



**MERRICOURT SUBSTATION**  
**EPCS/ECI MONTHLY PROJECT STATUS REPORT**

**DATE December 19, 2019**

**1. SAFETY**

- a. Safety orientation are given to all persons working on site.
- b. Daily safety tailboard meetings are being held daily at show up (Substation).
  - i. Keep eye contact with the operator if approaching equipment.
  - ii. Keep non-construction personal off the site unless accompanied with a qualified person.
  - iii. Barricade any open excavations.
  - iv. Make sure you keep warm and get warmed up as needed.
- c. There have been no recordable incidents this month.

<b>Project Name: <u>Merricourt Substation Project</u></b>	
<b>Location: <u>McIntosh County, ND</u></b>	
<b>Major "EPC" Contractor: <u>Wanzek</u></b>	
<b>Turbine Supplier: NA</b>	
<b>EPCS Monthly Man Hours</b>	
<b>December Hours</b>	<b>TOTALS:</b>
<b>Number of Monthly MAN HOURS (break-down needed):</b>	766.00
<b>EPCS Substation Construction Manager (Site Grading Strata)</b>	87.00
<b>Dakota Fence</b>	
<b>Renew Energy (Substation)</b>	458.00
<b>Interstate Surveying</b>	
<b>Terracon Testing</b>	
<b>FirstMark Foundations</b>	
<b>EPCS Testing</b>	
<b>Pro Energy</b>	165.00
<b>Thein Movers</b>	56.00
<b>° EDF Site Rep. TEAM (if applicable)</b>	
<b>EPCS Project RIR to date:</b>	0
<b>EPCS Project DART to date:</b>	0
<b>EPCS Project SR to date:</b>	0
<b>EPCS Project FR to date:</b>	0
<b>Fatalities:</b>	0
<b>EPCS First Aid Only:</b>	0
<b>EPCS Near Miss/Good Catch:</b>	0
<b>EPCS Property Damage:</b>	0
<b>Recordable w/NO LOST DAYS:</b>	0
<b>Recordable w/LOST DAYS:</b>	0
<b>Number of DAYS LOST:</b>	0
<b>Number of hours worked (MONTH):</b>	766.00
<b>Number of hours worked (Previous Months):</b>	5222.50
<b>Total Hours Worked on the Project:</b>	5988.50

## **2. MERRICOURT SUBSTATION ENGINEERING**

### **a. Substation Design Drawings:**

#### **i. Physical design**

1. Shunt reactor addition below grade package was issued for construction on November 26, 2019.
2. Initial scope (minus shunt reactor) above grade package was issued for construction on December 4, 2019.
3. Shunt reactor addition above grade package was issued for review on December 6, 2019.
4. .

#### **ii. Electrical design**

1. 60% design package was submitted for review on October 17, 2019. Comments from EDF were received on November 4<sup>th</sup>, OTP comments were received on November 11<sup>th</sup>.
2. Shunt reactor schematic design package was submitted for review on December 6, 2019.
3. If required, full electrical package for review is expected early January 2020.

## **3. MERRICOURT SUBSTATION SCADA:**

- a. SCADA design is progressing well. Conversations and meetings between ECI, EDF & OTP have been positive & productive.

## **4. MERRICOURT SUBSTATION STUDIES:**

### **a. Insulation Coordination**

- i. Initial study was issued for EDF review on September 20, 2019. Comments were received on September 30<sup>th</sup>.
- ii. Revised study was issued for EDF review on October 9, 2019. . Comments were received on November 5<sup>th</sup>.
- iii. Revised study was issued for EDF review on November 19, 2019

### **b. Reactive Power Study**

- i. This study was approved by EDF on November 11<sup>th</sup>. Report was sealed and submitted on December 2, 2019.

### **c. Short Circuit Analysis**

- i. Initial study was submitted for EDF review on June 19, 2019. Comments were received on July 10<sup>th</sup>.
- ii. Next version of the study will be available when all major equipment drawings are available.
- iii. .

## **5. MERRICOURT SUBSTATION MATERIALS**

### **a. Material Status:**

- i. Major equipment has been ordered.
- ii. Equipment is starting to show up to site.
- iii. Misc. materials are on order and scheduled to arrive as needed for the project.

**6. MERRICOURT SUBSTATION CONSTRUCTION**

- a. Contractor Staffing:
  - i. EPC Services Company: 1
  - ii. Site work : 2
  - iii. Foundations: 14
  - iv. Electrical: 4
  - v. Total: 121
- b. Construction Activities:
  - i. Site work has been completed for the Substation pad, the top soil will be placed next year when the contractor comes back to install the station rock
  - ii. Foundations are completed.
  - iii. Fence has been installed.
  - iv. The electrical contractor Renew is on site doing below grade work, setting steel and equipment.
  - v. The transformer has been set on the foundation by others.
- c. Progress to Date:
  - i. Site Work 95%
  - ii. Foundations 100%
  - iii. Fence 90%
  - iv. Below Grade work 50%
  - v. Steel Structures 0%
  - vi. Electrical Equipment 0%
  - vii. Control Building 0%
  - viii. Control Panels 0%
  - ix. Bus Work 0%
  - x. Control Cable and Terms 0%
  - xi. Finish Rock 0%
  - xii. Testing 0%

**7. LANDOWNER & LOCAL COMMUNITY ISSUES & LOCAL SPEND:**

- a. Contractors
  - i. Approximately \$24,610
- b. Materials
  - i. Approximately \$78,800
- c. Living Expense
  - i. Motels - Approximately \$13,910
  - ii. Meals - Approximately \$4,550
  - iii. Gas - Approximately \$12,175
- d. **Total Spending \$134,545**

**8. MERRICOURT SUBSTATION RECENT PROJECT PHOTOS:**



**9. MERRICOURT SUBSTATION SCHEDULE:**

