed as to the proper procedures for grounding any and all generators.	All employee's were advised as to the proper procedures for grounding any and all generators in the next safety talk.
134	11/12/2014	Safety Walk	Hazard Observation	RES Earth and Cable	No cones were placed around the employee's company vehicle.	Employee's were addressed as to the importance and site policy of setting cones in front and back of all parked vehicles.	All employee's were addressed as to the importance and site policy of setting cones in front and back of all parked vehicles in the next safety talk.
135	11/12/2014	Safety Walk	Safe Work Observation	RES Americas	Supervisor's identified a potential safety hazard (damaged staircase) and blocked the area off so that the staircase could be replaced while using the proper PPE and procedures.	None, this was a Safe Observation.	None, this was a Safe Observation.
136	11/13/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	The employee practiced proactive safety measures by driving the site speed limit.	None, this was a Safe Observation.	None, this was a Safe Observation.
137	11/13/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	The employee enquired about proper spill disposal and collected the spill in a container.	None, this was a Safe Observation.	None, this was a Safe Observation.
138	11/13/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Employee failed to stop before entering the county road from the access road.	Employee was addressed via radio as to the proper procedures of stopping at all access and county roads.	All employee's were addressed as to the proper traffic control measures in the next mornings safety talk.
139	11/14/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	The employee practiced safe movement and operation of a Komatsu 360 Excavator.	None, this was a Safe Observation.	None, this was a Safe Observation.
140	11/14/2014	Safety	Safe Work	RES Earth and	Safe entry to turbine	None, this was a	None, this was a



		Walk	Observation	Cable	site was performed while operating HAMM Smooth Drum Roller.	Safe Observation.	Safe Observation.
141	11/14/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Trip hazards were apparent in a trench zone at one of the turbine sites.	Employee's were notified of trip hazards before entering the trench zone.	All employee's were notified as to inspecting all excavation and trenching area's before starting any work activities in the next morning's safety talk.
142	11/14/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Cold weather conditions possibly affecting work for the employees.	Employee's were notified as to the proper clothing needed for the weather.	All employee's were addressed as to layering up in clothing suitable for the weather in the next morning's safety talk.
143	11/14/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Safety cones were deployed for a light vehicle.	None, this was a Safe Observation.	None, this was a Safe Observation.
144	11/14/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Tick and headlights were used while driving.	None, this was a Safe Observation.	None, this was a Safe Observation.
145	11/14/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Trip hazards apparent at a Class 5 Soil backfill.	Employee's were notified of trip hazards before entering the work area.	All employee's were notified as to inspecting all excavation and trenching area's before starting any work activities in the next morning's safety talk.
146	11/14/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	All PPE was worn by crew at a work site.	None, this was a Safe Observation.	None, this was a Safe Observation.
147	11/14/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Proper safety precautions were taken while grader operator was accessing County Road 108.	None, this was a Safe Observation.	None, this was a Safe Observation.
148	11/14/2014	Safety Walk	Hazard Observation	RES Earth and Cable	There was heavy traffic at work zone.	Employee's were notified as to the proper control measures for heavy traffic in the work zone.	All employee's were notified as to the proper control measures for heavy traffic in the work zone in the next morning's safety talk.
149	11/13/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Operator had good communication with laborer conducting ground activities.	None, this was a Safe Observation.	None, this was a Safe Observation.
150	11/13/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Vehicle escort was not listed on JHA.	Employee was advised as to adding necessary corrections to JHA.	All employee's were addressed in the next morning's safety talk as how to properly fill out a JHA.
151	11/13/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Employee's did not mention propane use	Employee's were advised as to	All employee's were addressed in the



