

**HB**

**250**

<TARGET><BILL>HB 250</BILL><SUBJECT>HB  
250</SUBJECT><COMM>HENE27</COMM></TARGET>



## REPRESENTATIVE BILL THOMAS

ALASKA STATE LEGISLATURE DISTRICT 5

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### **Sponsor Statement for HB 250** **Relating to the Renewable Energy Fund and Recommendation Program**

In 2008, the Alaska Legislature passed HB 152 which established an energy fund for renewable projects across the state. Since then, the program has gone through four rounds of grant applications and issued grants for more than 200 renewable energy projects across the state. With an emphasis towards issuing grants for those who see the highest energy costs, these grants have had a significant impact in the cost of energy for many small communities who otherwise would be totally dependent on diesel fuel.

AEA, along with the Renewable Energy Fund Advisory Committee, evaluates each grant application based on various criteria including the current cost of energy in the area, availability of matching funds, and the overall feasibility of the project. By 2013 it is estimated that the Renewable Energy Grant Fund will displace six million gallons of diesel fuel each year.

The program is set to expire in 2013. HB 250 reauthorizes the program until 2018. It also continues the legislative intent that was made in 2008 to fund the program at \$50,000,000 a year.

I urge your support of HB 250.

27-LS1060ND  
Nauman  
1/30/12

**CS FOR HOUSE BILL NO. 250( )**

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-SEVENTH LEGISLATURE - SECOND SESSION

**BY**

**Offered:**

**Referred:**

**Sponsor(s): REPRESENTATIVES THOMAS, PEGGY WILSON, AND MILLETT, Austerman, Edgmon, Herron, Miller**

**A BILL**

**FOR AN ACT ENTITLED**

1 **"An Act relating to the renewable energy grant fund and recommendation program;**  
2 **and providing for an effective date."**

3 **BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

4 \* **Section 1.** The uncodified law of the State of Alaska is amended by adding a new section  
5 to read:

6 LEGISLATIVE INTENT. It is the intent of the legislature that, each fiscal year for the  
7 next five fiscal years, \$50,000,000 be appropriated to the renewable energy grant fund for  
8 projects recommended by the Alaska Energy Authority under AS 42.45.045.

9 \* **Sec. 2.** Section 5, ch. 31, SLA 2008, is amended to read:

10 Sec. 5. AS 42.45.045 is repealed June 30, **2018** [2013].

11 \* **Sec. 3.** This Act takes effect immediately under AS 01.10.070(c).

27-LS1060X  
Nauman  
3/29/12

**SENATE CS FOR CS FOR HOUSE BILL NO. 250(FIN)**

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-SEVENTH LEGISLATURE - SECOND SESSION

BY THE SENATE FINANCE COMMITTEE

Offered:  
Referred:

Sponsor(s): REPRESENTATIVES THOMAS, PEGGY WILSON, AND MILLETT, Austerman, Edgmon, Herron, Miller, Petersen, Gara, Tuck, Cissna, Tammie Wilson, Guttenberg, Costello, Seaton, Pruitt, Muñoz, Lynn, Kawasaki, Saddler, Gruenberg, Johnson

**A BILL**

**FOR AN ACT ENTITLED**

1 "An Act relating to the renewable energy grant fund and recommendation program;  
2 and providing for an effective date."

3 **BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

4 \* **Section 1.** The uncodified law of the State of Alaska is amended by adding a new section  
5 to read:

6 LEGISLATIVE INTENT. It is the intent of the legislature that, each fiscal year for the  
7 next 10 fiscal years, \$50,000,000 be appropriated to the renewable energy grant fund for  
8 projects recommended by the Alaska Energy Authority under AS 42.45.045.

9 \* **Sec. 2.** AS 42.45.045(i) is amended to read:

10 (i) An advisory committee is established and consists of nine [SEVEN]  
11 members, appointed as follows:

12 (1) five members shall be appointed by the governor to staggered  
13 three-year terms, with one representative to be appointed from each of the following  
14 groups:

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- (A) small Alaska rural electric utilities;
- (B) large Alaska urban electric utilities;
- (C) Alaska Native organizations;
- (D) businesses or organizations engaged in the renewable energy sector; and
- (E) the Denali Commission established under P.L. 105-277, 42 U.S.C. 3121 note;

(2) two members [ONE MEMBER] of the house of representatives shall be appointed by the speaker of the house of representatives; and

(3) two members [ONE MEMBER] of the senate shall be appointed by the president of the senate.

\* **Sec. 3.** Section 5, ch. 31, SLA 2008, is amended to read:

Sec. 5. AS 42.45.045 is repealed June 30, 2023 [2013].

\* **Sec. 4.** This Act takes effect immediately under AS 01.10.070(c).

5



## REPRESENTATIVE BILL THOMAS

ALASKA STATE LEGISLATURE DISTRICT 5

e-mail: [Representative.Bill.Thomas@legis.state.ak.us](mailto:Representative.Bill.Thomas@legis.state.ak.us)

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State Capitol

Juneau AK, 99801-1182

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### AS 44.99.115. Declaration of state energy policy.

The State of Alaska recognizes that the state's economic prosperity is dependent on available, reliable, and affordable residential, commercial, and industrial energy to supply the state's electric, heating, and transportation needs. The state also recognizes that worldwide supply and demand for fossil fuels and concerns about global climate change will affect the price of fossil fuels consumed by Alaskans and exported from the state to other markets. In establishing a state energy policy, the state further recognizes the immense diversity of the state's geography, cultures, and resource availability. Therefore, it is the policy of the state to

(1) institute a comprehensive and coordinated approach to supporting energy efficiency and conservation by

(A) encouraging statewide energy efficiency codes for new and renovated residential, commercial, and public buildings;

(B) decreasing public building energy consumption through conservation measures and energy-efficient technologies; and

(C) initiating and supporting a program to educate state residents on the benefits of energy efficiency and conservation, including dissemination of information on state and federal programs that reward energy efficiency;

(2) encourage economic development by

(A) **promoting the development of renewable and alternative energy resources, including geothermal, wind, solar, hydroelectric, hydrokinetic, tidal, and biomass energy, for use by Alaskans;**

(B) promoting the development, transport, and efficient use of nonrenewable and alternative energy resources, including natural gas, coal, oil, gas hydrates, heavy oil, and nuclear energy, for use by Alaskans and for export;

(C) working to identify and assist with development of the most cost-effective, long-term sources of energy for each community statewide;

(D) creating and maintaining a state fiscal regime and permitting and regulatory processes that encourage private sector development of the state's energy resources; and

(E) promoting the efficiency of energy used for transportation;

(3) support energy research, education, and workforce development by investing in

(A) training and education programs that will help create jobs for Alaskans and that address energy conservation, efficiency, and availability, including programs that address workforce development and workforce transition; and

(B) applied energy research and development of alternative and emerging technologies, including university programs, to achieve reductions in state energy costs and stimulate industry investment in the state;

(4) coordinate governmental functions

(A) by reviewing and streamlining regulatory processes and balancing the economic costs of review with the level of regulation necessary to protect the public interest;

(B) by using one office or agency, as may be specified by law, to serve as a clearinghouse in managing the state's energy-related functions to avoid fragmentation and duplication and to increase effectiveness; and

(C) by actively collaborating with federal agencies to achieve the state's energy goals and to meet emissions, renewable and alternative energy, and energy production targets.

# FISCAL NOTE

**STATE OF ALASKA**  
**2012 LEGISLATIVE SESSION**

Bill Version CSHB 250 (ENE)  
 Fiscal Note Number \_\_\_\_\_  
 () Publish Date \_\_\_\_\_

Identifier (file name) HB250-DCCED-AEA-03-09-12 Dept. Affected DCCED  
 Title Extend Renewable Energy Grant Fund Appropriation Alaska Energy Authority  
 Allocation AEA Statewide Project Dev and AEE  
 Sponsor Representatives Thomas, P.Wilson, Millett  
 Requester House Finance Committee OMB Component Number 2888

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	FY13 Appropriation Requested	Included in Governor's FY13 Request	Out-Year Cost Estimates				
			FY14	FY15	FY16	FY17	FY18
<b>OPERATING EXPENDITURES</b>	<b>FY13</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>
Personal Services							
Travel							
Services		2,155.0	2,155.0	2,155.0	2,155.0	2,155.0	2,155.0
Commodities							
Capital Outlay							
Grants, Benefits							
Miscellaneous							
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>

<b>FUND SOURCE</b>		(Thousands of Dollars)					
1002	Federal Receipts						
1003	GF Match						
1004	GF		155.0	155.0	155.0	155.0	155.0
1173	GF MisEarn (UGF)		2,000.0	2,000.0	2,000.0	2,000.0	2,000.0
1037	GF/MH (UGF)						
1178	temp code (UGF)						
<b>TOTAL</b>		<b>0.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>

<b>POSITIONS</b>							
Full-time							
Part-time							
Temporary							

<b>CHANGE IN REVENUES</b>							

Estimated SUPPLEMENTAL (FY12) operating costs 0.0 (separate supplemental appropriation required;  
 (discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY13) costs 0.0 (separate capital appropriation required)  
 (discuss reasons and fund source(s) in analysis section)

**Why this fiscal note differs from previous version (if initial version, please note as such)**

This fiscal note has been updated to include, for informational purposes, \$155.0 UGF fiscal note increment related to SCS CSHB 152 FIN SLA2008. Additionally, an analysis of available investment earnings on the renewable energy fund was performed and is noted in the analysis.

Prepared by Sara Fisher-Goad, Executive Director  
 Division Alaska Energy Authority  
 Approved by JoEllen Hanrahan, Director Administrative Services  
Commerce, Community and Economic Development

Phone 907-771-3000  
 Date/Time 3/9/12 4:00 PM  
 Date 3/10/2012

## FISCAL NOTE

STATE OF ALASKA  
2012 LEGISLATIVE SESSION

BILL NO. CSHB 250 (ENE)

### Analysis

This legislation adds legislative intent language related to the continuation of the renewable energy grant fund and recommendation program (AS.42.45.045) at funding levels of \$50 million each fiscal year to be appropriated to the renewable energy grant fund for projects recommended by the Alaska Energy Authority (AEA); and extends the program an additional 5 years to June 30, 2018.

#### Costs of Administering the Fund:

The renewable energy grant fund and recommendation program was established by legislation for the fiscal year ending June 30, 2009 (HB152 SLA 2008 CH 31). The associated fiscal note provided an increment of \$226.0 for the first year and \$155.0 for subsequent years through FY2013 to AEA's Statewide Project Development and AEE component. The \$155.0 increment represented the costs associated with a new grant manager and advisory committee costs. This increment is reflected in the fiscal note for informational purposes.

Starting in FY2011, investment earnings on the renewable energy grant fund, not to exceed \$2 million, were appropriated to AEA for the costs of administering the renewable energy grant fund and recommendation program (FY2011: SB230 SLA 2010 CH 43 Sec 28 Pg 160 Lines 26-29; FY2012: HB108 FSSLA 2011 CH 3 Sec 13 Pg 72 Lines 2-4). Based on an average net return on investments of 3.2%, we project that the net investment earnings will support the costs of administering the funds through FY2018. Additionally, an accumulation of investment earnings on the fund in FY2009 and FY2010 prior to appropriation to AEA for administrative costs are available.

In FY2011, the actual costs of administering the renewable energy grant fund and recommendation program were \$1.2 million. Estimated costs for FY2012 are \$1.6 million. Costs include AEA project management, grant management, as well as finance and administrative support. Costs also include contractual services related to the technical analysis and evaluation of applications and project proposals. At June 30, 2011, four renewable energy fund application periods were complete; \$150 million had been appropriated for 133 renewable energy projects and approximately 126 grants were being managed. In FY2012, \$36.6 million was appropriated for an additional 74 projects (\$36.6 million included \$10 million of re-allocated funds).

