Pilot Point Wind Power & Heat

Grantees	City of Pilot Point (Local Government)
Technology Type	WIND
Region	Bristol Bay
AEDG Project Code	10139

REF Grants Received

Round	App	Grant Title	Grant #	AEA Project #	Phase	Start Date	End Date	Status
3	486	Pilot Point Wind Power & Heat	7030007	409026	Construction	7/1/10	12/31/15	Active

Grant 7030007: Pilot Point Wind Power & Heat

Project Scope: This grant consists of $1,421,240 from Round III of the Renewable Energy Fund for a wind construction project in Pilot Point. $201,000 in grant funds is allocated for conceptual design, final design and permitting. $1,370,240 is currently unallocated for construction. Allocation of final design funds will be made through an amendment to this grant after the conceptual design report has been accepted by the Authority. Allocation of construction funds will be made through an amendment to this grant after the 65% design report has been accepted by the Authority. The total project cost is $1,571,240 with a match of $150,000 provided by the grantee. City of Pilot Point will complete a meteorological tower study, conceptual design, final design, permitting, construction and startup of a wind farm and heat recovery boiler, along with any necessary controls or equipment needed to integrate the wind farm into the Pilot Point electrical grid. It is expected that the wind farm will be approximately 100 kW in nameplate capacity and a transmission line from the wind farm to the power plant will need to be constructed.

Project Status: A meteorological study was performed from 2004-2006 with equipment attached to the Bergey wind towers, readings were taken at 10 meters and 30 meters. Over the three year period, about 50% of the data was lost and one month was not collected at all during the three year period. The calculated terrain roughness from the data was not consistent with the roughness of other studies with similar terrain and vegetation. Given the lack of consistent data, the questions regarding the calculated roughness, the placement of the data collection equipment and the off-set on the towers, there is a high probability that all the data could have been compromised. Based on these findings, and at the suggestion of AEA, the City of Pilot Point agreed to perform another meteorological study, this time using ten meter towers at multiple locations. Collecting data from multiple locations for a wind resource assessment provides the best analytical criteria for placement of the wind farm and the type(s) of turbines. The final site selection decision will also be based on site control, site access and development costs, transmission line construction costs and community preferences.

An amendment to change the scope of work and budget as well as to extend the grant is in place as of September 6, 2012. The grantee installed 10 meter masts at the old Bergey wind turbine site, Airport Hill and near the Post Office. A draft conceptual design report was been submitted that proposed all high penetration systems. A review of the CDR was submitted to the grantee and a revised draft CDR was submitted. Issues with the modeling and proposed systems still remained. The City decided to change contractors and a kick-off meeting was held on February 10, 2015. It was agreed that most information required to finish the CDR has been collected. The contractor will provide a budget and timeline for the CDR and Design work and if necessary the grant will be amended. A budget for construction activities will not be provided until the 65% Design has been accepted by AEA.

A draft CDR was submitted to AEA and the recommended project was not economically viable. A review of the CDR was supplied to the grantee and a revised CDR submitted in January 2016.

As of Nov. 30, 2013	Budget	Expenditures
Renewable Energy Funding	$1,421,240.00	$54,243.75
Other State Funding	$0.00	$0.00
Total State	**$1,421,240.00**	**$54,243.75**
Required Local Match	$150,000.00	$4,301.19
Federal Grant Funding	$0.00	$0.00
Total Project Costs	**$1,571,240.00**	**$58,544.94**