					heaters on their JHA.	updating their JHA to fit the job scope.	next morning's safety talk as how to properly fill out a JHA.
152	11/14/2014	Safety Walk	Hazard Observation	RES Earth and Cable	Employee's did not mention any type of cable protection in their JHA.	Employee's were advised as to updating their JHA to fit the job scope.	All employee's were addressed in the next morning's safety talk as how to properly fill out a JHA.
153	11/14/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Barricade's were set in place lining up with ditch/excavation.	None, this was a Safe Observation.	None, this was a Safe Observation.
154	11/14/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Operator grounded bucket when approached by traffic.	None, this was a Safe Observation.	None, this was a Safe Observation.
155	11/14/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Wheel chocks were placed under disengaged trailer.	None, this was a Safe Observation.	None, this was a Safe Observation.
156	11/14/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Cones were placed around both vehicles and equipment.	None, this was a Safe Observation.	None, this was a Safe Observation.
157	11/14/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	An equipment checklist was filled out properly for a forklift.	None, this was a Safe Observation.	None, this was a Safe Observation.
158	11/11/2014	Safety Walk	Near Miss	Xcel	A truck driver arrived on site and exited the vehicle without the necessary PPE on.	Supervisor advised the truck driver that a high visibility vest was needed before setting foot on work site.	All employee's were advised to let any new or non subcontractor's know the proper PPE needed to be on the jobsite in the next mornings safety talk.
159	11/13/2014	Normal Work Activities	Near Miss	RES Earth and Cable	A culvert was suspended in the air with no tag line attached.	Worker's were kindly asked to stop and were addressed as to putting tag line on suspended load.	All employee's were addressed as to the proper procedures needed when having a suspended load in the air in the next mornings safety talk.
160	11/13/2014	Normal Work Activities	Near Miss	RES Earth and Cable	JHA was not filled out to it's fullest potential.	JHA was corrected by the reporting employee and the information that was added was reiterated to the crew.	All employee's were addressed in the next morning's safety talk as how to properly fill out a JHA.
161	11/14/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Employee listed all possible hazards on JHA as well as all mitigation procedures needed for each hazard.	None, this was a Safe Observation.	None, this was a Safe Observation.
162	11/14/2014	Safety Walk	Safe Work Observation	RES Earth and Cable	Operator called for an escort before any traveling took place.	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
23053-15-3	Minor Incident (Below RQ)	Equipment Failure or leak	RES E&C	11/13/14	Diesel leak from a dozer at T12 access road. Drain valve opened while operating.	The affected soil was collected in a container using a shovel and then disposed in the special waste bin in the laydown yard.	Advised to inspect all vehicles for any leaks.
23053-15-4	Minor Incident (Below RQ)	Equipment Failure or leak	RES E&C	11/14/14	Fuel spilled while pulling out the hose after fueling the grader.	Picked up the spill with a shovel and placed in a sealed 5 gallon bucket for disposal.	Advised to place diapers on the ground while fuelling the pump
23053-15-5	Minor Incident (Below RQ)	Equipment Failure or leak	RES E&C	11/14/14	Diesel fuel found on the ground in the laydown yard.	The spoil was collected in a 5 gallon container	Advised everyone to inspect their vehicle for leaks every morning.
23053-15-6	Minor Incident (Below RQ)	Equipment Failure or leak	RES E&C	11/14/14	A cup of oil found on the ground under the grader, undergoing routine maintenance	The spoil was collected in a 5 gallon container	Informed the mechanic to place absorbent pads while refilling oil/fuel.



Exhibit 4 – Quality Log

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

Material Receipt

Description of Material	Delivery Date	Vendor	Quantity	Cumulative Qty	Balance

Description of Material	NCR Opened (Current Week)	NCR Closed (Current Week)	Total NCR Open (As of this Week)	Total NCR Closed (As of this week)
Totals			3	4
NCR-2014-44, Concrete for O&M building was not protected for cold weather.			X	
NCR-2014-34, Topsoil beneath subgrade fill material at the Substation			X	
NCR-2014-38, T3 grounding was not installed per specifications			X	



Border Winds

FIELD QUALITY CONTROL PROGRAM DEFICIENCY REPORT REGISTER

PREPARED BY: George Protz

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	
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	