This fiscal note assumes a continuation of current funding levels estimated at up to \$2 million annually for the costs of administering the renewable energy grant fund and recommendation program.

# FISCAL NOTE

STATE OF ALASKA  
2012 LEGISLATIVE SESSION

Bill Version CSHB 250 (ENE)  
Fiscal Note Number \_\_\_\_\_  
( ) Publish Date \_\_\_\_\_

Identifier (file name) HB250-DCCED-AEA-03-14-12 Dept. Affected DCCED  
Title Extend Renewable Energy Grant Fund Appropriation Alaska Energy Authority  
Allocation AEA Statewide Project Dev and AEE  
Sponsor Representatives Thomas, P. Wilson, Millett  
Requester House Finance Committee OMB Component Number 2888

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	FY13 Appropriation Requested	Included in Governor's FY13 Request	Out-Year Cost Estimates				
			FY14	FY15	FY16	FY17	FY18
<b>OPERATING EXPENDITURES</b>	<b>FY13</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>
Personal Services							
Travel							
Services		2,155.0	2,155.0	2,155.0	2,155.0	2,155.0	2,155.0
Commodities							
Capital Outlay							
Grants, Benefits							
Miscellaneous							
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>

FUND SOURCE		(Thousands of Dollars)						
1002	Federal Receipts							
1003	GF Match							
1004	GF	(155.0)	155.0					
1173	GF MisEarn (UGF)	(2,000.0)	2,000.0					
1210	Ren Energy (DGF)	2,155.0		2,155.0	2,155.0	2,155.0	2,155.0	2,155.0
1178	temp code (UGF)							
<b>TOTAL</b>		<b>0.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>	<b>2,155.0</b>

POSITIONS							
Full-time							
Part-time							
Temporary							

**CHANGE IN REVENUES**

Estimated SUPPLEMENTAL (FY12) operating costs 0.0 (separate supplemental appropriation required,  
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY13) costs 0.0 (separate capital appropriation required)  
(discuss reasons and fund source(s) in analysis section)

**Why this fiscal note differs from previous version (if initial version, please note as such)**

This fiscal note realigns the fund sources available to cover the costs of administering the renewable energy grant fund program. This fiscal note reflects a reduction of general fund and miscellaneous earning included in the FY2013 Governor's budget request and identifies earnings available from the Renewable Energy Fund as the alternate funding source.

Prepared by Sara Fisher-Goad, Executive Director  
Division Alaska Energy Authority  
Approved by Susan K. Bell, Commissioner  
Commerce, Community, and Economic Development

Phone 907-771-3000  
Date/Time 3/14/12 12:00 PM  
Date 3/14/2012

## FISCAL NOTE

STATE OF ALASKA  
2012 LEGISLATIVE SESSION

BILL NO. CSHB 250 (ENE)

### Analysis

This legislation adds legislative intent language related to the continuation of the renewable energy grant fund and recommendation program (AS.42.45.045) at funding levels of \$50 million each fiscal year to be appropriated to the renewable energy grant fund for projects recommended by the Alaska Energy Authority (AEA); and extends the program an additional 5 years to June 30, 2018.

#### Costs of Administering the Fund:

The renewable energy grant fund and recommendation program was established by legislation for the fiscal year ending June 30, 2009 (HB152 SLA 2008 CH 31). The associated fiscal note provided an increment of \$226.0 GF for the first year and \$155.0 GF for subsequent years through FY2013 to AEA's Statewide Project Development and AEE component. The \$155.0 increment represented the costs associated with a new grant manager and advisory committee costs. This GF increment is included in the FY2013 Governor's budget request (Fund Code 1004).

Starting in FY2011, investment earnings on the renewable energy grant fund, not to exceed \$2 million, were appropriated to AEA for the costs of administering the renewable energy grant fund and recommendation program (FY2011: SB230 SLA 2010 CH 43 Sec 28 Pg 160 Lines 26-29; FY2012: HB108 FSSLA 2011 CH 3 Sec 13 Pg 72 Lines 2-4). The FY2013 Governor's budget request includes a request for a continuation of this funding through miscellaneous earnings (Fund Code 1173).

In FY2011, the actual costs of administering the renewable energy grant fund and recommendation program were \$1.2 million. Estimated costs for FY2012 are \$1.8 million. Costs include AEA project management, grant management, as well as finance and administrative support. Costs also include contractual services related to the technical analysis and evaluation of applications and project proposals. At June 30, 2011, four renewable energy fund application periods were complete; \$150 million had been appropriated for 133 renewable energy projects and approximately 126 grants were being managed. In FY2012, \$36.6 million was appropriated for an additional 74 projects (\$36.6 million included \$10 million of re-allocated funds).

AEA has projected the net investment earnings on the Renewable Energy Fund through FY2018 to determine whether earnings on the Fund would be available to support the costs of administering the program. Based on certain assumptions made on funding levels, cash outflows and an average net return on investments of 3.2%, we project that the net investment earnings will support the costs of administering the funds through FY2018. Additionally, an accumulation of investment earnings on the fund in FY2009 and FY2010 prior to appropriation to AEA for administrative costs are available.

This fiscal note assumes a continuation of current funding levels estimated at up to \$2.2 million annually for the costs of administering the renewable energy grant fund and recommendation program and reflects a reduction of general fund and miscellaneous earnings included in the FY2013 Governor's budget request being replaced by earnings available from the Renewable Energy Fund.

# FISCAL NOTE

STATE OF ALASKA  
2012 LEGISLATIVE SESSION

Bill Version HB 250  
Fiscal Note Number \_\_\_\_\_  
( ) Publish Date \_\_\_\_\_

Identifier (file name) HB250-DCCED-AEA-01-20-12 Dept. Affected DCCED  
Title Extend Renewable Energy Grant Fund Appropriation Alaska Energy Authority  
Allocation AEA Statewide Project Dev and AEE  
Sponsor Representatives Thomas, P.Wilson, Millett  
Requester House Energy Committee OMB Component Number 2888

## Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	FY13 Appropriation Requested	Included in Governor's FY13 Request	Out-Year Cost Estimates				
			FY14	FY15	FY16	FY17	FY18
<b>OPERATING EXPENDITURES</b>	<b>FY13</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>
Personal Services							
Travel							
Services		2,000.0	2,000.0	2,000.0	2,000.0	2,000.0	2,000.0
Commodities							
Capital Outlay							
Grants, Benefits							
Miscellaneous							
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>2,000.0</b>	<b>2,000.0</b>	<b>2,000.0</b>	<b>2,000.0</b>	<b>2,000.0</b>	<b>2,000.0</b>

FUND SOURCE		(Thousands of Dollars)					
1002	Federal Receipts						
1003	GF Match						
1004	GF						
1173	GF MisEarn (UGF)		2,000.0	2,000.0	2,000.0	2,000.0	2,000.0
1037	GF/MH (UGF)						
1178	temp code (UGF)						
<b>TOTAL</b>		<b>0.0</b>	<b>2,000.0</b>	<b>2,000.0</b>	<b>2,000.0</b>	<b>2,000.0</b>	<b>2,000.0</b>

POSITIONS							
Full-time							
Part-time							
Temporary							

CHANGE IN REVENUES							

Estimated SUPPLEMENTAL (FY12) operating costs 0.0 (separate supplemental appropriation required)  
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY13) costs 0.0 (separate capital appropriation required)  
(discuss reasons and fund source(s) in analysis section)

### Why this fiscal note differs from previous version (if initial version, please note as such)

Initial Version

Prepared by Sara Fisher-Goad, Executive Director  
Division Alaska Energy Authority  
Approved by Susan K. Bell, Commissioner  
Commerce, Community, and Economic Development

Phone 907-771-3000  
Date/Time 1/20/12 4:30 PM  
Date 1/21/2012

## FISCAL NOTE

STATE OF ALASKA  
2012 LEGISLATIVE SESSION

BILL NO. HB 250

### Analysis

This legislation adds legislative intent language related to the continuation of the renewable energy grant fund and recommendation program (AS.42.45.045) at funding levels of \$50 million each fiscal year to be appropriated to the renewable energy grant fund for projects recommended by the Alaska Energy Authority (AEA); and extends the program an additional 10 years to June 30, 2023.

#### Costs of Administering the Fund:

The renewable energy grant recommendation program was established by legislation for the fiscal year ending June 30, 2009 (HB152 SLA 2008 CH 31). The associated fiscal note provided an increment of \$226.0 for the first year and \$155.0 for subsequent years through FY2013 to AEA's Statewide Project Development and AEE component.

Starting in FY2011, interest earnings on the renewable energy grant fund, not to exceed \$2 million, were appropriated to AEA for the costs of administering the renewable energy grant fund program (FY2011: SB230 SLA 2010 CH 43 Sec 28 Pg 160 Lines 26-29; FY2012: HB108 FSSLA 2011 CH 3 Sec 13 Pg 72 Lines 2-4). A continuation of funding is included in the FY2013 Governor's budget.

In FY2011, the actual costs of administering the renewable energy grant fund program were \$1.2 million. Estimated costs for FY2012 are \$1.6 million. Costs include AEA project management, grant management, as well as finance and administrative support. Costs also include contractual services related to the technical analysis and evaluation of applications and project proposals. At June 30, 2011, four renewable energy fund application periods were complete; \$150 million had been appropriated for 133 renewable energy projects and approximately 126 grants were being managed. In FY2012, \$36.6 million was appropriated for an additional 74 projects (\$36.6 million included \$10 million of re-allocated funds). This fiscal note assumes a continuation of current funding levels estimated at up to \$2 million annually for the costs of administering the renewable energy grant fund program.

## Alaska Renewable Energy Fund Grant Recommendation Program

### Preliminary Assessment of Project Performance

February 4, 2012

#### Background

Alaska Energy Authority (AEA) has at least one year of operational data for 14 of the 21 Renewable Energy Fund (REF) projects that were producing energy at the end of 2011. The following assessment is based on the technical and economic performance of these 14 projects summarized in table 1.

This assessment is preliminary. It

- Reports on only a portion of the 73 construction projects that have been funded by the REF since inception. Status of all projects funded by the REF is available in the 2012 REF Program Status Report at [http://www.akenergyauthority.org/RE\\_Fund\\_Applications-V.html](http://www.akenergyauthority.org/RE_Fund_Applications-V.html).
- Is based on one year of production (2011). As is common to most energy projects, some of the projects—particularly biomass and small wind systems—require additional time for operators to debug and integrate the equipment into the existing fossil system.
- Does not address non-fuel operation and maintenance (O&M) cost increases or savings. For the purposes of this assessment, the costs of O&M for diesel-fired power and heat generation is assumed to be equal to that of renewable energy generation.
- Does not address positive or negative impacts on overall system efficiency. For example, higher penetration of wind energy into a diesel power system may decrease diesel generation efficiency. More detailed study is required to assess such an impact in a particular location.
- Does not address impacts on the cost of electricity, the Power Cost Equalization program, air quality, greenhouse gas emissions, fuel spills, economic development, community stability, or other more complex environmental and socioeconomic issues.

Despite these limitations, however, AEA believes it is appropriate to focus, at least initially, on quantity and value of fuel displacement as a program metric given the overwhelming impact that fossil fuel usage has on energy cost.

