

As-Built Inspection Report

230 kV Transmission Line – Stark County
Brady Wind, LLC

ND PSC Case No. PU-15-797

Prepared for:

North Dakota Public Service Commission
Public Utilities Division
State Capitol
600 East Boulevard – Dept. 408
Bismarck, ND 58505-0480

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Executive Summary

The State of North Dakota, acting through its North Dakota Public Service Commission (Commission), Division of Public Utilities, has contracted Keitu Engineers & Consultants, Inc. (Keitu) to perform consulting services for as-built siting inspections. This report addresses the Orders established by the Commission and issues established in Case No. PU-15-797.

The 230 kV Transmission Line is located in Stark County, North Dakota. The Station is owned and operated by Brady Wind, LLC (Brady Wind). Construction for the Project began in June 2016 and was completed in November 2016. The purpose of the construction inspection was to ensure the Project was constructed in compliance with the siting laws, rules, and the applicable Commission Order for the Project. Prior to the construction inspection, Keitu reviewed all Project documents to identify any and all aspects requiring site verification.

The site was visually inspected on April 17, 2017 by Keitu staff. Overall, the project was very well-maintained, secured, and in good condition. It appeared to be constructed in compliance with the siting laws, siting rules, and applicable Commission Orders.

Introduction

The 230 kV Transmission Line (Project) was approved and constructed in 2016. The Project is operated by Brady Wind, LLC (Brady Wind), a Delaware limited liability company headquartered in Juno Beach, Florida. The Project is a transmission line that connects the Brady Wind Energy Center to the Belfield to Rhame 230 kV Transmission Line in Stark County. The Project consists of approximately 126 steel monopole structures, a transmission line which is approximately 19 miles long, and a new 30 acre switchyard at the western terminus. The Project is under the jurisdiction of the North Dakota Public Service Commission (Commission), which issued its Order Amending Certificate and Permit for Case No. PU-15-797 on June 16, 2016.

Purpose and Scope of Inspection

The North Dakota Energy Conversion and Transmission Facility Act (North Dakota Century Code Chapter 49-22) authorizes the Public Service Commission to determine that the location, construction, and operation of jurisdictional energy conversion and transmission facilities will produce minimal adverse effects on the environment and welfare of the citizens of North Dakota. Construction inspections ensure the Project is constructed in compliance with siting laws, rules, and the applicable Commission Order Amending Certificate and Permit (Order).

The Commission retained Keitu Engineers & Consultants, Inc. (Keitu) to complete an as-built construction inspection of the Project. The inspection process included a review of the Application for Amended Corridor Certificate and Route Permit (Application), Order, Certification Relating to Order Provisions (Certification), and other applicable documents to determine Project-specific siting and construction requirements; a site visit and inspection of facilities; documentation of compliance; and a report summarizing findings. This report includes, but is not limited to, site visit observations, documentation of compliance deficiencies, and a summary of issues that should be addressed for the Project to be considered complete and in full compliance.

Methods

Keitu reviewed North Dakota siting laws and rules, the Application, Certification, and the Order for the Project to identify what Project-specific documentation was required for compliance. Keitu then reviewed Project documents in the Commission Online Case Search to identify those siting laws, rules, and Application and Order assertions that already had written verification, those that still required documentation, and those that required physical site verification.

Keitu staff visited the Project area on April 17, 2017 to visually inspect the site. Digital photographs were taken showing typical Project infrastructure and to document any problem areas (starting page 6). During the field visit, the transmission line was in operation. Stormwater prevention BMPs (silt fences and straw wattles) appeared to have been installed and were operating correctly.

Orders

The following section includes discussion of a list of Project components that were asserted in the Order which could be documented during the as-built inspection to verify compliance with siting laws, rules and the Order for the Project, via written documentation or physical site verification. Included are detailed findings and observations from Keitu personnel involved in the as-built inspection for the Project.

1. Brady Wind’s application for a waiver of procedures and time schedules is granted.

In a January 20, 2016 motion (Docket #7), JRL moved the Commission to issue a Notice of Filing and Notice of Opportunity for Hearing in Brady Wind, LLC, 230 kV Transmission Line - Stark County, Siting Application, Case No. PU-15-797

Order #1 is complete.

2. Certificate of Corridor Compatibility No. 188 is issued to Brady Wind designating a corridor for the construction, operation, and maintenance of the proposed 230 kV transmission line and associated facilities in Stark County, North Dakota. For purposes of the Certificate, the corridor will consist of a 250 foot wide area.