Exhibit 5 – RFI Log

RFI	Generated By	Company	Sent To	Company	Subject	Date Sent	Response Requested By	Type: Civil, Electrical, etc.	Date Closed
23053-01	David Calitz	RES	Nathan Svoboda	Xcel Energy - Generation	Substation Relay Requirements	2/28/2014	3/7/2014	Electrical	03/10/14
23053-02	Kyler Leen	RES	Chris Ayika	Xcel Energy - Transmission	Allowable Voltage Step Change	3/31/2014	4/4/2014	Electrical	05/01/14
23053-03	Kyler Leen	RES	Chris Ayika	Xcel Energy - Transmission	Grid Voltage Profile	3/31/2014	4/4/2014	Electrical	05/01/14
23053-04	Kyler Leen	RES	Bradley Morrison	Xcel Energy - Generation	Main Power Transformer Design	3/31/2014	4/4/2014	Electrical	04/21/14
23053-05	Bob Tepp	RES	Ritchie Farmer	Vestas	Draka 35kV, 3x70mm ² Down-Tower Cable Data	7/16/2014	7/18/2014	Electrical	07/23/14
23053-06	David Calitz	RES	Bradley Morrison	Xcel Energy - Generation	Substation Capacitor Bank Configurations	7/31/2014	8/4/2014	Electrical	08/05/14
23053-07	Kyler Leen	RES	Chris Ayika	Xcel Energy - Transmission	VAR Neutrality	8/5/2014	8/8/2014	Electrical	10/17/14
23053-08	Bob Tepp	RES	Bradley Morrison	Xcel Energy - Generation	T58 Access Road Entrance Culvert Removal	8/13/2014	8/15/2014	Civil	08/14/14
23053-09	Bob Tepp	RES	Bradley Morrison	Xcel Energy - Generation	Access Road Adjustment to T72 and T74	8/18/2014	8/20/2014	Civil	
23053-10	Bob Tepp	RES	Bradley Morrison	Xcel Energy - Generation	Access Road Adjustment to T71, T76, and T77	8/18/2014	8/20/2014	Civil	
23053-11	Bob Tepp	RES	Bradley Morrison	Xcel Energy - Generation	Access Road Adjustment to T51, T52, T53, and T54	8/18/2014	8/20/2014	Civil	
23053-12	Bob Tepp	RES	Bradley Morrison	Xcel Energy - Generation	Access Road Adjustment to T31 and T32	8/18/2014	8/21/2014	Civil	
23053-13	Bob Tepp	RES	Bradley Morrison	Xcel Energy - Generation	Access Road Adjustment to T26	8/18/2014	8/21/2014	Civil	
23053-14	Bob Tepp	RES	Bradley Morrison	Xcel Energy - Generation	Access Road Adjustment to T22	8/18/2014	8/21/2014	Civil	08/28/14
23053-15	Julio Lima	RES	Chris Ayika	Xcel Energy - Transmission	Peace Garden dead end structures GPS coordinates	8/21/2014	8/25/2014	Electrical	08/25/14
23053-16	Kyler Leen	RES	Chris Ayika	Xcel Energy - Transmission	Dynamic Reactive Power Inputs	9/9/2014	9/16/2014	Electrical	
23053-17	Kyler Leen	RES	Richard Farmer	Vestas	WTG Conduit Type and Location	9/24/2014	10/1/2014	Electrical	10/03/14
23053-18	David Calitz	RES	Bradley Morrison	Xcel Energy - Generation	HV and MV disconnect switch requirements	9/26/2014	10/3/2014	Electrical	10/07/14
23053-19	Shabeeb Abdul Khader	RES	Bradley Morrison	Xcel Energy - Generation	Use aggregate from Marcel Pit	9/29/2014	10/1/2014	Civil	10/06/14
23053-20	Julio Lima	RES	Rich Rhode	Rosendin Electric	Plan and Schedule for material delivery in the load restriction period	9/30/2014	10/3/2014	Electrical	
23053-21	Shabeeb Abdul Khader	RES	Bradley Morrison	Xcel Energy - Generation	Substation Foundation	10/8/2014	10/10/2014	Civil	10/09/14
23053-22	Shabeeb Abdul Khader	RES	Bradley Morrison	Xcel Energy - Generation	Access road adjustments to T19, T20, T79/T80, T21/T22, T15, T10/T11, T5, and T30, T1/T2	10/9/2014	10/16/2014	Civil	10/16/14
23053-23	Shabeeb Abdul Khader	RES	Bradley Morrison	Xcel Energy - Generation	Access road adjustments to T33/34	10/13/2014	10/20/2014	Civil	10/16/14
23053-24	Shabeeb Abdul Khader	RES	Bradley Morrison	Xcel Energy - Generation	Access road adjustments to T26	10/14/2014	10/21/2014	Civil	10/16/14
23053-25	Aaron Thooft	RES	Bradley Morrison	Xcel Energy - Generation	Collector System - Circuit 5 route - realignment	10/15/2014	10/22/2014	Electrical	
23053-26	Shabeeb Abdul Khader	RES	Richard Farmer	Vestas	WTG Installation Manuals for the Mk7H and Mk10 V100-2.0 VCSS turbines	10/17/2014	10/21/2014	Electrical	
23053-	Shabeeb Abdul	RES	Richard	Vestas	Grounding kit installation for	10/20/2014	10/27/2014	Electrical	



27	Khader		Farmer		T3				
23053-28	Shabeeb Abdul Khader	RES	Bradley Morrison	Xcel Energy - Generation	Concrete Slurry mix design for the Substation	10/22/2014	10/28/2014	Civil	10/31/14
23053-29	Shabeeb Abdul Khader	RES	Richard Farmer	Vestas	Generator Data Sheet	10/23/2014	10/30/2014	Electrical	10/29/14
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	
23053-31	Shabeeb Abdul Khader	RES	Bradley Morrison	Xcel Energy - Generation	Above grade containment at MPT foundation	11/5/2014	11/11/2014	Civil	



Exhibit 6 – Three Week Look Ahead