AEA maintains an ongoing program to monitor energy production, operation and maintenance issues, and economic performance of construction projects funded by the REF and other programs. As more data becomes available AEA will expand the analysis of project performance to include additional projects, assess cost of electricity impacts on ratepayers, and analyze distribution of benefits to the public. AEA will continue to coordinate this work with the University of Alaska and make results publicly available.

As part of the REF program evaluation that is in progress, AEA contractor Vermont Energy Investment Corporation is conducting an assessment of program impact versus cost that will address project cost versus savings, jobs, development of infrastructure, and other public benefits. A draft report will be available in March, while the final report is due in June.

## Overall Results

Table 1 indicates that the 14 projects displaced 1.46 million gallons of diesel in 2011—approximately 84% of the amount of fuel that was expected by AEA, UAA Institute of Social and Economic Research (ISER), and private economists that reviewed REF applications. (This expected amount of fuel is termed “Goal” in the table.)

The value of the fuel displaced in 2011 was \$4.87 million. Dividing the total unsubsidized cost of all projects (\$55.6 million) by the \$4.87 million in savings 2011 indicates a simple payback of 11 years for projects that AEA expects have a 20-year useful life (except for the hydro project that is assumed to have a 50-year life). Dividing the total REF grant for these projects (\$20.65 million) by the \$4.87 million in savings indicates a payback on the grant portion of the projects of 4 years.

2011 fuel prices may be rather low in the long run. Based on the USDOE Energy Information Administration’s mid-case projection of the cost of crude and other (see Alaska Fuel Price Projections 2011-2035 [ftp://ftp.aidea.org/ReFund-5/4\\_Program\\_Update/Fuel\\_price\\_projection\\_2011-2035\\_final.pdf](ftp://ftp.aidea.org/ReFund-5/4_Program_Update/Fuel_price_projection_2011-2035_final.pdf)), ISER estimates that the average price of fuel in rural areas will increase by 42% during the next 20 years over 2011 levels.

The following sections provide more detailed information on project performance. Information is organized by renewable energy resource.

## Biomass

The Tok School Biomass system reported fuel displacement for 2011 at 48% of the estimated displacement from their application. The Tok boiler only operated from January to May in 2011, when it was shut down to be retrofitted for steam, and a steam turbine-generator was added to the system. The heating system was not restarted until January 2012. Therefore thermal production was substantially less than expected. During 2013 the wood-fired system is expected to produce both heat and power during the year. The Alaska Gateway School District has used fuelwood harvested in wildfire mitigation efforts to date. Thus biomass fuel cost has been limited to handling and processing.

The Native Village of Eyak processed 75 cords of local logs in 2011. Although this is only 13% of the original goal, payback time of the REF investment appears short.

The Gulkana Central Wood Heating system displaced fuel at 40% of the goal. This is a basic biomass system with minimal instrumentation, so the estimates for displaced fuel are derived from quantity of harvested wood. This system’s lower-than-expected performance may be caused by less than 100% utilization of the system. AEA will monitor the system with the Native Village of Gulkana. Despite this apparent underperformance, the project saved the Village approximately \$24,000 in fuel cost. Similar to Tok, the project is firing the boiler with wood stored from earlier harvest operations.

## **Geothermal**

The City and Borough of Juneau's ground source heat pump is performing at 126% of its fuel displacement goals using figures from a recent preliminary report prepared by the CBJ for AEA. Simple payback is 8 years for total cost and 4 years for REF funding. The CBJ report assesses economics more fully and includes costs of increased power consumption and benefits of reduced snow removal costs.

## **Heat Recovery**

Golden Valley Electric Association's (GVEA's) heat recovery facility at its North Pole power plant is performing well, if somewhat below the original goal. Having saved \$172,000 in naphtha fuel during 2011, the \$1 million project promises to be highly economic.

McGrath Heat Recovery System reported fuel displacement for 2011 at 72% of goal. In late 2011, the new McGrath Clinic was connected to the district heating system and will increase the fuel displaced by approximately 5,400 gallons. The system is operating well and saved the community \$157,000 in fuel during 2011.

## **Hydroelectric**

The City and Borough of Wrangell's electric boilers are operating as planned and displaced \$230,000 of fuel in 2011.

Gustavus Electric Company's Falls Creek hydro project produced 117% of its energy goal. The 50-year, \$8.4 million project offset fuel worth \$583,000 in 2011. It should be noted that hydropower is subject to yearly weather, and annual energy may vary by +/- 20% of the predictions based upon a "normal" water year.

## **Solar**

GVEA's McKinley Village solar thermal project offset less than a third of the amount of fuel expected during 2011. GVEA staff and contractors established a data collection system for the \$193,000 demonstration project, however, and are working on understanding and improving performance.

## **Wind**

The AEA wind program publishes a quarterly report card of all utility-scale wind projects in the state. The first report card was released in late September 2011, while the second report was completed in early January 2012.

Wind energy varies seasonally with greater wind turbine output in the winter and less in the summer. Therefore a 12-month average is needed to accurately assess wind project performance.

Kodiak Electric's Pillar Mountain Wind Farm continues to meet or exceed energy goals. In 2011 it displaced over 870,000 gallons of diesel fuel, saving \$2.9 million. With a total installed cost of \$21.4 million, payback by fuel savings is 7 years.

Alaska Environmental Power's Delta wind project resolved some key equipment issues last summer and produced 82% of its energy goal. The project, which displaced 95,900 gallons of naphtha worth \$256,000 in 2011, appears to be on track to reach its energy goal in 2012.

Alaska Village Electric Cooperative installed a third Northwind 100 turbine with funding from the REF in Toksook Bay. Based on prorated generation figures the project generated at 77% of goal and saved \$43,000 in fuel.

The privately owned Banner Peak Wind project experienced equipment issues and produced at only 28% of its capacity in 2011. No state funds were used for the wind farm. The REF-funded intertie, however, performs as expected and will provide additional benefit when Nome Joint Utility System installs larger wind turbines if REF round 5 funding is received.

Unalakleet Valley Electric Company's project produced near its expected energy goal. However system cost payback remains high. UVEC and AEA staff is working to improve system performance and turbine downtime. The project saved \$211,000 in fuel during 2011.

Figure 1. 2011 Energy production and diesel cost savings vs goals from RE Fund projects with at least 12 months of operation.

Resource	Grantee	Project Name	Energy Performance					Economic Performance					
			2011 Energy Production		Diesel Displaced (gal x 1000)		Actual / Goal	Project Cost (\$ x 1000)		2011 Fuel Savings (\$ x1000)	Simple Payback (Years) on:		Project Life
			Electrical (MWh)	Thermal (mmBtu)	2011 Actual	Goal		Total Cost	REF Funding		Total Cost	REF Funding	
Biomass	Alaska Gateway School District	Tok Wood Heating	-	3.2	24.4	50.4	48%	3,260	3,245	92	35	35	20
	Native Village of Eyak	Cordova Wood Processor	-	1.5	11.4	88.7	13%	78	75	42	2	2	20
	Gulkana Village Council	Gulkana Central Wood Heating	-	0.8	5.9	14.6	40%	500	500	24	21	21	20
Geothermal	City and Borough of Juneau	Juneau Airport GS Heat Pump	-	5.1	37.1	29.5	126%	1,026	513	131	8	4	20
Heat Recovery	Golden Valley Electric Assoc	North Pole Heat Recovery	-	5.2	61.5	89.6	69%	1,022	817	172	6	5	20
	McGrath Light & Power Co	McGrath Heat Recovery	-	2.9	23.0	32.0	72%	1,179	712	157	8	5	20
Hydro	City and Borough of Wrangell	Wrangell Hydro Electric Boilers	-	6.9	66.0	69.6	95%	2,082	2,000	230	9	9	20
	Gustavus Electric Co	Falls Creek Hydroelectric	1,933	-	138.1	118.3	117%	8,400	750	483	17	2	50
Solar	Golden Valley Electric Assoc	McKinley Village Solar Thermal	-	0.1	1.8	5.7	31%	194	193	7	27	27	20
Wind	Kodiak Electric Association	Pillar Mountain Wind	12,448	-	870.7	852.0	102%	21,400	4,000	2,873	7	1	20
	Alaska Env Power	Delta Area Wind	1,425	-	95.9	117.0	82%	2,802	2,000	256	11	8	20
	Alaska Village Electric Coop	Toksook Wind Farm	187	-	12.6	16.3	77%	1,253	1,038	43	29	24	20
	Nome Joint Utility Systems	Banner Pk Wind Transmission	955	-	53.9	191.3	28%	6,390	801	152	42	5	20
	Unalakleet Valley Electric Co	Unalakleet Wind Farm	958	-	58.2	61.9	94%	6,000	4,000	211	28	19	20
<b>TOTAL</b>			<b>17,907</b>	<b>25.8</b>	<b>1,460.4</b>	<b>1,736.8</b>	<b>84%</b>	<b>55,585</b>	<b>20,645</b>	<b>4,872</b>	<b>11</b>	<b>4</b>	

Notes:

1. Includes projects in operation for at least 12 months
2. Assumes that operation and maintenance costs of new and existing projects are the same.
3. Assumes no impact on existing oil-fired system efficiency.

**From:** Peter Crimp  
**To:** Weston Eiler ([Weston\\_Eiler@legis.state.ak.us](mailto:Weston_Eiler@legis.state.ak.us))  
**Cc:** Sara Fisher-Goad  
**Subject:** Assessment of projected REF savings

Attached is a spreadsheet that gives projected average annual energy production, fossil fuel displacement, and savings for 63 construction projects funded by the Alaska Renewable Energy Fund (REF) program. Five additional construction projects are funded by the program, but are not presented because they are not yet scheduled for completion. (See the REF program Status Report at [http://www.akenergyauthority.org/re-fund-5/4\\_Program\\_Update/StatusReport2012.pdf](http://www.akenergyauthority.org/re-fund-5/4_Program_Update/StatusReport2012.pdf) for additional information). Notes at the bottom of the chart explain how the information was compiled.

This information follows up a 2-4-12 report (attached) that AEA provided to the Senate Finance Committee that provided a preliminary assessment of performance of projects with 12 months of operation during 2011. The current deliverable includes all projects scheduled for construction. Since only a subset of the projects have representative operational data, future performance is projected based on the original economic analyses performed by contracted economists under coordination of ISER with modifications by AEA given additional information that became available after the projects were analyzed.

Net Savings are estimated as Fuel Savings minus O&M costs. Payback time in years is estimated based on total or REF Funding quantity divided by net savings.

**Results:**

1. Average net savings per year for the round 1-4 projects is estimated at \$35.3 million/yr. Given a total installed cost of \$358 million, payback time for all projects is 10 years.
2. Project life is greater than total project cost payback time for 58 of the 63 projects. This indicates that most projects are economic, whether or not they are subsidized by the REF program.
3. Project life is greater than REF grant payback time for 60 of the 63 projects.

Please contact me if I can answer any questions on this analysis.

