

Alternative Energy and Energy Efficiency Programs

FY2020 Request:

\$500,000

Reference No:

49735

AP/AL: Appropriation

Project Type: Energy

Category: Development

Location: Statewide

House District: Statewide (HD 1-40)

Impact House District: Statewide (HD 1-40)

Contact: Janet Reiser

Estimated Project Dates: 07/01/2019 - 06/30/2024

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Brief Summary and Statement of Need:

This project is for the research, resource assessments, feasibility, regulatory and permitting issues, outreach, stakeholder involvement, and other project development needs for alternative energy and energy efficiency programs. The Alternative Energy and Energy Efficiency (AEEE) programs provide critical support for communities interested in developing effective and high-quality renewable energy and energy efficiency projects. This capital project provides funds for reconnaissance level studies, feasibility analysis to help identify locations and projects as well as technical assistance and support for utilities and communities interested in developing cost effective renewable and efficiency projects.

Funding:	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
1004 Gen Fund	\$500,000						\$500,000
Total:	\$500,000	\$0	\$0	\$0	\$0	\$0	\$500,000

<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

Prior Funding History / Additional Information:

Sec1 Ch16 SLA2013 P4 L11 SB18 \$2,000,000

Sec1 Ch17 SLA2012 P6 L3 SB160 \$4,800,000

Sec7 Ch43 SLA2010 P20 L24 SB230 \$8,000,000

Project Description/Justification:

The Alternative Energy and Energy Efficiency (AEEE) programs provide critical support for communities interested in developing renewable energy and efficiency projects. This capital project provides funds for reconnaissance level studies, feasibility analysis to help identify locations and projects as well as technical assistance and support for utilities and communities interested in developing cost effective renewable and efficiency projects. It is a cost effective way to establish base-line information of a resource area and support the development of stable-priced, cost-effective energy in Alaska.

In addition to providing a quality “pipeline” of qualified projects to grant programs, including the Renewable Energy Fund, and state loan programs, including the Power Project Fund, this program removes barriers and solves problems in each of the different renewable energy technology types.

Each program area (biomass, wind, heat recovery, hydroelectric, solar, and geothermal) works on statewide resource assessments, regulatory and permitting issues, and outreach and stakeholder involvement in order to advance cost-effective renewable energy in Alaska.

The AEEE programs provide a foundation of support and development that is critical to the proper development of renewable energy technologies in Alaska. Each of the renewable technology areas and efficiency have a working group facilitated by AEA that supports the proper application of their technology in both urban and rural communities in the state. These general funds will support the continuation of the programs.

The AEEE program includes the following focuses and projects:

Energy Data: Energy Data program activities include gathering, verifying, analyzing and making publicly available data and information that can help the State, communities and project developers make informed and data-driven decisions about energy project development. AEA's energy data program provides quality information that is critical to a wide array of stakeholders in planning for, executing and evaluating energy projects around the state.

Efficiency: AEA's energy efficiency programs focus on public buildings, commercial buildings, and public infrastructure such as street lighting and water/sewer infrastructure. AEA's core efficiency programs are focused on two primary goals: 1) achieving the most energy efficiency gain for the dollar, and 2) providing services where energy costs are critically high. Recent efforts also include facilitating the development of a statewide Commercial Property Assessed Clean Energy (C-PACE) program for Alaska and coordination of efforts to transition markets to support the electrification of transportation. AEA coordinates closely with Alaska Housing and Finance Corporation, which provides the residential programs and a complimentary public building program.

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. AEA works closely with U.S. Forest Service, project champions, and local land managers to ensure the development of high quality projects with sustainable harvest plans.

Wind: Wind energy development activities include wind resource mapping and assessment, feasibility analysis, technical assistance and training, AEA's meteorological tower loan program for onsite 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.

Heat Recovery and CHP: Combined heat and power (CHP) project development activities, including "waste" heat recovery, are supported through a U.S. Department of Energy (USDOE) cost-share program and the State's Renewable Energy Fund and Rural Power System Upgrade programs.

Hydroelectric: 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 U.S. Army Corps of Engineers. Ocean and River energy 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.

Solar: The Solar program focuses on facilitation of a statewide working group that includes vendors, utilities, policy makers, and researchers to identify Alaska specific needs for solar energy development. AEA provides guidance for small utilities interested in integrating solar into their remote isolated systems at a utility scale and responding to an increasing desire by customers to install distributed generation.

Geothermal: 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.