This is to certify that the Commission has designated a transmission facility corridor for Brady Wind, LLC for the construction of Approximately 19 miles of 230 kV electric transmission line and associated facilities in Stark County, North Dakota This certificate is issued in accordance with the Order of the Commission dated June 16, 2016 in Case No. PU-15-797 and is subject to the conditions and limitations noted in the Order.

Order #2 is complete.

3. Route Permit No. 200 is issued to Brady Wind granting authority to construct and operate the proposed approximate 19 mile 230 kV transmission line and associated facilities in Stark County, North Dakota, as described in the application, supplements to the application, at the public hearing, and in late-filed exhibits.

This is to certify that the Commission has designated a transmission facility route for Brady Wind, LLC for the construction of approximately 19 miles of 230 kV electric transmission line and associated facilities in Stark County, North Dakota This permit is issued in accordance with the Order of this Commission dated June 16, 2016 in Case No. PU-15-797 and is subject to the conditions and limitations noted in the Order.

Order #3 was followed.

4. Brady Wind shall file with the Commission a copy of the SHPO concurrence letter for architectural history when received.

On March 2, 2016 Brady Wind filed a copy of the SHPO concurrence letter for architectural history with the Commission. (Docket #40)

Order #4 was followed.

- 5. The Certification Relating to Order Provisions - Transmission Facility Siting with accompanying Tree and Shrub Mitigation specifications dated March 4, 2016, as filed with the Commission on March 9, 2016, are incorporated by reference and attached to this Order.**

A Tree and Shrub Inventory and Mitigation/Replacement was filed by Brady Wind, LLC on April 21, 2017. (Docket #141)

Order #5 was followed.

Certification

The following section includes discussion of relevant items included in the Certification attached by reference to original Order (Docket #49). This Certification was also reviewed with Brady Wind and a Commission representative during the preconstruction conference. As noted in the preconstruction conference, not all original 34 certification points are relevant to the 230 kV Transmission Line Project.

1. Certification Point 7 – Preconstruction Conference

A preconstruction conference (Docket #106) was held on June 16, 2016 to ensure all contractors fully understood the conditions set forth in the Order. In attendance was Jerry Lein, representing the Commission, as well as representatives from Brady Wind and Keitu.

Certification Point #7 was followed.

2. Certification Point 9 – Beginning of Topsoil Removal

Brady Wind was to have the Commission's third party construction inspector onsite before topsoil removal could begin. A Topsoil Inspection Report (Docket #145) filed with the Commission on July 22, 2016 showed Keitu was onsite for the start of topsoil removal to ensure topsoil is properly removed and segregated from subsoil while construction activities are taking place.

Certification Point #9 was followed.

3. Certification Point 10 – Monthly Construction Activity Updates

Brady Wind submitted a notice of intent to commence construction on June 17, 2016. (Docket #106) During construction, Brady Wind was to provide monthly construction activity updates to the Commission and the Commission’s third-party construction inspector. Brady Wind submitted updates on a schedule that met or exceeded the monthly requirement.

Certification Point #10 was followed.

4. Certification Point 23 – Tree and Shrub Mitigation Specifications

Brady Wind provided the Commission with a Tree and Shrub Inventory and Mitigation/Replacement Plan on April 21, 2017. (Docket #141)

Certification Point #23 was followed.

5. Certification Point 33 – As Built Surveys

In the certification document, Brady Wind agreed to provide the Commission with electronic and a paper copy of the design specifications for the construction of the transmission facility showing the location of the transmission facility as built, and will provide this information within three months of the completion of the construction. These were provided to the Commission on February 22, 2017. (Docket #140)

Certification Point #33 was followed.

Conclusions

Overall, the Project appeared to be constructed with minimal impacts to the surrounding environment. The Project site was in good condition and well maintained and appeared to be constructed in compliance with siting laws, siting rules, and applicable Commission Orders.

Management Review

The services performed by Keitu and its staff for this project have been conducted in a manner consistent with the degree of care and technical skill appropriately exercised by professionals currently practicing in this area under similar time and budget constraints.

Recommendations and findings contained in this report represent our professional judgment and are based upon available information and technically accepted practices at the present time and location. Other than this, no warranty is implied or expressed.