Sincerely,  
Peter Crimp  
\* \* \*

Deputy Director –  
Alternative Energy & Energy Efficiency  
Alaska Energy Authority  
(907) 771-3039

**Alaska Renewable Energy Fund**  
**Projected Energy Production and Cost Savings from Round 1-4 Projects**  
**March 28, 2012**



Resource	ID	Grantee	Project Name	Energy and Fuel					Cost Savings					In Operation 2011	
				Energy Production		Fuel Displaced (x 1000)			Project Cost (\$ x 1000)		Net Savings (\$ x 1000/yr)	Cost / Savings Payback Time (Years)			Project Life (Years)
				Electrical (MWh/yr)	Thermal (mmBtu/yr)	Diesel (gal/yr)	Natural Gas (MCF/yr)	Diesel Equivalent (gal/yr)	Total Cost	REF Funding		Total Cost	REF Funding		
BIOMASS	49	Alaska Gateway School District	Tok Wood Heating Construction		6,990	50	0	50	3,260	3,245	183	18	18	20	x
	15	Cheesh'na Tribal Council	Chistochina Central Wood Heating Construction		1,832	13	0	13	512	500	35	14	14	20	
	53	Chena Power, LLC	Biomass-fired Organic Rankine Cycle System	3,098	1,035	201	0	201	4,613	2,000	520	9	4	20	
	33	Chilkoot Indian Association	Haines Central Wood Heating Construction		5,320	38	0	38	225	189	149	2	1	20	
	605	City of Craig	Biomass Fuel Dryer Project		6,621	48	0	48	600	350	129	5	3	20	
	476	City of Tanana	City-Tribe Biomass Energy Conservation		1,509	12	0	12	508	413	52	10	8	20	
	649	Copper River School District	Kenny Lake School Wood Fired Boiler		2,774	20	0	20	565	565	46	12	12	20	
	112	Delta/Greely School District	Delta Junction Wood Chip Heating		7,282	53	0	53	2,868	2,000	151	19	13	20	
	2	Gulkana Village Council	Gulkana Central Wood Heating Construction		2,031	15	0	15	500	500	23	22	22	20	x
	445	Gwitchyaa Zhee Utility Company	District Wood Heating in Fort Yukon		19,040	137	0	137	3,606	2,318	538	7	4	20	
	681	Lake and Peninsula Borough	Lake and Peninsula Wood Boilers		541	4	0	4	493	370	24	21	16	20	
	623	Matanuska Susitna Borough	Susitna Valley High School Wood Heat		2,885	21	0	21	756	750	40	19	19	20	
	68	Municipality of Anchorage	Anchorage Landfill Gas Electricity Construction	24,183		0	311,378	2,301	7,395	2,000	1,219	6	2	20	
	26	Native Village of Eyak	Cordova Wood Processing Plant		1,803	13	0	13	138	138	43	3	3	20	x
211,636	Southeast Island School District	Thorne Bay Wood Boiler		2,427	18	0	18	580	478	32	18	15	20		
705	City and Borough of Sitka	Japonski Island Boathouse Heat Pump		374	3	0	3	165	125	9	18	14	20		
999	City and Borough of Juneau	Juneau Airport Ground Source Heat Pump		5,143	37	0	37	1,026	513	148	7	3	20	x	
111	City and Borough of Juneau	Juneau Aquatic Ctr Ground Source Heat Pump Constr		15,140	109	0	109	1,950	1,450	141	14	10	20		
453	City of Seward	Alaska Sealife Center Ph II Seawater Heat Pump		7,196	52	0	52	287	287	117	2	2	20		
307	City of Ambler	Ambler Heat Recovery Construction		1,229	9	0	9	500	435	47	11	9	20		
448	City of Saint Paul Electric Utility	Saint Paul Fuel Economy Upgrade		2,501	18	0	18	98	98	100	1	1	20		
271	City of Unalaska	Unalaska Heat Recovery Construction	1,662		128	0	128	1,920	1,300	546	4	2	20		
22	Cordova Electric Cooperative	Cordova Heat Recovery Construction		7,874	57	0	57	3,770	1,780	256	15	7	20		
105	Golden Valley Electric Association	North Pole Heat Recovery Construction	1,476		92	0	92	1,050	840	237	4	4	20	x	
687	Inside Passage Electric Cooperative	Hoonah Heat Recovery Project		7,905	57	0	57	1,005	475	220	5	2	20		
235	Kotzebue Electric Association	Kotzebue Electric Heat Recovery Construction	1,213	12,649	185	0	185	1,216	916	978	1	1	20		
61	McGrath Light & Power Company	McGrath Heat Recovery Construction		4,438	32	0	32	954	712	196	5	4	20	x	
244	North Slope Borough	Point Lay Heat Recovery Construction		15,199	110	0	110	4,257	396	694	6	1	20		
672	Alaska Electric Light & Power Company	Snettisham Transmission Avalanche Mitigation		936	72	0	72	3,344	2,000	258	13	8	50		
23	Alaska Power and Telephone	North Prince of Wales Island Intertie Project	1,356		104	0	104	6,155	3,752	279	22	13	50	x	
9	City and Borough of Wrangell	Wrangell Hydro Based Electric Boilers Construction		11,903	86	0	86	2,082	2,000	374	6	5	50	x	
469	City of Akutan	Akutan Hydroelectric System Repair and Upgrade		420	32	0	32	1,491	1,391	113	13	12	50		
58	City of Atka	Chuniisax Creek Hydroelectric Construction		568	44	0	44	7,167	996	239	30	4	50		
37,620	City of Ketchikan	Whitman Lake Project		7,926	528	0	528	25,000	700	2,113	12	0	50		
688	City of Pelican	Pelican Hydroelectric Upgrade Project		1,000	77	0	77	5,521	1,897	270	20	7	50		
21,407	Cordova Electric Cooperative	Humpback Creek Hydroelectric Construction		3,764	290	0	290	21,300	8,000	1,211	18	7	50	x	
10	Gustavus Electric Company	Falls Creek Hydroelectric Construction		1,766	118	0	118	8,400	750	540	16	1	50	x	
653	Kodiak Electric Association	Terror Lake Unit 3 Hydroelectric Project		6,456	455	0	455	15,908	3,752	1,997	8	2	50		
104,629	Southeast Conference	Reynolds Creek Hydroelectric Project		7,351	565	0	565	27,000	4,000	1,877	14	2	50		

Resource	ID	Grantee	Project Name	Energy and Fuel					Cost Savings					In Operation 2011	
				Energy Production		Fuel Displaced (x 1000)			Project Cost (\$ x 1000)		Net Savings (\$ x 1000/yr)	Cost / Savings Payback Time (Years)			Project Life (Years)
				Electrical (MWh/yr)	Thermal (mmBtu/yr)	Diesel (gal/yr)	Natural Gas (MCF/yr)	Diesel Equivalent (gal/yr)	Total Cost	REF Funding		Total Cost	REF Funding		
OCEAN/RIVER	660	Ocean Renewable Power Company	Cook Inlet TidGen Project	1,840		0	23,484	174	8,051	2,000	43	186	46	15	
SOLAR	641	Alaska Village Electric Cooperative	Kaltag Solar Construction	7,351		1	0	1	100	90	3	29	26	30	
	108	Golden Valley Electric Association	McKinley Village Solar Thermal Construction	32		2	0	2	194	190	11	18	17	30	x
WIND	102	Alaska Environmental Power	Delta Area Wind Turbines-Construction	1,750		117	0	117	2,802	2,000	468	6	4	20	x
	70	Alaska Village Electric Cooperative	Quinhagak Wind Farm Construction	649		50	0	50	4,839	3,882	237	20	16	20	x
	71	Alaska Village Electric Cooperative	Toksook Wind Farm Construction	166		13	0	13	1,253	1,038	58	22	18	20	x
	72	Alaska Village Electric Cooperative	Mekoryuk Wind Farm Construction	478		34	0	34	4,031	3,156	165	24	19	20	x
	302	Alaska Village Electric Cooperative	Emmonak/Alakanuk Wind Design and Constr	637		45	0	45	10,733	8,000	157	68	51	20	x
	303	Alaska Village Electric Cooperative	Shaktoolik Wind Construction	360		33	0	33	2,728	2,465	153	18	16	20	
	317	Aleutian Wind Energy	Sand Point Wind Construction	1,855	2,122	158	0	158	1,078	640	884	1	1	20	x
	122, 604	City of Bethel	Bethel Wind Power Project Times Four	817		63	0	63	3,198	2,598	418	8	6	20	
	486	City of Pilot Point	Pilot Point Wind Power & Heat	240		23	0	23	1,571	1,421	151	10	9	20	
	90	City of St. George	St. George Wind Farm Construction	511		39	0	39	2,000	1,500	154	13	10	20	
	616	Golden Valley Electric Association	GVEA Eva Creek Wind Turbine Purchase	55,510		3,469	0	3,469	93,300	1,463	6,890	14	0	20	
	103	Kodiak Electric Association	Pillar Mountain Wind Project - Construction	12,200		859	0	859	21,400	4,000	3,851	6	1	20	x
	85, 518	Kotzebue Electric Association	High Penetration Wind-Battery-Diesel Hybrid	4,267		328	0	328	10,809	8,000	1,627	7	5	20	
	107	Kwig Power Company	Kwiggillingok High Penetration Wind-Diesel	743		69	0	69	3,200	1,600	348	9	5	20	
	89	Nikolski IRA Council	Nikolski Wind Integration Construction	84	366	10	0	10	451	409	63	7	7	20	
	52	Nome Joint Utilities	Newton Peak Wind Farm	4,267		328	0	328	4,444	4,000	1,470	3	3	20	
	47	Nome Joint Utility Systems	Nome Banner Peak Wind Farm Transmission Constr	1,030		69	0	69	890	801	311	3	3	20	x
	110	Puvurnaq Power Company	Kongiganak High Penetration Wind-Diesel	1,167		90	0	90	3,300	1,700	493	7	3	20	x
503	TDX Corporation	St. Paul Wind Diesel Project	1,600		123	0	123	2,100	1,900	628	3	3	20		
273	Tuntutuliak Comm Svcs Assoc	Tuntutuliak High Penetration Wind-Diesel	518		63	0	63	3,360	1,760	193	17	9	20		
50	Unalakleet Valley Electric Co	Unalakleet Wind Farm Construction	1,200		80	0	80	4,223	4,000	396	11	10	20	x	
<b>TOTAL</b>				<b>162,447</b>	<b>156,229</b>	<b>9,968</b>	<b>334,862</b>	<b>12,443</b>	<b>358,240</b>	<b>112,995</b>	<b>35,318</b>	<b>10</b>	<b>3</b>		

- Notes:
1. Fuel savings and operation & maintenance (O&M) net cost figures are total present value over 20 years divided by 20. A real discount rate of 3% is assumed.
  2. Estimated performance of projects is based on assumptions of round 1-4 economic analyses coordinated by ISER and modified by AEA given updated information.
  3. Performance assumptions are subject to adjustment as new performance and actual price information becomes available.
  4. Fuel prices are estimated based on updated Energy Information Administration Annual Energy Outlook 2012 Early Release. See [http://www.iser.uaa.alaska.edu/Publications/Fuel\\_price\\_projection\\_2011-2035\\_final.pdf](http://www.iser.uaa.alaska.edu/Publications/Fuel_price_projection_2011-2035_final.pdf)

Ms. Fisher-Goad,

I have included previous emails to help refresh your memory and help you see from an outsiders perspective that AEA is not lowering the cost of energy in Alaska nor is it promoting sustainable rural energy systems. AEA is part of the problem providing resources to rural power systems which do not maintain their facilities and penalizing companies and communities where their electrical infrastructure is properly maintained and managed.

Let us examine the facts at face value, AEA has provided the community run electrical system of Ruby with multiple generators, buildings and an electrical grid multiple times based on need over the course of many years. The community of Ruby will be raising their electrical rate to \$1.13/kwh, yet Tanana who has not received any AEA assistance for their electrical system, power rate remains at \$0.5693/kwh for the highest rate class. So a company without AEA assistance Tanana is able to produce electricity for half of the cost of a company with AEA assistance. AEA is an enabler, rewarding a companies who do not maintain or invest in their facilities by providing them with new infrastructure and penalizing customers like those in Tanana with a properly maintained and managed electric company. The customers in Tanana pay for the full cost of power because they have an electrical system that is properly maintained and managed yet companies that live on State assistance, like Ruby, are rewarded with new infrastructure for allowing their infrastructure which was previously installed to go into disrepair. What is fair or equitable about that? What is AEA doing to ensure that the State's investment is protected in these communities like Ruby where the state has built infrastructure multiple times to ensure that the system is sustainable and the state will not be requested to build the system again in a couple of years? AEA is part of the rural Alaska Energy problem.

