

## Pillar Mountain Wind Project

<b>Grantees</b>	Kodiak Electric Association, Inc. (Utility-Private)
<b>Technology Type</b>	WIND
<b>Region</b>	Kodiak
<b>AEDG Project Code</b>	10099

### REF Grants Received

Round	App	Grant Title	Grant #	AEA Project #	Phase	Start Date	End Date	Status
0, 1	-1, 103	Pillar Mountain Wind Project - Construction	2195371	410025	Construction	8/20/08	12/31/09	Closed
5	803	Pillar Mountain High Penetration Wind Project	7050803	410082	Construction	7/1/12	6/30/13	Closed

### Grant 2195371: Pillar Mountain Wind Project - Construction

**Project Scope:** The scope of this project is to fund the costs associated with purchasing and transporting turbines for up to \$1,000,000.

The Pillar Mountain Wind Project, both Phase I and Phase II, proposes to construct and operate a four and a half to nine MW wind farm utilizing up to six wind turbines located on the ridgeline of Pillar Mountain.

The project design for Phase I involves the installation of the first three wind turbines at sites T4, T5, T6, and the buried installation of a 25 KV line connecting to High Substation. The power line will follow an existing single-phase line currently providing power to antennas on Pillar Mountain.

Tetra Tech EC, Inc. will be responsible for the design and construction of the environmental, civil engineering, and turbine installation portion of the project. EPS, Inc. and Dryden & La Rue, Inc. will be responsible for grid interconnection design. KEA and EPS will be responsible for the installation of the grid interconnection for the project.

The majority of permits have been obtained. The necessary permits that have yet to be issued include the State of AK Land Lease from the Department of Natural Resources, City of Kodiak easements, and the Kodiak Island Borough building permit.

**Project Status:** The project was completed in August 2009

As of Nov. 30, 2013	Budget	Expenditures
Renewable Energy Funding	\$4,000,000.00	\$4,000,000.00
Other State Funding	\$0.00	\$0.00
<b>Total State</b>	<b>\$4,000,000.00</b>	<b>\$4,000,000.00</b>
Required Local Match	\$1,000,000.00	\$1,000,000.00
Federal Grant Funding	\$0.00	\$0.00
<b>Total Project Costs</b>	<b>\$5,000,000.00</b>	<b>\$5,000,000.00</b>

### Grant 7050803: Pillar Mountain High Penetration Wind Project

**Project Scope:** Kodiak Electric Association (KEA) will expand their current wind farm from three to six GE 1.5 MW SLE turbines. The total nameplate capacity of the expanded system will be 9 MW. KEA will also install an Extreme Battery system to act as a bridge between the variable generation of the wind and the response of the Terror Lake Hydro generators. A protective coating will be added to turbine blades for all 6 turbines that will reduce leading-edge erosion.

**Project Status:** The wind turbine construction is complete and commissioning finished in mid September 2012. Battery construction and commissioning is complete, setting the two dynamic power units on their pads. The substation upgrade was completed in late September 2012 and went online in early October. A change order was made with Xtreme Power systems for the addition of a Clean Agent FE-25 unit fire suppression systems in light of the Kahuku wind farm battery system fire in early August 2012. Each fire suppression unit costs \$55k. Testing of the system successfully supported a 3.4MW trip.

The grant was closed on March 1, 2013.

<b>As of Nov. 30, 2013</b>	<b>Budget</b>	<b>Expenditures</b>
Renewable Energy Funding	\$7,800,000.00	\$7,800,000.00
Other State Funding	\$0.00	\$0.00
<b>Total State</b>	<b>\$7,800,000.00</b>	<b>\$7,800,000.00</b>
Required Local Match	\$7,800,000.00	\$7,800,000.00
Federal Grant Funding	\$0.00	\$0.00
<b>Total Project Costs</b>	<b>\$15,600,000.00</b>	<b>\$15,600,000.00</b>