## **Mekoryuk Wind Farm**

Grantees Alaska Village Electric Cooperative (Utility-Cooperative)

**Technology Type** WIND

**Region** Lower Yukon-Kuskokwim

**AEDG Project Code** 10073

## **REF Grants Received**

Round	App	Grant Title	Grant #	<b>AEA Project #</b>	Phase	<b>Start Date</b>	<b>End Date</b>	Status
1	72	Mekoryuk Wind Farm	2195384	410038	Construction	8/20/08	6/30/12	Closed
		Construction						
5	870	Surplus Wind Energy Recovery	7050870	410083	Construction	7/1/12	12/31/15	Active
		for Mekoryuk Water System						
		Heat						

## **Grant 2195384: Mekoryuk Wind Farm Construction**

**Project Scope**: This project involves the final design, permitting, construction, erection, startup, and commissioning of two Northwind 100a wind turbines to supplement the existing power generation and distribution system for the community of Mekoryuk.

**Project Status**: Tasks 4.5 Transmission/Distribution lines and 4.9 Secondary Load Controller are additional costs at grantee's expense. The turbines were installed in the fall 2010. The control Module was repaired and secondary/dump loads were installed in spring 2011. As-built drawing received in mid-2013. This project is closed out.

As of Nov. 30, 2013	Budget	Expenditures
Renewable Energy Funding	\$3,155,765.00	\$3,155,765.00
Other State Funding	\$0.00	\$0.00
Total State	\$3,155,765.00	\$3,155,765.00
Required Local Match	\$390,493.00	\$390,493.00
Federal Grant Funding	\$0.00	\$0.00
<b>Total Project Costs</b>	\$3,546,258.00	\$3,546,258.00

## Grant 7050870: Surplus Wind Energy Recovery for Mekoryuk Water System Heat

**Project Scope**: The Alaska Village Electric Cooperative (AVEC), in collaboration with Alaska Native Tribal Health Consortium (ANTHC), will design and construct a secondary load(s) to capture excess energy from the existing wind farm in Mekoryuk. The secondary loads will be used to provide heat for the washeteria, water treatment plant and drinking water storage tank. ANTHC will provide the match.

**Project Status**: The grant is in place. The Collaborative Project Agreement between AVEC and ANTHC is also in place. The final design was approved June 6, 2014 by AVEC. AEA accepted the design June 12, 2014 and has released procurement and construction funds. Construction has been completed and an inspection of the project by ANTHC, AVEC, and AEA was completed January 6, 2014. Upon receipt of as-builts and final reimbursement the project will be closed-out.

One of the two wind turbines in Mekoryuk suffered a fire inside the base of the tower. The fire was unrelated to this project and will decrease the amount of excess electricity available to the Water Treatment Plant. AVEC is assessing their options and will most likely replace the turbine (which is insured) with a newer model. Performance of this project should return to, or improve upon, initial expectations when the turbine is replaced.

As of Nov. 30, 2013	Budget	Expenditures
Renewable Energy Funding	\$264,459.00	\$242,753.00
Other State Funding	\$0.00	\$0.00
Total State	\$264,459.00	\$242,753.00
Required Local Match	\$13,919.00	\$13,919.00
Federal Grant Funding	\$0.00	\$0.00
<b>Total Project Costs</b>	\$278,378.00	\$256,672.00