AEA and its staff have a very limited understanding rural Alaska. AEA staff people as shown by the following are very removed and do not understand Alaska. Let's look at specifics:

- 1) AEA defining Tanana as a Class 7 wind zone (AK\_Energy\_Model\_Tanana) and then denying multiple requests for funding on projects (Summary\_Project\_Evaluation\_R2\_Tananarejection) which will lower the cost of electricity in Tanana because the projects do not follow the centralized beaurcratic top down planning process dictated by AEA. AEA then later comes out and states that, "Tanana does not have economically viable wind resources." This is after rejecting multiple requests because they did not pursue wind, a resource which is not economically developable in the area, which I have told AEA multiple times and have been ignored. So because AEA messed up and does not know what they are talking about, the residents of Tanana are penalized being denied funding. Not exactly fair or a demonstration of the competency of AEA.
- 2) AEA has insisted on pursuing the Susitna Hydro project, a project that will cost somewhere in the neighborhood of \$5 billion dollars and will displace electricity costing about \$0.15/kwh. Jackson Creek hydro development which has already received a sterling endorsement from AEA's predecessor would cost in the neighborhood of \$5 million and displace electricity costing \$0.56/kwh but is discouraged by AEA. Let's examine AEA's objections: a) environmental issues associated with licensing a dam are very significant today. b) Building a dam on permafrost is a significant challenge from an engineering perspective. c) Thermal issues associated with hydro projects restrict their development and lands North of there. Talk about removed from reality. AEA is willing

to pursue the development of Susitna for \$5 Billion dollars with all of the same issues and objections associated with Jackson Creek which would cost \$5 million dollars, but is unwilling to pursue Jackson Creek development. AEA is very removed and disconnected from reality, let's look at the objection to Jackson Creek development: a) Licensing, because of the size and the fact that the area to be developed is on Native land, Jackson Creek hydro is exempt from most of the licensing requirements. b) Mr. Ott's statement regarding building a dam on permafrost is correct, there are issues with building on permafrost, this however does have any effect on the Jackson Creek project since it does not set on permafrost. Any engineer working in Alaska with any competence should know that Southern facing steep well drained slopes such as Jackson Creek, typically do not have permafrost issues. c) Thermal issues such as frazil ice are very real engineering concerns in Northern climates, however it is an issue with the Susitna project just as it would be with Jackson Creek. There are hundreds of traditional hydro electric projects above the Arctic Circle, just look at Norway. So while "thermal issues" are real concerns in Northern climates it is not a show stopper, there are a lot of examples of hydro electric systems operating above the Arctic Circle without problems.

- 3) AEA pursuit of biomass is a good idea at face value but really needs some on the ground study which has not been done before it is pursued. As a result of the biomass project at the Tanana laundrymat residents of Tanana have already seen an increase in the cost of wood for heat. The installation of three more systems in the community will only put a greater demand on the resource causing wood for residential heating to go up in price and become less plentiful. We already have an example of the use of biomass in Tanana from the 1900s. Jetté (1910) records the Koyukon Athabascan name for the village as Hohudotlaatl Denh, literally, 'where the area has been chopped' The forest around Tanana is still recovering from the days of Fort Gibbon, local trees in the Tanana area are typically at most 6-8" in diameter, it has taken almost 100 years for the trees to get this big. So for AEA to aid in the development of biomass development without a though long term study of the implications, is irresponsible.
- 4) Tanana Power has actually developed a kinetic hydro energy conversion device that works. The device in one summer season has produced and put more electrical energy on the grid than all the other devices in Alaska combined throughout their entire existence. AEA has failed even to provide even minor assistance to Tanana Power for this project, instead spends money pursuing things like nuclear energy for rural applications a non starter at face value.

My goal is not to bash AEA, however, AEA has provided multiple examples of incompetence within the organization and the rewarding of incompetence through the organization. Given that this is unfair to my customers and the state as a whole I see no other alternative but to take this fight to the legislature but am providing AEA one last chance to explain themselves before doing so. I look forward to your thoughtful response.

Sincerely,

Don Eller

**From:** Sara Fisher-Goad [<mailto:SFisherGoad@aidea.org>]

**Sent:** Monday, March 21, 2011 1:15 PM

**To:** [nalaska@vukontel.com](mailto:nalaska@vukontel.com)

**Cc:** Mike Harper; David Lockard; Douglas Ott; Barbara Triplett; Ronald Brown; Shauna Howell; Peter Crimp

**Subject:** RE: AEA and rural power

Dear Mr. Eller-

Thank you for your e-mail. I appreciate hearing from people as familiar as you are with rural Alaskan energy issues. Be assured, AEA project staff have in-depth rural Alaska experience. Our engineering staff includes people born in Alakanuk and McGrath. We also have employees who have worked for a decade or more in Kotzebue, the Lake Iliamna region, and Barrow. In my experience, AEA employees have gained their knowledge of rural Alaska with hands-on years of experience, not one or two-day trips in a community.

AEA has energy programs and projects that run the gamut from energy efficiency to bulk fuel tank farm construction, from PCE to the study of advanced small nuclear reactors, and from loans for rural bulk fuel purchases to investigating hydropower potential on the Susitna River. AEA's website [www.akenergyauthority.org](http://www.akenergyauthority.org) provides a great deal of information regarding how AEA allocates its resources to lower the cost of energy in Alaska. The "Program and Project Fact Sheets" link on our web page provides specific information on various AEA programs. I also invite you to come to our offices and meet with me and Mike Harper, Deputy Director - Rural Energy to discuss your concerns about AEA programs.

I do want to address a couple of specifics from your email:

Your points regarding the value of nuclear power in Alaska are valuable, and I have shared them with the authors of that study. AEA was appropriated funds last year to partner with ACEP to develop a feasibility study of potential nuclear power in Alaska. The summary you referenced is draft only and several of your comments and concerns are shared by AEA staff. Last year, legislation also passed allowing the state to consider nuclear power projects as potential energy projects in Alaska. As a key agency for energy project planning and financing, AEA supports analyzing all energy technologies. Since the Nuclear Regulatory Commission has not approved a small modular nuclear reactor design, this technology's potential use in Alaska is many years away.

The biomass resource is a critical concern when AEA considers wood boiler projects. Our grant process requires a resource assessment as an early part of project development. In Tanana, AEA staff met recently with Tanana Chiefs Resource Specialist Will Putnam and State Forester Doug Hanson to plan for these projects. If you would like to be added to the stakeholder list for that process, please contact Ron Brown, AEA biomass project manager ([rbrown@aidea.org](mailto:rbrown@aidea.org)).

Your comments on the wind resource around Tanana are in agreement with recent wind data AEA has gathered using a high resolution wind model. With only a class 2 wind resource, Tanana does not appear to be a promising site for wind development.

Unfortunately, it appears the hydro resource near Tanana is not conducive to development either. Mr. Douglas Ott is AEA's hydropower program manager. (no relation to Ron Ott, principal of the former Ott Water Engineers, whose firm prepared the 1978 hydropower reconnaissance report on Jackson Creek.) Mr. Ott has prepared the following summary of the hydro prospects for Jackson Creek :

*The creek is seasonally intermittent and located in a flat valley with steep hillsides. The scheme studied in 1978 report included a dam and reservoir on Jackson Creek and a 5 mile long penstock to a 850kW powerhouse. Regulations and licensing requirements for hydropower projects have become much more stringent since 1978. Environmental issues associated with licensing a dam are very significant today.*

*Building a dam and creating a reservoir on permafrost is a significant challenge from an engineering perspective. Further, a 5 mile long penstock is beyond the range of that considered economic for intermittent hydro operation. Lastly, thermal issues associated with hydro projects restrict their development in the Interior and lands north of there. For all these reasons, AEA does not recommend further consideration of hydro development on Jackson Creek.*

The Yukon River at Ruby was the site of the first hydrokinetic demonstration in Alaska. However, this technology is several years from commercialization, would only provide seasonal power, and has significant technological and environmental hurdles to cross. I understand that you have invested significant resources into a prototype hydrokinetic device. Ms. Barbara Triplett, AEA's ocean and river energy program manager, can add you to AEA's hydrokinetic working group list if you are interested ([bttriplett@aidea.org](mailto:bttriplett@aidea.org)).

I understand you have worked with a number of AEA program managers to gather information regarding wind, geothermal, river in-stream and hydropower; the City of Tanana has also received a grant from AEA for a street lighting retrofit to LED lamps.

I applaud your efforts to pursue alternative energy sources for Tanana. I agree, rural residents know best what their needs are and how to meet them; please consider AEA a resource to help you in your efforts.

Sincerely,

Sara Fisher-Goad

AEA Executive Director

---

**From:** Don Eller [nalaska@yukontel.com]  
**Sent:** Wednesday, March 16, 2011 1:23 PM

There are real and practical solutions for rural power, traditional hydro-electric is one such solution but is immediately discounted by AEA as are coal fired boilers. Attached is the Jackson Creek hydro study and the recommendation to AEA that the best energy alternatives for Tanana is the development of Jackson Creek Hydro. Yet anytime suggestions are made to AEA to develop the hydro resources around Tanana, AEA immediately discounts them pushing for much higher cost energy fads of the day like wind and biomass development. It is interesting to note that much of the early work on hydro in Alaska was done by Mr. Ott. Douglas Ott is also the project manager for traditional hydro projects at AEA. I am unsure if they are the same person but if they are the change in attitude from when Mr. Ott was a consultant making money of rural hydro development and now that he is a program manager for AEA amounts to an about face.

It is always easy to tear down and criticize others actions, this is communication with you is not meant to do that. This communication is an attempt to bring about structural changes of the way the State of Alaska handles rural energy by demonstrating the problem areas and providing logical alternatives the state has proposed in the past. I understand your job is dealing with energy throughout the state of Alaska so the specifics of Tanana are not on the top of your priority list.. Affordable energy in Tanana however is my priority and having been born and raised in Tanana and worked there throughout my life, no one knows more about what is the best energy resource for Tanana, than me. Unfortunately I cannot get those who have control of the purse strings to listen.

As always you and anyone at AEA staff are welcome in Tanana any time to review and inspect what an efficient power generation system installed in rural Alaska with private dollars should look like.

Don

Don Eller  
Yukon Tech. Inc.  
6270 Beechcraft Rd.  
Wasilla, Alaska 99654

907 745-5363

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Version: 10.0.1153 / Virus Database: 1498/3520 - Release Date: 03/21/11



*Ruby Electric*  
P.O BOX 90  
Ruby, Alaska 99768  
PH# (907)468-4401  
FAX# (907)468-4443

RECEIVED JUL : 3 2010

June 30, 2010

Ruby Electric Customer:

Due to the increase in fuel costs we had to increase the KW charge from .76 to .84.  
This will be effective on the next billing cycle, next month.

Reminder, at the conclusion of the next month we will have our first \$100.00 drawing for current electrical customers. I have hi-lited overdue amounts due that will need to be paid in addition any amounts in your 1-30 will need to be paid so it does not move over to 31-60 days . Any current residential customers (no balances in 31-60 or over) with no overdue city charges will be eligible.

