



December 7, 2015

Jerry Lein
North Dakota Public Service Commission
600 East Boulevard Avenue, Dept. 408
Bismarck, ND 58505-0480

Dear Mr. Lein:

Carlson McCain, Inc. (CMI) conducted an onsite inspection of the Border Winds Energy Project (Case No. PU-14-031) on December 1, 2015, on behalf of the North Dakota Public Service Commission (PSC). The project consists of installing 75 wind turbines totaling approximately 150 MW of generating capacity and associated facilities in Rolette County, North Dakota.

CMI Inspector Sean Garry met with Claus Larson, RES-America, Project Manager, and Jessica Coffey, RES-America, Assistant Project Manager, at the project office in Rolla, ND. Construction progress was discussed and current maps of turbine locations were observed. RES-America Construction, Inc (RES-America) is the construction contractor for the turbine and earthwork construction.

Construction has been progressing since first starting June 23rd, 2014, but work has stopped due to site conditions according to Mr. Larson. RES-America did report that 100% of the turbines were constructed and functioning. There is about a month and a half left of work to be done in the reclamation process, which will be completed in the spring. Ms. Coffey said that regular inspections for the Storm Water Pollution Prevention Plan (SWPPP) have been occurring bi-weekly and after a rainfall event over 0.25 inches. These inspections are on file.

Mr. Garry and Ms. Coffey proceeded to the project area to visually inspect construction, reclamation, and overall site quality. Inspection notes and photos recorded during the site visit are attached to this letter.

Field Review

Weather conditions at the time of the field visit were partly cloudy, 37 degrees, with light wind. Soil surfaces were slightly moist if not already frozen from a previous week's precipitation.

Providing safe access to the turbine locations has been made top priority at this point in the project before the winter comes. There was a partial outage for work to be done on a splice south of T45 in circuit 2. Class 5 rock was hauled in order to restore public gravel roads. There is still work that needs to be done reclaiming topsoil around service roads to the turbines and substation. Service roads were constructed, but not all of the radii corners had erosion control blanket in place due to site conditions. To help alleviate spring runoff and still allow access to the turbines during the winter months, some of the service roads were constructed with a gradual cut running across the road in lower elevated areas.

The reclamation process and placement of erosion control devices were discussed throughout the inspection with Ms. Coffey as well as again with Mr. Larson at the end of the inspection. They knew that the areas needing erosion mat would need to be closely monitored and addressed in the spring. Aside from these topics, construction procedures appeared to be in compliance with the siting laws and rules, and the applicable Findings of Fact, Conclusions of Law, and Order.

Please contact me at 701-595-7008 if you have any questions or comments.

Respectfully submitted,



Sean Garry
Project Engineer

cc: Mr. Claus Larson – Project Manager, RES-America
Ms. Jessica Coffey – Assistant Project Manager, RES-America

Attachments: Photos



Figure 1. Photo taken of reclaimed service road radii corner. Drainage ditch has been graded, erosion mat in place, and culvert installed.



Figure 2. Topsoil being moved back into place and rocks being separated.



Figure 3. Finished turbine T19 and pad. Topsoil has been disked and service road has a slight taper away from turbine base.



Figure 4. Turbine pad to be reclaimed at T20.



Figure 5. Photo of a service road to be realigned to be in line with the turbine pad at land owner's request.



Figure 6. Photo of a ditch to be regraded to establish better runoff collection near T27.



Figure 7. Other side of the service road of T27 with culvert and erosion mat in place.



Figure 8. Photo of completed substation and work still needed to reclaim the service road and topsoil around it.



Figure 9. Photo of the gradual cut in the service road to promote better drainage and still allow safe access to the turbine.