

Alternative Energy Training Facility Expansion

FY2011 Request: \$1,139,000

Reference No: 48820

AP/AL: Appropriation

Project Type: Construction

Category: Education

Location: Seward

Contact: Fred Esposito

House District: Homer/Seward (HD 35)

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Estimated Project Dates: 07/01/2010 - 06/30/2012

Brief Summary and Statement of Need:

Expansion of the Industrial Electricity (IE) training facility is needed to add wind turbine and hydro training programs. The Alaska Vocational Technical Center (AVTEC) received a \$500,000 Denali Commission grant and a \$200,000 Alaska Energy Authority grant in FY2010 to install a wind turbine, develop a wind turbine training program, and replace aging switchgear. This request would also include the connection of the wind turbine to the switchgear and diesel powered generators located inside the IE building. The IE building mechanical systems need to be upgraded and expanded to support the additional training space. Through training, AVTEC supports the Department's mission to advance opportunities for employment.

Funding:	<u>FY2011</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Gen Fund	\$1,139,000						\$1,139,000
Total:	\$1,139,000	\$0	\$0	\$0	\$0	\$0	\$1,139,000

<input type="checkbox"/> State Match Required	<input checked="" type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
Totals:	0	0

Additional Information / Prior Funding History:

AVTEC received a \$500,000 Denali Commission grant and \$200,000 Alaska Energy Authority (AEA) grant in FY2010 to install a wind turbine, develop a wind turbine training program, and replace aging switchgear.

Project Description/Justification:

This project will provide opportunities for rural power plant operators to gain hands-on training at AVTEC for the operation and maintenance of wind-diesel systems.

The completed project will support the alternative energy investments being made by agencies and communities in Alaska by providing a training center and program for wind-diesel system operators. The Division of Business Partnerships issued a State Training Employment Program (STEP) reimbursable services agreement to AVTEC for the development of wind-diesel training curriculum. In September 2009, AVTEC sent an instructor to Vermont for training on operation and maintenance of wind turbines, who then created the curriculum for the training program.

The wind turbine will be installed next to the existing IE building. The IE building was designed to handle 15 students, but has been operating at 24-26 students for the last decade. The requested

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\$1,139,000 of general funds for this project would increase the capacity for not only the IE training program, but also provide space for adding two alternative energy training programs, wind turbine and hydro. This request includes funding for connectivity of the wind turbine to the switchgear and power plant generators located inside the IE building. Environmental systems in this facility are nearing 30 years old and need to be upgraded and expanded to support the additional training space and for efficiency improvement.

AVTEC provides market-driven vocational and technical training to state residents, which is in alignment with the purpose of the Denali Commission grant. This program fits into the long-term plans for AVTEC and provides a necessary step to assist and train Alaskans in alternative renewable energy resource management. The state's contribution to expand the IE building will capitalize on the investments from the Denali Commission, AEA, and the STEP funds, which were already committed to provide alternative energy training for Alaskans. These funds and activities are to meet a specific job training need for Alaskans. This project is designed for training Alaskans not only in FY2011, but will continue providing training benefits to Alaskans for the foreseeable future.