Sincerely,

Jennie Peter  
City Clerk



*RUBY ELECTRIC CO.*

P.O BOX 90  
Ruby, Alaska 99768  
PH# (907)468-4401  
FAX# (907)468-4443

RECEIVED AUG 1 1 2011

July 31, 2011

Ruby Electric Customers:

In receiving our fuel this summer there was a substantial price increase on the price of fuel that directly effects our KW rate. With our fuel increase it would generate an increase of KW rate to \$1.13.

The City Council has decided to wait until the fall fuel shipment is delivered to make any adjustments to the KW rate. We are in hopes the cost will be less so that our increase will not be so high. Therefore, at this time there will be no increase.

Unfortunately, there will have to be an increase to the KW rate this fall based on the price of fuel however the rate is unknown at this time.

This letter however will serve as notice to our customers notifying you of the rate increase.

Thank you,

Jennie Peter  
City Clerk

# Tanana

## Energy Used



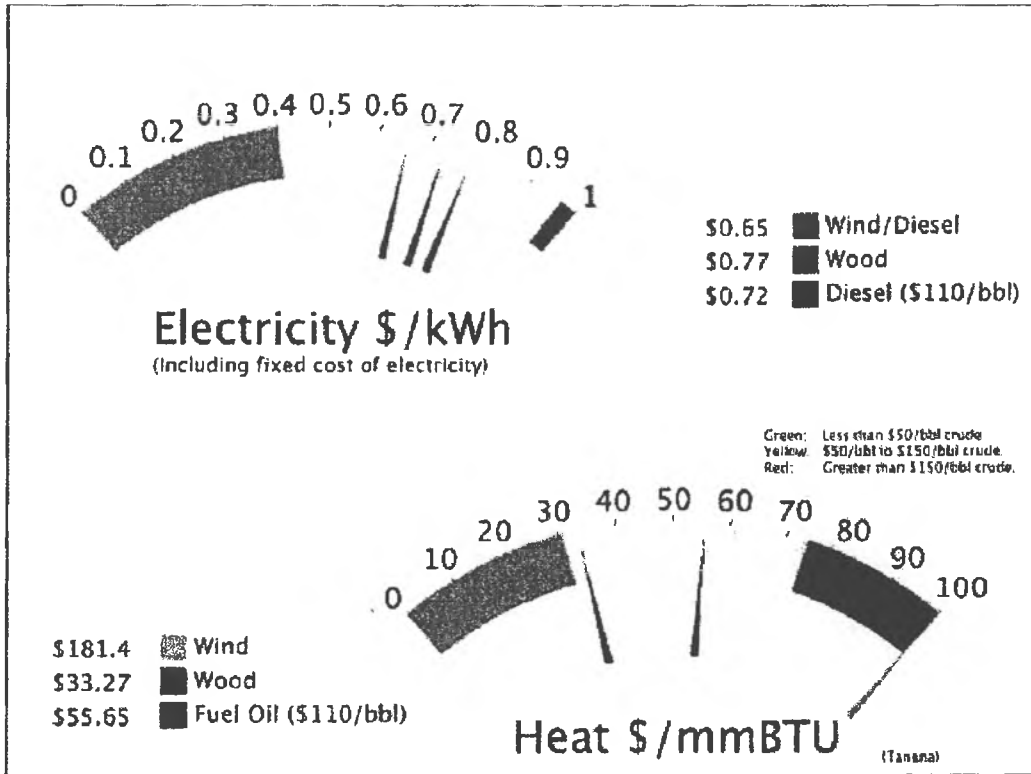
Total: **\$5,309** Per capita

Heat **\$1,632** Per capita

Transportation **\$590** Per capita

Electricity: **\$3,087** Per capita

POPULATION: 258



# Tanana

Regional Corporation

**Doyon, Limited**

House 6

Senate : C

POPULATION	258	LATITUDE: 65d 10m N	LONGITUDE: 152d 04m	<b>Unorganized</b>
LOCATION	Tanana is located in Interior Alaska about two miles west of the junction of the Tanana and Yukon Rivers, 130 air miles west of Fairbanks.			
ECONOMY	Two-thirds of the full-time jobs in Tanana are with the city, school district or native council. There are a number of positions with local businesses and services. BLM firefighting, trapping, construction work and commercial fishing are important seasonal cash sources. 17 residents hold commercial fishing permits. Subsistence foods include salmon, whitefish, moose, bear, ptarmigan, waterfowl and berries.			
HISTORY	Due to its location at the confluence of the Tanana and Yukon Rivers, Tanana was a traditional trading settlement for Koyukon and Tanana Athabascans long before European contact. In 1880, Harper's Station, an Alaska Commercial Company Trading Post, was established 13 miles downriver from the present site. In 1881, Church of England missionaries from Canada built a mission 8 miles downriver. Between 1887 and 1900, an elaborate school and hospital complex, the St. James Mission, was constructed. It became an important source of services and social change along both rivers. In 1898, Fort Gibbon was founded at Tanana to maintain the telegraph line between Fairbanks and Nome. A post office was also established, and several other trading posts developed around the turn of the century. Gold seekers left the Yukon after 1906. Ft. Gibbon was abandoned in 1923. The St. James Hospital was transferred to the BIA administration in the 1920s. During World War II, an air base was established near Tanana as a refueling stop for the lend-lease aircraft program. New hospital facilities were built in 1949; and during the 1950s, hospital administration was transferred to the U.S. Public Health Service. The City of Tanana was incorporated in 1961. The hospital complex was a major employer during this period, employing 54 persons with a payroll of \$1.6 million, but was closed in 1982. During 1982, Tanana incorporated as a First Class City in order to assume control of the local school system. The hospital facilities were remodeled for use as a health clinic, counseling center, tribal office, and Regional Elders's Residence.			

---

## Current Energy Status PCE

### Electric (Estimates based on PCE)

				Estimated Local Fuel cost @ \$110/bbl <b>\$5.15</b>		
Current efficiency	13.41 kW-hr/gal	Fuel COE	\$0.40 /kw-hr	/kw-hr		
Consumption in 200	93,988 gal	Est OM	\$0.02 /kw-hr	Estimated Diesel OM	\$24,030	
Average Load	137 kW	NF COE:	\$0.30 /kw-hr	Other Non-Fuel Costs:	\$365,086	
Estimated peak loa	274.31 kW	Total	\$0.73	Current Fuel Costs	\$483,963	
Average Sales	1,201,487 kW-hours				<b>Total Electric</b>	
						<b>\$873,079</b>

### Space Heating (Estimated)

2000 Census Data	2008 Estimated Heating Fuel used: 68,484 gal		
Fuel Oil: 41%	Estimated heating fuel cost/gallon	\$6.15	
Wood: 59%	\$/MMBtu delivered to user	\$55.77	Total Heating Oil
Electricity: 0.0%	Community heat needs in MMBtu	8,218	<b>\$421,125</b>

### Transportation (Estimated)

Estimated Diesel: 24,742 gal	Estimated cost	\$6.15	Total Transportation
			<b>\$152,141</b>

**Energy Total \$1,446,344**

## Possible Upgrades to Current Power Plant

### Power Plant - Performance Improvement to higher efficiency

Upgrade needed:	Capital cost	\$100,000	
<b>Powerhouse Upgrade</b>	Annual Capital cost	\$8,377	\$0.01 /kw-hr
Status Pending	Estimated Diesel OM	\$24,030	\$0.02
Achievable efficiency 14 kW-	New fuel cost	\$463,511	\$0.39
New Fuel use 90,016	Avg Non-Fuel Costs:	\$389,116	\$0.30
			<b>Savings</b>
			<b>\$12,076</b>
			New cost of electricity \$0.70 per kW-hr

### Diesel Engine Heat Recovery

Heat Recovery System Installed? Y	Capital cost	\$384,037	
Is it working now? Y	Annual ID	\$32,169	
BLDGs connected and working:	Annual OM	\$7,681	
<b>Powerhouse Only</b>			
	Value		
Water Jacket 14,098 gal	\$86,693	Total Annual costs	\$39,850
Stack Heat 0 gal	\$0	Heat cost	\$25.58 /MMBtu
			<b>Savings</b>
			<b>\$46,842</b>

## Alternative Energy Resources

### Wind Diesel Hybrid

Installed KW	400	Capital cost	\$3,071,563	per kW-hr	Heat Cost \$/MMBtu :
kW-hr/year	830746	Annual Capital	\$206,457	\$0.25	\$72.82
Met Tower?	no	Annual OM	\$38,976	\$0.05	\$13.75
Homer Data?	yes	Fuel cost:	\$0	\$0.00	
Wind Class	7	Total Annual Cost	\$245,433	\$0.30	\$86.56
Avg wind speed	8.50 m/s	Non-Fuel Costs		\$0.32	
		Alternative COE:		\$0.62	
		% Community energy		69%	
		New Community COE		\$0.64	
		(includes non-fuel and diesel costs)			<b>Savings</b>
					<b>\$105,808</b>

## Alternative Energy Resources

### Wood

Installed KW	164	Capital cost	\$2,425,756	per kW-hr	Heat Cost \$/MMBtu :
kW-hr/year	1219094	Annual Capital	\$163,049	\$0.13	
Installation Type	Wood ORC	Annual OM	\$153,774	\$0.13	
Electric Wood cost	\$150/cd	Fuel cost:	\$231,086	\$0.19	-90
Wood Required	1541 Cd/Y	Total Annual Cost	\$547,908	\$0.45	\$29.76
Stove Wood cost	250.00 \$/Cd	Non-Fuel Costs		\$0.32	
		Alternative COE:		\$0.77	
		% Community energy		101%	
		New Community COE		\$0.78	
		(includes non-fuel and diesel costs)			<b>Savings</b>
					<b>\$325,170</b>

### Biomass For Heat

Garn heater installed cost	\$500,000
Heat Delivered:	425000 BTU/hr
Annual ID	\$33,608
Cords/day:	1.8
Capital per MMBt	\$13.18
Hours per year	6000
Fuel cost per MMBtu	\$20.09
Wood (cordwood or willows)	\$225 \$/cord
Total per MMBT	\$33.27
Annual Heat	31.0%

### Other Resources

Tanana

Tidal:  
Wave:  
Coal Bed Methane:  
Natural Gas:  
Coal:  
Propane:

### Renewable Fund Project List:

For detailed information, consult the AEA web site. [akenergyauthority.org](http://akenergyauthority.org)

A project titled: Tanana Alternative Energy Assessment \_Tanana Power has been submitted by: Tanana Power Company for a Other project. The total project budget is: \$393,298 with \$303,060 requested in grant funding and \$90,238 as matching funds.

A project titled: Tanana Biomass Feasibility has been submitted by: Tanana Tribal Council for a Biomass project. The total project budget is: \$39,868 with \$30,668 requested in grant funding and \$9,200 as matching funds.

**App #281 Tanana Alternative Energy Assessment Tanana Power**

**Resource:** Other

**Proposed Project Phase:** Feasibility  
Recon

**Proposer:** Tanana Power Company

**AEA Program Manager:** Lenny Landis

**Applicant Type:** Utility

## Project Description

The Tanana area is blessed with a multitude of possible alternative energy resources including:

1) Wind Energy at T. 5 N., R. 21 W. Sec. 10 located approximately 10 miles from downtown Tanana proper.

2) Wind Energy at T. 4 N., R 20 W. This resource was eliminated as a possible because of transmission line costs from the site to Tanana. The transmission line would have to cross the Yukon River.

3) Wind and Kinetic Hydro at T. 6 N., R 17 W. commonly referred to as "The Rapids". This has both wind and water energy available however transmission line costs from The Rapids to Tanana, given the terrain, would be very costly.

