

Alternative Energy and Energy Efficiency (AEEE) Programs FY2013 Request: \$4,800,000
Reference No: 49735

AP/AL: Allocation **Project Type:** Energy
Category: Development
Location: Statewide **House District:** Statewide (HD 1-40)
Impact House District: Statewide (HD 1-40) **Contact:** Sara Fisher-Goad
Estimated Project Dates: 07/01/2012 - 06/30/2017 **Contact Phone:** (907)771-3000
Appropriation: Alaska Energy Authority - Energy Projects

Brief Summary and Statement of Need:

This request addresses the federally funded Alternative Energy and Energy Efficiency (AEEE) energy projects. The projects contributes to the department's mission of promoting a healthy economy and strong communities by providing economic growth in the communities it serves.

Funding:	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	Total
Fed Rcpts	\$2,000,000						\$2,000,000
Gen Fund	\$2,000,000						\$2,000,000
I/A Rcpts	\$200,000						\$200,000
Stat Desig	\$600,000						\$600,000
Total:	\$4,800,000	\$0	\$0	\$0	\$0	\$0	\$4,800,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" 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:

Refer to the funding matrix in the Energy Projects Appropriation

Project Description/Justification:

Alternative Energy and Energy Efficiency (AEEE) Programs:

The objective is to lower the cost of power and heat to Alaska communities while maintaining system safety and reliability. AEA alternative energy programs have received federal funding since the 1980s from USDOE and the EPA and recently expanded with funding from the Denali Commission and ARRA funds. A state general fund match of 25 percent to 100 percent is required for most federal AEEE programs.

AEA anticipates \$2 million in federal funding from USDOE and other federal agencies. AEA also anticipates a continuation of funding from USDOE for the Statewide Energy Program (SEP) support through Alaska Housing Finance Corporation (AHFC); and a continuation of program funding from other agencies for waste heat recovery. AEA is also requesting \$2 million in general funds to support the continuation of the AEEE programs. State funds will be used to match federal funds when required and to provide support for these programs where federal funding is not available.

The AEEE program includes the following focuses and projects:

Biomass: AEA's biomass energy program focuses on developing wood-fired systems that displace fuel oil for heating public facilities, assessing opportunities for developing liquid fuels such as biodiesel, and recovering energy from municipal solid waste.

Combined Heat and Power: Project development activities, including "waste" heat recovery, are supported through a USDOE cost-share program. AEA routinely includes heat recovery in RPSU projects.

Energy Data Inventory: Program activities include preparation of the Alaska Energy Statistics publication and maintenance and expansion of the web-based geographic information system <http://akenergyinventory.org/> that houses renewable and fossil resource, energy production and use, and energy infrastructure data.

Energy Efficiency and Conservation (EE&C) program: AEA focuses its end use energy efficiency program activities on commercial buildings, public buildings, industrial facilities, and electrical efficiency. Additionally, AEA organizes the collaborative multi-stakeholder group called the Alaska Energy Efficiency Partnership, which is focused on outreach and education about efficiency and conservation as well as EE&C long-term planning. AEA also addresses generation efficiency through its Rural Power System Upgrade (RPSU) program.

Geothermal: Energy program assists communities in identifying and planning geo-power and direct heating projects. AEA coordinates the statewide Geothermal Working Group of industry, academic, and government officials interested in geothermal development.

Hydroelectric Power Project Development: Work includes inventorying and scanning hydro feasibility reports and performing site-specific assessments of potential hydroelectric projects in partnership with the US Army Corps of Engineers.

Nuclear Energy: Nuclear energy potential has been studied by UAF's Alaska Center for Energy and Power, which prepared a draft report on the applicability of small modular systems in spring 2011 under contract with AEA. Update work is in progress.

Ocean and River Energy Program: This program assesses tidal, in-stream flow and wave energy resources and technology options for power production. USDOE and other federal agencies are anticipated co-funding sources through the federal Marine Energy Technology Advancement program.

Wind Energy: These development activities include wind resource mapping and assessment, technical assistance and training, AEA's meteorological tower loan program for on-site assessment, project siting and bird habitat impact assessment, conceptual design and technology analysis for hybrid wind-diesel systems, and evaluation of field results from operating systems required for additional federal construction funds.