Jaimee Antognazzi, Operations Manager

05/12/2017

Date

Report Photo #1: Transmission Line Looking East



Report Photo #2: New Vegetation



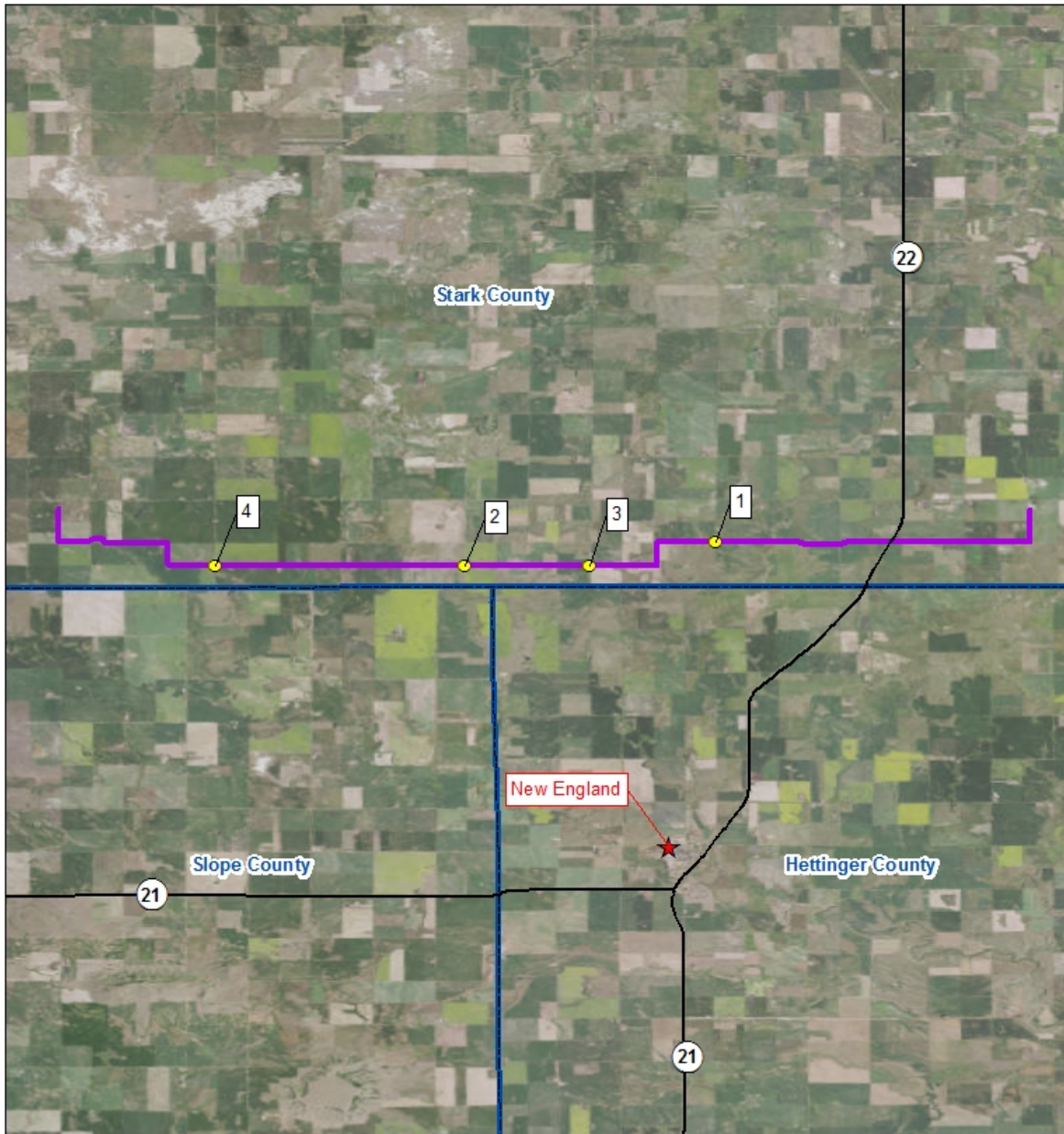
Report Photo #3: Transmission Line, Topsoil Replaced










Report Photo #4 Transmission Line Topsoil Replaced in Crop Field



Site Location – 230 kV Transmission Line – Stark County



<ul style="list-style-type: none"> Photo Point Town Proposed Transmission Line State Highway County Boundary	 	<p>ND PSC Case No. PU-15-797 Brady Wind, LLC 230 kV Transmission Line Stark County, North Dakota</p>
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