4) Geothermal at Little Melozitna Hot Springs (65.459, 153.312). There has been cursory analysis done on this resource using chalcedony geo-thermometer methods by Kolker. These results are encouraging. However, the magnitude of the resource needs to be defined better to determine if it would be economically prudent to develop.

5) Traditional Hydro at Jackson Creek located at T. 5 N., R. 21 W. and T. 6 N., R 21 W. The project has been studied before by the APA in the 1980s. Information regarding the study can be found in "Reconnaissance Study of Energy Requirements and Alternatives for Tanana" Report Summary.

6) Kinetic Hydro Energy production using the Yukon River at Tanana using drag turbines. Grant funds would be used to do engineering assessments of resources 4 and 5 with the contributed funds and in kind resources of Tanana Power and the community of Tanana devoted to quantifying the resources 1 and 6.

The ultimate goal being to determine "the best" resource to develop of the community to meet the community of Tanana's long term energy needs most cost effectively.

## Funding & Cost

<b>Cost of Power:</b>	\$0.57 /kWh
<b>Requested Grant Funds:</b>	\$303,060
<b>Matched Funds Provided:</b>	\$90,238.5
<b>Total Potential Grant Amount:</b>	\$393,298.5
<b>Existing RE Fund Grant Offer:</b>	
<b>AEA Funding Recommendation:</b> (Not Constrained by Available Funding)	

## AEA Recommendation

- Full Funding
- Partial Funding
- Special Provision
- ✗ Not Recommended
- Did Not Pass Stage 1
- Withdrawn

**AEA Funding Recommendation:**

App #281 Tanana Alternative Energy Assessment Tanana Power

Resource: Other

Proposed Project Phase: Feasibility Recon

Proposer: Tanana Power Company

AEA Program Manager: Lenny Landis

Applicant Type: Utility

Scoring & Location



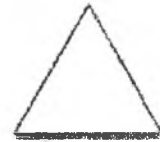
Overall Rank (out of 60)



Stage 3 Total Score (out of 100)

Energy Region: Yukon-Koyukuk/Upper Tanana

Election District: 6, Interior Villages



Rank within Region (out of )

Stage 3 Scoring Summary

<u>Criterion (Weight)</u>	<u>Score</u>
1) Cost of Energy (Max 30)	21
2) Funding Resources (Max 25)	
3) Project Feasibility from Stage 2 (Max 20)	
4) Project Readiness (Max 5)	
5) Benefits (Max 10)	
6) Local Support (Max 5)	
7) Sustainability (Max 5)	

AEA Review Comments

Applicant proposes to assess alternative energy resources of Tanana.

The work that the applicant proposes, while potentially valuable to Tanana, is more effectively accomplished using standard methodology on a statewide and regionwide basis that builds on the work already done in the statewide energy report that was released after this application.

Recommend no funding.

**App #281 Tanana Alternative Energy Assessment - Tanana Power**

**Resource:** Other

**Proposed Project Phase:** Feasibility  
Recon

**Proposer:** Tanana Power Company

**AEA Program Manager:** Lenny Landis

**Applicant Type:** Utility

**Economic Analysis**

Benefit/Cost Ratio  
(Applicant)



Benefit/Cost Ratio  
(AEA)



Mr. Eller,

I have consulted with AEA and they agree that saying "energy costs" is more accurate than "power rates." I have changed the sponsor statement to reflect that and it should be posted online shortly. Thank you for pointing that out.

## **Kaci Schroeder Hotch**

Chief of Staff

Office of Representative Thomas

State Capitol, Rm 505

Juneau, Alaska 99801

(907) 465-3732

fax: (907) 465-2652

"A certain amount of opposition is of great help to a man.  
Kites rise against, not with the wind."

-John Neal

**From:** Don Eller [<mailto:nalaska@yukontel.com>]

**Sent:** Friday, March 02, 2012 5:19 PM

**To:** Kaci Schroeder

**Cc:** Rebecca Rooney; Rep. Charisse Millett; Erin Harrington; Adam Berg; Rob Earl; Rep. Bob Miller; Rep. Pete Petersen; Rep. Les Gara; Rep. Chris Tuck; Rep. Sharon Cissna

**Subject:** HB 250

Hi Kaci Schroeder,

In reading the sponsor statement, "In 2008, the Alaska Legislature passed HB 152 which established an energy fund for renewable projects across the state.. Since then, the program has gone through four rounds of grant applications and issued grants for 200 renewable energy projects across the state. With an emphasis towards issuing grants for those who see the highest power costs, these grants have made huge differences in the power rates of many small communities who otherwise would be totally dependent on diesel fuel. " I have not been able to substantiate the statement "these grants have made huge differences in the power rates of many small communities who otherwise would be totally dependent on diesel fuel. " with any factual evidence.

If this truly is the case and I have overlooked the information proving this, would you please provide me with all cases where Renewable Energy Grant Funding has made huge differences in the power rates.

Thanks,

Don

Don Eller

Yukon Tech. Inc.

6270 Beechcraft Rd.

Wasilla, Alaska 99654

Hi Peter,

A couple of things: 1) the purpose for the information requested is to correlate AEA's "investments" to lowered energy costs, AEA's mission statement. So I am looking for all money spent through AEA or any other governmental body on electrical energy projects in Alaska, not just the renewable energy fund. 2) Only looking at a few years of data is not adequate, all spending since APA would paint a much clearer picture as to the effects of governmental spending on energy projects on energy costs.

I am trying to gather this information to present to the legislature. As I have told Ms. Fisher-Goad I believe AEA is an enabler, providing resources to utilities who fail to properly maintain and manage their utility. While properly run utilities receive no recognition or assistance because they are self sufficient and doing it right. Case in point look at the state resources provided to Ruby Electric over time verses the 9.5% loan the state provided to Tanana Power, look at utility rates, reliability and facilities. Has the State "investment" really lowered the cost of energy in Ruby or has it allow a village to live off its power utility? Is it fair that my customer have to pay the full cost of electricity while others who are provided all the capital costs have power rates twice that of mine.

Combine this with what I perceive a incompetence at AEA: 1) Tanana Power's requests for funding being denied, not that they were bad projects but because we did not follow the centralized planning top down approach dictated by AEA to pursue wind. In AEA's energy model Tanana was classified as a class 7 wind zone, inspite of my protests and 50 of historical wind data showing it to be a class 1 wind zone. Tanana Power and my customer are overlooked for funding because AEA does not know what they were talking about and would not listen to those who do. 2) AEA staff promoting Susitna Hydro while saying Jackson Creek Hydro is unfeasible even though they are very similar, just many magnitudes difference in price both in capital cost and in the value of energy they are replacing. 3) I have numerous other items but there is no need for a long laundry list.

I have expressed my concerns to the executive director to no avail. So I see no alternative than to bring to the legislature AEA's report card. The money spent by AEA verses the impact on energy costs, lowering the cost of energy in Alaska being AEA's mission statement and then let the legislature make their own judgment as to the value of AEA based on the facts. I am requesting the amount spent by and through AEA ( since inception) on all electrical projects in Alaska under AS 40.25.110.

Peter I have no desire to have conflict with AEA but when my company and customers are totally dismissed and not given a fair chance I see no alternative than raising the issue at a state level, letting the legislature make their own decision based on facts.

Thanks,

Don

**From:** Peter Crimp [<mailto:PCrimp@aidea.org>]

**Sent:** Tuesday, September 13, 2011 2:00 PM

**To:** Don Eller

**Cc:** Sara Fisher-Goad  
**Subject:** RE: AEA expenditure information

Don,

I think the most applicable program area for you to consider is the RE Fund, which I manage.

Here is a link to the status report for the first three rounds

[ftp://ftp.aidea.org/ReFund\\_RoundIV\\_Recommendations/REFundRound4/4\\_Program\\_Update/StatusReport2011.pdf](ftp://ftp.aidea.org/ReFund_RoundIV_Recommendations/REFundRound4/4_Program_Update/StatusReport2011.pdf) Suggest you look at fig 3 and table 3.

By the end of 2012 AEA expects that 45 construction projects will have been completed at a total cost of \$167 million—half funded by the RE Fund and half paid for by other sources. AEA estimates the annual fuel savings from these completed projects will be over 6 million gallons per year of diesel or equivalent.

AEA is planning to engage a consultant to prepare an independent review of the effectiveness and efficiency of the RE Fund (Oct-March timeline). Part of that will be an assessment of benefit (e.g. energy savings) vs cost. Cost will include the grants as well as AEA staff, etc. You are welcome to provide feedback.

Hope that helps.

Peter

**From:** Don Eller [<mailto:nalaska@yukontel.com>]

**Sent:** Tuesday, September 13, 2011 11:11 AM

**To:** Peter Crimp

**Subject:** AEA expenditure information

Hi Peter,

Given that AEA's mission statement is to lower the cost of energy in Alaska, I would like to do an impact analysis of AEA spending and the cost of energy. So I am looking for information regarding AEA and APA expenditures. Is there someone to work with at AEA to obtain this information, if so who, or a place this information is kept so that I can access the information.

Thanks for your help.

Don

Don Eller  
Yukon Tech. Inc.  
6270 Beechcraft Rd.  
Wasilla, Alaska 99654

907 745-5363

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## State grants are Bush boon

TIM BRADNER  
ECONOMY  
Published: November 20th, 2010 07:01 PM  
Last Modified: November 20th, 2010 07:02 PM

When government does things right, it's worth a pat on the back.

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With that in mind, let's give credit to our Alaska Energy Authority, state legislators and Gov. Sean Parnell, who have given steady support to a renewable energy grant program aimed mainly at helping small rural villages.

The program is already reducing these communities' reliance on costly diesel for power generation and space heating. It's a worthy public investment because reducing the amount rural Alaskans spend on diesel keeps cash at home, strengthening the local village economy.

It's also good for the state's larger cities, including Anchorage, because rural residents will have more money to spend on purchases here. Money stays in Alaska rather than going to purchase oil from countries

that are sometimes unfriendly.

Legislators designed the program to last three years, with \$250 million in grants to be allocated. We're now two years into the three years.

So far the energy authority has approved \$150 million in state funds for 124 projects around the state. By the end of this year the number should be up to 180 projects.

Local partners, and local matching funds, are required, so the actual amounts being spent are higher because of the local contributions, which vary.

The Legislature will consider another \$50 million in projects next year, the third and final year.

Considering just the projects completed now, there will be annual savings of 2.5 million gallons of fuel that won't have to be purchased. As more projects are completed, by the end of 2012 the savings will be 8 million gallons per year, increasing to 9 million gallons yearly the following year.

Assuming an average delivered fuel cost of \$5 per gallon (the actual prices are higher, no doubt), 9 million gallons a year saved adds \$45 million dollars a year to the purchasing power of rural villagers.

If the Legislature completes the third year of funding and the governor approves it, the fuel savings will grow.

This is something to be proud of. Alaska now has the largest renewable energy development program of any state, and it appears to be the only state program aimed at small projects in rural areas.

### More Tim Bradner stories »

- Nome isn't only city lacking fuel security To fuel our future, we need to go further, fast
- New gas discoveries show that incentives work
- Let's look carefully at gas line possibilities
- Our agriculture industry small but fertile

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living/entry. Privacy level  
master. Corner lot w/lo  
deck, Jan Retreat! 2.10  
n343



1 of 11

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The bulk of these are small wind and hydro projects but there are innovative wood-heat and even solar projects. Yes, the sun does shine, even at northern latitudes.

Finding substitutions for diesel is only part of this story. Energy conservation is the cheapest and easiest way to reduce diesel use and the energy authority also has programs under way to upgrade the efficiency of local power plants, many of which are aged, and help communities retrofit public buildings.

