



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 Sunflower Wind Project (Case No. PU-14-105) on December 3, 2015, on behalf of the North Dakota Public Service Commission (PSC). The project consists of installing 52 2.0-MW Vestes wind turbines and substation that will connect to the U.S. Department of Energy, Western Area Power Administration's Dickinson-Mandan 230 KV transmission line.

CMI Inspector Sean Garry met with Paul Crossland, SunEdison, Assistant Project Manager, and Ryan Januszewski, Mortenson Construction, Project Manager at the site office south of Hebron, North Dakota. Construction progress was discussed and what was currently happening on site. An overall site map was viewed to get a better visual representation of what had been completed since the beginning of construction in September. Mortenson is contracted for the construction.

Since construction progress started September 21st, 2015, Mr. Januszewski reported that 59% of the access road stabilization, aggregate placement, and cut/fill had been completed up to today. Also, the grading on 30 of the 52 turbine sites has been completed. The rest of the earth work will continue in the spring when the ground begins to thaw. Mr. Januszewski stated and Mr. Crossland confirmed that there is a Storm Water Pollution Prevention Plan (SWPPP) in place, and regular inspections have been occurring.

Mr. Garry and Mr. Crossland proceeded to drive along the project area to visually inspect construction and overall site quality. Inspection notes and photos taken during the site visit are attached to this letter.

Field Review

Weather conditions at the time of the field visit were sunny, 28 degrees, with a light breeze. Soil surfaces were dry and frozen.

Access road and turbine pad grading was finished for the winter. Erosion control devices (ECDs) including seed, mulch, straw swaddles, erosion blanket, and silt fence were installed along access roads and around topsoil piles. Work was still being done on the substation. They were working on assembling the concrete forms for the secondary containment of the transformers. French drains were installed in place of culverts along runoff areas that did not have enough flow or depth to need a culvert. This drainage system included a layer of geotextile fabric, 6 inch minus rip rap, followed by a few inches of ¾ inch minus. Areas where culverts and French drains were installed have been documented on as-built drawings.

There was one area that needed maintenance. A straw swaddle had become dislodged from its proper placement. This was pointed out by Mr. Crossland and brought up to Mr. Januszewski. They agreed to take care of it. Other than that item, 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. Aron Anderson – Project Manager, SunEdison
Mr. Paul Crossland – Assistant Project Manager, SunEdison
Mr. Ryan Januszewski – Project Manager, Mortenson Construction

Attachments: Photos



Figure 1. Photo of cleared topsoil along service road ROW. Mulch anchored in for erosion protection.



Figure 2. Two new culverts installed on service road between T3 and T4. ECDs properly installed to prevent erosion problems.



Figure 3. Break in the topsoil berm to alleviate storm water runoff. Straw swaddle in place to prevent sediments from exiting working area.



Figure 4. Construction of substation and secondary containment for grounding transformers.



Figure 5. Construction of substation and secondary containment of the step up transformer.



Figure 6. French drain installed in the service road perpendicular to the drainage path crossing the project area.



Figure 7. ECDs installed on back slope of T20.



Figure 8. Photo of preliminary grading of the turbine pad at T20.



Figure 9. End of construction work area for the winter. ECDs and safety barrier in place.



Figure 10. Access road radii increased to accommodate turbine deliveries for turbines T17-T20. These will be regraded and reclaimed at the end of construction.



Figure 11. ECDs installed at the edge of working area preventing sediment from leaving the working area.



Figure 12. Fuel tanks in containment at laydown yard.