

#31

**WEEKLY REPORT  
OF  
CONSTRUCTION PROGRESS**

**PROJECT:**

Merricourt - Ellendale, 230kV, TL151  
Ashley - Ellendale, 46kV, TL041 UB  
Wishek - Ellendale, 230kV, TL089 - Merricourt Taps

**DATE:** April 22, 2012

**WO:** J172396  
J186381  
JXXXXXX

**WEEK OF CONSTRUCTION:** April 16, 2012 to April 22, 2012  
#31

OPERATION		* PERCENT COMPLETION										
		10	20	30	40	50	60	70	80	90	100	
NEW CONSTRUCTION	STRUCTURE LOCATION STAKED											100%
	MATERIAL HAULED IN FIELD											100%
	STRUCTURE ASSEMBLING											100%
	STRUCTURE ERECTING											100%
	GUY & ANCHOR INSTALLATION											100%
	<i>230 KV 954 mm<sup>2</sup> AACSR 4577 Conductor</i> WIRE STRINGING											100%
	<i>3/4" EHS shield wire</i> RIGHT OF WAY CLEARING											90%
RETIREMENT	POLE LINE REMOVAL											100%
	CONDUCTOR REMOVAL											100%
	MATERIAL RETURNS (New & Used)											100%

\* Percent completed to period of report -----  
Percent completed during period of report \*\*\*\*\*

**REMARKS:**

**138 PU-10-164** Filed: 5/1/2012 Pages: 6  
Merricourt, Ashley, Wishek to Ellendale progress report, week ending 4-22-2012

Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc.

**CONTRACTOR:**  
BRINK CONSTRUCTORS, INC

**MONTANA-DAKOTA UTILITIES CO.**

**BY:** S.S.

**BY:** Kenneth W. Siskin HDR

April 16, 2012 To April 22, 2012

Merrisout wind Farm to Ellendale 230KV Project

2 NO. Structure assembling T-230-JP

243 Total  $242 + 1 = 243$

$243 \overline{)243} = 1.0000 = 100\%$

1-W wire string 230KV 954 MCM OCSR 45/7  
and  $\frac{3}{8}$ " E.H.S. shield wire

156,876 ft total  $142,582 + 10,000 + 7,056,238 = 159,876$

$156,876 \overline{)156,876} = 1.000 = 100\%$

OPBW CC 57/465

156,740 ft total  $134,964 + 21,776$

$156,740 \overline{)156,740} = 1.000 = 100\%$

**INSPECTOR'S WEEKLY REPORT**

Line: Merricourt Wind Farm to Ellendale 230K Project

Period: April 16, 2012 to April 2012 Contractor: Brink

Inspector: Kenneth W. Sikes General Foreman: Seth Scott

Weather Conditions: Temp. 19° to 66° Workmen Total: 14

**Progress:**

1. Roads Built \_\_\_\_\_
2. ~~Cable~~ <sup>anchors</sup> (8) screw anchor for structure 19/C 230 D.E. STE. \_\_\_\_\_
- \*3. Material Hauled Poles, D.A. arms and insulators \_\_\_\_\_
- \*4. Structures Framed 2-T-230-DB & 1-T-230 P.E. \_\_\_\_\_
- \*5. Digging Same as number 4 \_\_\_\_\_
- (\*6. Structures Set Same as number 5). Structure No: 1 T-230 J.P. \_\_\_\_\_
7. Sock Line Pulled from STE. 24-23 to STE. No: 1 and STEEL D.E. Tower in Merricourt sub  
OPBW from "H" STE. D.E. No: 30 to Merricourt D.E. Tower in sub.
8. Wire Strung from STE. 24-23 to STE. No: 1 and STEEL D.E. Tower in Merricourt sub.
9. (Wire Sagged) & (Clipped) from STE. 24-23 to 11-10. STE. 11-10 to No: 1 No: 1 Merricourt sub  
(D.E. Tower)
10. Clean-up RLW ground only and around Poles Same structures No: 6-9 to STE. 30

**Comments:**

\* Wisher Ellendale 230KV Transmission line T.L. 091 work done on this Project this week.

weather has slow down the work, rain storms and very strong winds this week, has caused some rutting on RLW due to soft ground.

from structure 20 to 16 and 9 to No: 1

between

between

# TRANSMISSION LINE CONSTRUCTION

## RECORD OF CONTRACTORS TIME & EQUIPMENT

PROJECT Mountain Wind Farm to Elendale REPORTED BY Kenneth W. Fisher

DATE April  
Monday 16, 2012  
Tuesday 17, 2012  
Saturday 21, 2012

MEN	NO.	TRAILS & LANDINGS	MATERIAL HAULING	HOLE DIGGING	STRUCTURE FRAMING (Ground)	STRUCTURE SETTING	STRUCTURE FRAMING (Aerial)	ANCHOR INSTALLATION	CONDUCTOR HAUL, STRING, SAG, CLIP	CLEAN-UP WORK	LOST TIME DUE TO ADVERSE WEATHER	TOTAL HOURS
FOREMAN	1											63
FOREMAN	1											55
FOREMAN	1											63
LINEMEN												
LINEMEN	2		2					2				16
LINEMEN	4							4				110
LINEMEN												220
LINEMEN												
EQUIP. OPERATORS	1		1					1			1	63
EQUIP. OPERATORS	2							2				110
EQUIP. OPERATORS												
GROUND MEN	2							2				110
GROUND MEN												
GROUND MEN												
GROUND MEN												
TOTAL MEN	14											810

**EQUIPMENT ON JOB (List on Monday and note only changes during week.)**

<u>3- 2 Ton Pickups</u>	<u>3 Tractor w/ Flat bed trailers with two steel stands for conductor</u>	<u>wire</u>
<u>2- 1 Ton Pickups</u>	<u>1- Truck Tension</u>	<u>1- 4 seat 4 wheeler</u>
<u>2- 3/4 Ton Pickups</u>	<u>hand line 12,000ft each drum</u>	<u>w/ Bucket</u>
<u>2- Texoma Hwy Diggers</u>	<u>1- 3 drum puller with 3/8"</u>	<u>1- John Deere Rubber Tire</u>
<u>2- Texoma Hwy Diggers</u>	<u>hand line 10,000ft each drum</u>	<u>w/ Bucket</u>
<u>2- Texoma Hwy Diggers</u>	<u>1- 3 drum puller with 5/8"</u>	<u>Series 900 National Crane</u>
<u>2- Texoma Hwy Diggers</u>	<u>of 5/8" Hand Line</u>	
<u>Series 1800 National Crane</u>	<u>1- 1 drum puller with 24,000ft</u>	
<u>w/ Bucket</u>		
<u>Series 1300 National Crane</u>	<u>1- Truck with Tension Bars steel stand for OPLW wire</u>	
<u>w/ Bucket</u>		
<u>Series 800 National Crane</u>	<u>1- Truck with 2 steel stands for 3/8" 45 shield wire</u>	
<u>5/8" winches each</u>	<u>R/W</u>	<u>Bucket</u>
<u>2- John Deere skidders w</u>	<u>John Deere backhoe 410J</u>	<u>John Deere rubber Track w/</u>
<u>air compressor w/ Tanks</u>	<u>1- D6 cat</u>	
	<u>1- 4 wheeler</u>	

**WEATHER CONDITIONS (Indicate above approx. time lost due to adverse weather.)**

<u>Overcast with some sun wind 5 to 20 mph</u>	<u>Temp 19° to 46°</u>	<u>4-16-12</u>
<u>overcast and sunny wind 5 to 25 mph</u>	<u>Temp 26° to 58°</u>	<u>4-17-12</u>
<u>overcast with some sun &amp; rain showers wind 5 to 25 mph</u>	<u>Temp 30° to 66°</u>	<u>4-18-12 to 4-20-12</u>
<u>Ptly cloudy with sun very windy 5 to 4.5 mph</u>	<u>Temp 36° to 65°</u>	<u>4-21-12</u>

Please let me know if you have any questions. Thanks!

*Jim Deutsch*  
Director, Reclamation and AML Divisions  
Public Service Commission  
(701) 328-2251

# DAILY RECORD OF CONTRACTORS WORK

4-16-12

STAND NO.	DIGGING-FT.		POLES SET	STRUCTURE <i>Aerial</i> FRAMED	ANCHORS INSTALLED	AERIAL MARKER	FENCE GATES
	EARTH	ROCK					
I				T-230-JP	4-17	12 & 4	4-18-12
Wisher-Ellendale 230KV Transmission Line T.L. 091							
191 B	11-0'		1-90-H1	T-230-DB			
191 C	11-0'		1-90-cl 1	T-230-PF	8 anchors	(Screw anchors)	
191 D	11-0'		1-90-H1	T-230-DB			
4-19-4-21-12	Dig. ground & Aerial Frame and Set all 3-5 Structures						
1							

**PROGRESS OF CONDUCTOR STRINGING, SAGGING, CLIPPING** 4-17-12 Pulled in 3-Phase of 954 mm acsr 45/7 wire from Structure 24-23 to structure 11-10. Sag on 4-18-12. Clipped on 4-18-12 to 4-20-12, also put Dampers on 3-conductor phases and 1 shield wire were used. Pulled in sock line from ST I to ST. 10-11 Then pulled 3-Phase of conductor with one shield wire from same structures, also pulled in OP5W wire from D.E. structure 30 to Merrimack Sub N.E Tower legs. Sag all wire on 4-21-12 late after noon, started to clip all wires on 4-22-12. On 4-22-12 Pulled in slack span from D.E. ST. I to D.E. Steel Tower in Merrimack Sub. 3-Phase of conductor wire and one shield wire. Sag between dead end ST. 4-20-12 made up D.E. on 2-Phase between NO. I D.E. Tower in Sub. also shield wires, and OP5W D.E. at same.

**GENERAL REMARKS** (Include R/W, Material, Inspection Decisions)

4-16-12 Monday 4 men went to Wisher Sub and loaded up on steel reel of 795 mm acsr wires. Hauled to Merrimack Sub. to Re use for New line with and at Merrimack Sub. That line is Wisher-Ellendale 230KV T.L. 091 Existing line that runs S.E. of the Sub.

12 men worked on wire operations from Tuesday to Saturday 4-17-12 to 4-21-12

1-man worked on R/W clearing of cuts and around Poles at each structure also between structure from 69 to structure 101-30.