

Kongiganak High Penetration Wind-Diesel Smart Grid

Grantees	Puvurraq Power Company (Utility-Government)
Technology Type	WIND TO HEAT
Region	Lower Yukon-Kuskokwim
AEDG Project Code	10105

REF Grants Received

Round	App	Grant Title	Grant #	AEA Project #	Phase	Start Date	End Date	Status
1	110	Kongiganak High Penetration Wind-Diesel Smart Grid	2195411	410035	Construction	8/20/08	6/30/13	Active
7	1073	Kongiganak Wind Heat Electrical Thermal Storage	7071073	410099		7/1/14		Active

Grant 2195411: Kongiganak High Penetration Wind-Diesel Smart Grid

Project Scope: This project consists of the construction of a 450 kW high-penetration wind system in Kongiganak with multiple secondary thermal loads in residences and the school. This project design is similar to systems being installed in Kwigillingok and Tuntutuliak. Half (\$1.5 million) of the funding is being provided by a legislative grant.

Project Status: All turbines are fully functioning on the new variable speed controller. The electric boiler and thermal stoves are functioning. The supervisory system is being dialed in/optimized. PPC has federal funding for the smart grid system. The smart meters are installed. The fibre optic line is installed between turbines. IES has finished the install of all ETS stoves. The EasyGen controllers are complete. The grantee expects the project to be completed by Q4 2013. AEA has reviewed the final deliverables and is closing out the grant.

As of Nov. 30, 2013	Budget	Expenditures
Renewable Energy Funding	\$1,699,791.57	\$1,699,791.57
Other State Funding	\$0.00	\$0.00
Total State	\$1,699,791.57	\$1,699,791.57
Required Local Match	\$1,475,169.97	\$1,475,169.97
Federal Grant Funding	\$0.00	\$0.00
Total Project Costs	\$3,174,961.54	\$3,174,961.54

Grant 7071073: Kongiganak Wind Heat Electrical Thermal Storage

Project Scope: This project expands existing Kongiganak Wind Heat Smart Grid System by adding additional electric thermal storage (ETS) devices. An additional 30 residences will be installed with ETS units for a total of 50.

Project Status: It is anticipated that the grant will be executed in February 2016.

As of Nov. 30, 2013	Budget	Expenditures
Renewable Energy Funding	\$311,500.00	\$0.00
Other State Funding	\$0.00	\$0.00
Total State	\$311,500.00	\$0.00
Required Local Match	\$0.00	\$0.00
Federal Grant Funding	\$0.00	\$0.00
Total Project Costs	\$311,500.00	\$0.00