



MERRICOURT SUBSTATION
EPCS/ECI MONTHLY PROJECT STATUS REPORT

DATE June 11, 2020

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. Covid-19 Documents are being reviewed and signed.
- c. There have been no recordable incidents this month.

Location: McIntosh County, ND	
Major "EPC" Contractors: Renew	
Turbine Supplier: NA	
EPCS Monthly Man Hours	
May Hours	TOTALS:
Number of Monthly MAN HOURS (break-down needed):	1,525.0
EPCS	284.5
Renew	1,219.5
Dakota Fence	0.0
FirstMark	0.0
EPCS Testing	21.0
Terracon Testing	0.0
	0.0
	0.0
	0.0
<i>° EDF Site Rep. TEAM (if applicable)</i>	
EPCS Project RIR to date:	0
EPCS Project DART to date:	0
EPCS Project SR to date:	0
EPCS Project FR to date:	0
Fatalities:	0
EPCS First Aid Only:	1
EPCS Near Miss/Good Catch:	0
EPCS Property Damage:	0
Recordable w/NO LOST DAYS:	0
Recordable w/LOST DAYS:	0
Number of DAYS LOST:	0
Number of hours worked (MONTH):	1525.0
Number of hours worked (Previous Months):	7310.0
Total Hours Worked on the Project:	8835.0

2. MERRICOURT SUBSTATION ENGINEERING

a. Substation Design Drawings:

i. Physical design

1. All physical drawings have been issued for construction.

ii. Electrical design

1. All electrical drawings have been issued for construction

3. MERRICOURT SUBSTATION SCADA:

- a. OTP has provided comments on Merricourt Substation RTU (D20) Master Tag List V3b; comments will be incorporated in V4 list that will be submitted at a later date.
- b. SCADA Comm block diagram has been updated based on OTP and AMSC discussions.

4. MERRICOURT SUBSTATION STUDIES:

a. Insulation Coordination

- i. Report was stamped and issued for record on February 28, 2020.

b. Reactive Power Study

- i. Report was stamped and issued for record on December 2, 2019.

c. Short Circuit Analysis

- i. Report was stamped and issued for record on March 24, 2020.

d. Substation Ground Grid Analysis

- i. Study was stamped and issued for record on November 26, 2019.

e. Harmonic

- i. Study was stamped and issued for record on May 5, 2020.

f. Lightning & Switching Overvoltage

- i. Not applicable for this project due to short line length.

g. Transient Overvoltage

- i. Initial study was issued for review June 8, 2020.

h. Transient Analysis

- i. Working through coordination efforts with AMSC. Expect to have initial study issued for review in the next couple weeks.

i. Relay Settings

- i. Coordination between ECI & OTP has been progressing very well. Expect to have settings ready to issue for download within the next week.

j. Arc Flash

- i. Initial arc flash was issued for EDF & OTP review on March 31, 2020. Comments received on June 1.
- ii. Tracking to have updated report sent within the next week. Label's will be created and sent to the field based on the updated report.

5. MERRICOURT SUBSTATION MATERIALS

a. Material Status:

- i. All major equipment has been received and installed
- ii. 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: 1-2
 - ii. Site work : 0
 - iii. Foundations: 0
 - iv. Electrical: 6-9
 - v. Total: 9
- b. Construction Activities:
 - i. Work continues on the cabling with approximately 85% complete, bus work including jumpers is 85-90% complete, below grounding and conduit is 95% complete, misc. equipment and fence grounds need to be completed and the control enclosure is 95% complete with minor pieces of equipment to install.
 - ii. The slack span has been installed to the MDU yard, fiber has been installed to the MDU yard and terminated in the OTP Merricourt station.
 - iii. Surface rock is expected to start the week of June 22nd weather pending.
- c. Progress to Date:
 - i. Site Work 95%
 - ii. Foundations 100%
 - iii. Fence 100%
 - iv. Below Grade work 95%
 - v. Steel Structures 100%
 - vi. Electrical Equipment 100%
 - vii. Control Enclosure 95%
 - viii. Control Panels 100%
 - ix. Bus Work 90%
 - x. Control Cable and Terms 85%
 - xi. Finish Rock 0%
 - xii. Testing 30%

7. LANDOWNER & LOCAL COMMUNITY ISSUES & LOCAL SPEND:

- a. Contractors
 - i. Approximately \$26,610
- b. Materials
 - i. Approximately \$79,550
- c. Living Expense
 - i. Motels - Approximately \$51,598
 - ii. Meals - Approximately \$14,874
 - iii. Gas - Approximately \$17,635
- d. **Total Spending \$190,267**

8. MERRICOURT SUBSTATION RECENT PROJECT PHOTOS:

