



**Luverne Wind Farm
Substation Construction
Plan of the Week (POW)**

Week of July 6th-10th, 2009

Otter Tail Power Company

- Activities:**
- **Activities this week:** Luverne continues to progress very well. Steel has been concluded this week, with the completion of the 230 deadend. 230 switch up, as well as the 34.5 switch. We have installed all hookstick switches, pt's, feeder arrestors, and available insulators. Concluded the 3 North feeder conduit runs and installed the bus connectors on insulators where applicable. Once the other insulators are installed we will be ready for the rigid bus. The Control House construction is complete and fence corner posts went in on Friday. S&S Landscaping seeded and mulched this week. Completed and demobed off site.
 - **Activities next week:** We plan to start installing the 5 South feeder conduits and also start plowing in the grounding from the North on Monday. Once the other insulators arrive and are installed we will be ready for the rigid bus, which is scheduled to arrive on Monday. Transformer foundation work will begin next week.
 - **Safety/Environmental:**
None.
 - **Lay down Yard:**
None.
 - **Electrical/Construction:**
None.
 - **Potential Schedule Delays:**
None.

General Information and Announcements

Construction	% Complete
Luverne Substation	
Sub Grade Yard and Road	100%
Final Grading Yard and Road-Class V	100%
Concrete Foundations	90%
Install Ground Grid	0%
Install Steel	100%
230 & 35kV bus / Outdoor Welding Conduit	0%
Complete Outdoor Equipment Installation, etc.	0%
Install Fence	0%
Construct Control House	100%
Install Control House Equipment & Wiring	0%
Install Control House Relay Panels and Wiring	0%
Install Yard Rock	0%
Testing & Commissioning	0%

Material Delivery	Required	Rec'd
Luverne Substation		
High Voltage 230kV Circuit Breaker at Barnes Substation	1	
High Voltage 230/34.5kV Transformer-HiCO	1	
Metering CT/PT Combo, 230kV	3	
Three phase 35kV group-operated Switch, 4000 amp	1	1
SF6 Circuit Breaker, 69kV	8	
Three phase 230kV group-operated Switch, 2000 amp	1	1
Single Phase hookstick Disconnect Switch, 35kV, 1200 amps	48	48
Reactor, Neutral Grounding, 34.5kV	1	
Potential Transformer, 35kV, Single Bushing	11	8
Station Class Surge Arrester Polymer Type 152 MCOV	3	
230kV Station Post Insulator	3	3
35kV Station Post Insulator, TR-231	18	18
35kV Station Post Insulator, TR-210	60	60
Outdoor Control Cable (4 & 12 Conductor #10)	Lot	
Aluminum Bus Tubing and Welded Connectors	Lot	85%
Steel Structures (230 & 35kv Bays)	Lot	100%