



Kokhanok Wind Diesel Project

July 2010 Status Report

Project Update

Wind turbines foundations completed.

Wind turbine towers erection started.

Wind system integration into the power grid is on-going.

Major installation of control and integration equipment in the Kokhanok Power Plant.

Project Description

The Kokhanok Wind Diesel Project is scheduled for installation from April through October 2010. The turbines will arrive in Kokhanok in June.

The two Vestas V-17 wind turbines will each have an output of up to 90kW, depending on wind speed. Erected between Big Lake and the abandoned airstrip, 75-foot towers will support the three-bladed turbines. The 55-foot diameter blades will rotate at up to 50 rotations per minute.

The integrated system is a high penetration design meaning the diesel generators will be shutdown when the wind turbines are supplying power. This will save up to 40% of the diesel needed to run the power plant. Excess wind power will be used to heat the school, further offsetting diesel fuel costs.

At the completion of construction the Kokhanok Village Council will own the system and Marsh Creek will have a five-year contract (funded by the project) to maintain the system and train utility employees.

Planned Activities for August 2010

- Complete erecting the wind turbine towers.
- Complete connection to the Kokhanok power grid.
- On-going work in the power plant installing equipment to upgrade the electrical control systems and integrate the wind turbines with the existing diesel generators.

Milestone Achievements

- RFP issued
- Selection of Marsh Creek
- Additional funding secured
- Lake & Peninsula Borough Assembly Marsh Creek contract approval
- Lake & Peninsula Borough/Kokhanok Village Council agreement approval
- Contract signed
- Geotechnical Investigation completed
- Rebuild Contract with Halus, Inc. (Wind Turbine Re-Builder)
- Long lead time equipment ordered from Sustainable Automation
- 35% Design complete
- 95% Design Review complete
- Wind turbines (rebuild to shipping) complete
- Power plant controllers installed
- Design 100% complete
- Shipping and mobilization complete
- Construction 70% complete

Project Team

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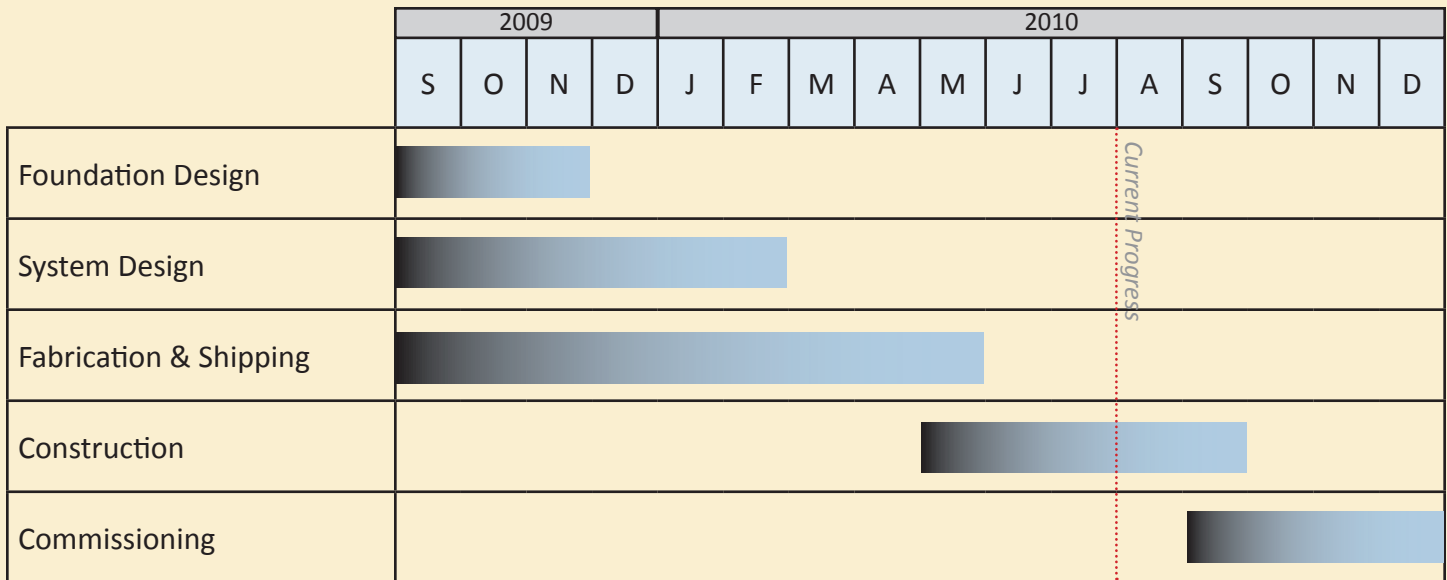
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Project Schedule



Budget

(as of Pay Estimate #9)

	Budget	Spent	Balance
Design/Permitting/Management	\$192,500	\$168,145	\$24,355
Sitework	\$123,300	\$80,180	\$43,120
Turbines/Connection to Power Grid	\$562,150	\$418,516	\$143,634
Integration & Controls	\$620,340	\$440,441	\$179,899
Mobilization/Demobilization	\$185,050	158,350	\$26,700
Other costs	\$261,909	\$103,750	\$158,159
TOTAL	\$1,945,249	\$1,369,383	\$575,866



Above: Wind turbine rotor installation.



Left: Two new wind tubrines erected in Kokhanok!