So far, efficiency programs, funded with a mix of loans and grants, have reduced electrical use in villages by an average of 4.5 percent. This is power that would otherwise have to be generated, mostly with diesel.

The renewable energy grant program is set to end in another year but it's interesting to consider the possibilities of an extended and truly aggressive renewable energy program for rural Alaska.

The energy authority has charted a path that through a mix of conservation, power plant efficiency improvements and local renewable energy projects could reduce -- to a startling degree -- the use of diesel to generate power in rural communities. And there would be additional reductions in diesel used for space heating.

Here are the numbers: The authority believes 35 million gallons per year now used for power generation could be reduced to 7.5 million gallons. Diesel used for space heating could be cut from the 60 million gallons per year used currently to 35 million gallons.

Between the two, that's a combined reduction of 62.5 million gallons of diesel yearly. That's an annual savings of \$312 million per year, and an equal increase in rural residents' income for other purchases.

These numbers and how they were calculated are in the authority's new booklet, "Alaska Energy Pathways," in which the energy authority lays out the state's energy strategies and goals.

All this doesn't mean the authority is focused only on rural Alaska, or that the state won't pursue bigger renewable energy projects like a hydro facility at Watana, north of Anchorage, or Chackachamna, west of the city.

Last year the energy authority worked with regional electric utilities to develop an Integrated Resource Plan for new power projects needed for Southcentral and Interior Alaska, which include provisions for a large hydro project.

The state already has a substantial hydro development track record. In the 1980s, a number of large projects were built in Southeast Alaska and near Homer. These facilities, which include the Bradley Lake project near Homer, provide Alaskans with the lowest-cost power available.

Back to my point: These projects show government can do things right. And it can be done again.

Tim Bradner writes for an Alaska economic reporting service. He also consults for private clients and writes for business publications. His opinion column appears every month in the Anchorage Daily News.

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## Gustavus celebrates diesel-free power

Posted: Sunday, June 27, 2010

By PAT FORGEY

GUSTAVUS - Gustavus no longer looks to Juneau, Sitka and Ketchikan and envies their cheap and plentiful hydroelectric power.

Instead, other Southeast Alaska communities are looking towards Gustavus and wondering whether they can do what the Icy Strait city did: Overcome decades-long hurdles, and replace its diesel generators with cheap, clean and plentiful hydroelectric power.

The community recently held a public celebration of its new Falls Creek Hydroelectric Project, which last year began providing all of Gustavus' power.

"It feels nothing short of wonderful," said Dick Levitt, president of the Gustavus Electric Co.

"Dick is the reason this finally got done," said Rep. Bill Thomas, a Haines Republican and a commercial fisherman.

Thomas said Levitt's lobbying efforts brought together multiple agencies and funding sources. Others at the celebration included state and federal officials who oversaw or funded the project, and representatives from neighboring utilities, including Juneau, each working on or already using similar projects.

Gustavus' diesel generators cost 74 cents per kilowatt-hour to produce power during the peak of fuel prices, with a more recent price of 39 cents per kwh. Falls Creek will bring that cost to under 20 cents.

While Gustavus now has surplus power, it didn't come either cheaply or easily. The total cost of the project was \$8.2 million, Levitt said.

"Grants paid everything but \$1.3 million, and we'll be paying that over time," he said.

State and federal agencies provided the grant money, with the largest part coming from the federally funded Denali Commission.

Gustavus also overcame the hurdle of acquiring the hydroelectric site. Originally within the boundaries of the nearby Glacier Bay National Park, a land trade provided state land elsewhere to the National Park Service in exchange for the site. And that took an act of Congress.

Then came the problem of getting to the location. Gustavus may be the flattest community in Southeast Alaska, and finding a site steep enough to produce power meant going into the nearby hills with an expensive three-mile road.

High in the forest, water enters a penstock where it flows down to the powerhouse after a fall of 600 feet that powers a turbine producing 800 kilowatts of power.

"When we finish with the water we put it back in the river as far upstream as we can," said Pedr Turner, construction superintendent on the project.

Returning the water to the river meant there was no impact to the salmon habitat, and fish screens on the intake also helped the project win environmental approvals, Gustavus Electric officials said.

While work is still being done on the project, it began producing power last July, and the diesel engines have been mostly silent since then.

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When the community toured the power house on June 18, it was producing only 250 kilowatts, all Gustavus needed at that time.

He said he hopes to use some of the surplus soon.

Gustavus isn't yet hooked up to the Park Service facilities at Bartlett Cove, but Levitt said the Park Service wants to make the connection and shut down its own diesels.

Levitt said they're also exploring creating an interruptible power rate for the Gustavus school, to enable it to save diesel by using electric heat when there is surplus available.

Levitt said that while the project had a high initial cost, it will produce immediate savings not only for residents, but the state.

In 2008, Gustavus Electric burned 132,000 gallons of diesel. The equalization program subsidized the first 500 kwh used per month for residences and community facilities. That year, about half of Gustavus Electric's sales were subsidized by the Power Cost Equalization program, at a cost of about \$710 per customer.

Southeast Conference Energy Coordinator Robert Venables said other communities can learn from what Gustavus has accomplished, but public officials also need to find ways to make renewable energy easier to finance and develop.

Gustavus Electric's slogan is "Power for Generations," and Levitt said Falls Creek will be producing renewable power for generations to come.

"This project will be generating for Gustavus 100 years from now, when all of us are gone," he said.

He said he looks to Juneau, where Alaska Electric Light & Power's Annex Creek Plant, the utility's older hydroelectric project, has been producing power for more than 100 years.

"Hydro is expensive initially, but it's very cheap in the long run," Levitt said.

• Contact reporter Pat Forgey at 523-2250 or [patrick.forgey@juneauempire.com](mailto:patrick.forgey@juneauempire.com).


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## [Renewable Energy](#)

### Alaska Co-op Rebuilds Hydro Plant

*By Derrill Holly | ECT Staff Writer Published: July 5th, 2011*

Nearly five years after flash flooding ripped a co-op-owned hydroelectric project away from the banks of an Alaska creek, a larger, more efficient facility is producing electricity for its consumer-members.



Cordova Electric Cooperative's new Humpback Creek Hydroelectric Project is expected to meet 20 percent of its seasonal power demand. (Photo By: CEC)

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The Humpback Creek Hydroelectric Project is expected to meet up to 20 percent of Cordova Electric Cooperative's seasonal demand. That capacity, combined with the co-op's Power Creek hydroelectric facility, will boost overall hydroelectric capacity to 80 percent of the co-op's load.

"This is a \$21 million investment for our co-op, but it is expected to offset the need for 370,000 gallons of diesel fuel a year," said Clay Koplin, CEO of the Cordova-based co-op. "This is energy that is generated in Cordova and is not subject to market fluctuations and barge logistics."

Humpback Creek has a long tradition of producing electricity for the small city of Cordova. The first hydroelectric facility began churning out power in 1909. In 1991, the co-op completed construction of a 1.2 megawatt plant on the creek at a cost of \$11.5 million.

That facility was undergoing renovation following a 2005 fire when a major storm hit Oct. 10, 2006. During a 24-hour period, more than 24 inches of rain fell on the area, battering the site with an estimated 2 billion gallons of water. Concrete footings were eroded, the power house was heavily damaged, and much of the equipment was washed away.



Alaska Lt. Gov. Mead Treadwell (left) helps Cordova Electric's Clay Koplin, board chairman Hap Symmonds, state Rep. Bill Thomas, and Sen. Lisa Murkowski dedicate the co-op's hydroelectric facility. (Photo By: CEC)

This was a really violent flood. It washed a five ton transformer away from the site and downstream; a 500 pound transformer from the same facility was literally washed out to sea. It was discovered stuck in the mud during a low tide, more than one mile offshore, said Koplin.

The Federal Emergency Management Agency provided \$5.3 million for the rebuilding project. The state of Alaska kicked in \$8 million through its renewable energy grant program, and the co-op financed the balance.

"We expect to increase our power generating capacity by as much as 20 percent," said Koplin, following the June 11 dedication ceremony. "The 1,250-kilowatt facility can generate as much as 4 million kilowatt-hours of electricity per year."

Besides supplying the needs of the co-op's nearly 1,600 consumer-members, it is also expected to help meet the demand of seasonal seafood processing plants operating in the region, Koplin said. "This will provide good service to the Cordova community for generations to come."

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February 27, 2012

House Finance  
State Capitol Building  
Juneau, Alaska 99811

Dear House Finance Members;

The Alaska Municipal League is in full support of HB 250. The expiration of a program that has been so successful would be very destructive to the State of Alaska, as over 200 renewable energy projects throughout the State of Alaska have been granted funds. The economic boon to those communities has been tremendous, as diesel fuel is no longer affordable by most small communities.

The Alaska Municipal League has closely watched those communities that have been fortunate enough to be awarded funds through this program. The continuation of HB 250 and the \$50 million per year until 2018 is necessary if small municipalities are to remain viable communities in which to live and carry on business.

Thank you for your interest and dedication to this issue.

Sincerely,

*Kathie Wasserman*

Kathie Wasserman  
Executive Director

Kathy Morgan  
Box 342  
Tok, AK 99780-0342

March 8, 2012

Representative Bill Thomas  
120 4<sup>th</sup> Street, State Capitol, Room 501  
Juneau, AK 998011-1182

Re: HB 250

Dear Representative Thomas:

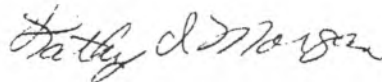
I strongly support House Bill 250, extending the renewable energy fund. This fund is critically important to the entire State of Alaska. We need that renewable energy fund to encourage renewable energy projects that can reduce our high cost of energy and help the State meet its renewable energy production goals.

My community of Tok has benefited from the program with the building of an efficient wood-fired boiler to heat the Tok School and eventually also power it electrically. Already the school is saving thousands of dollars per year in heating costs, using a carbon-neutral fuel that otherwise threatens our homes with wildfire—and produces less pollution than standard oil boilers. Extending the renewable energy grant fund so that other communities can enjoy similar benefits, using whatever appropriate resources are available in their local area, is the right thing to do.

Tok School's heating and electrical generation projects funded by the renewable energy fund prove that there are feasible renewable alternatives that reduce our dependence on petroleum fuels and in the long run save both State money and private money. In the case of Tok's projects, as an extra bonus, while the projects are saving money for the school they are providing new jobs that benefit the community's economy and reduce our air pollution levels.

To turn renewable resource potential into reality, we need funding for projects to prove the validity and reliability of alternate energy projects in the unique conditions that we face in our state, with the wide variation and extremes of climate and ecology and the challenges of transportation and technology in remote areas. Different areas of the state have different resources that call for different solutions. Thank you for sponsoring HB 250.

Sincerely,



Kathy I. Morgan



Tok Community Umbrella Corporation  
Box 547  
Tok, AK 99780-0547



MARCH 8, 2012

Representative Bill Thomas  
120 4<sup>th</sup> Street, State Capitol, Room 501  
Juneau, AK 998011-1182

Re: HB 250

Dear Representative Thomas:

This letter is in support of House Bill 250, extending the renewable energy fund. This fund is critically important to the entire State of Alaska and is needed to encourage renewable energy projects that can reduce our high cost of energy and help the State meet its renewable energy production goals.

The cost of petroleum-based energy is high and increasing throughout the world, but particularly in Alaska. It has reached crisis proportion in some of the rural areas. There are feasible renewable alternatives that are carbon-neutral or add no carbon to the atmosphere, reduce our dependence of foreign fuels, in some cases make our homes safer, and in the long run save both State money and private money.

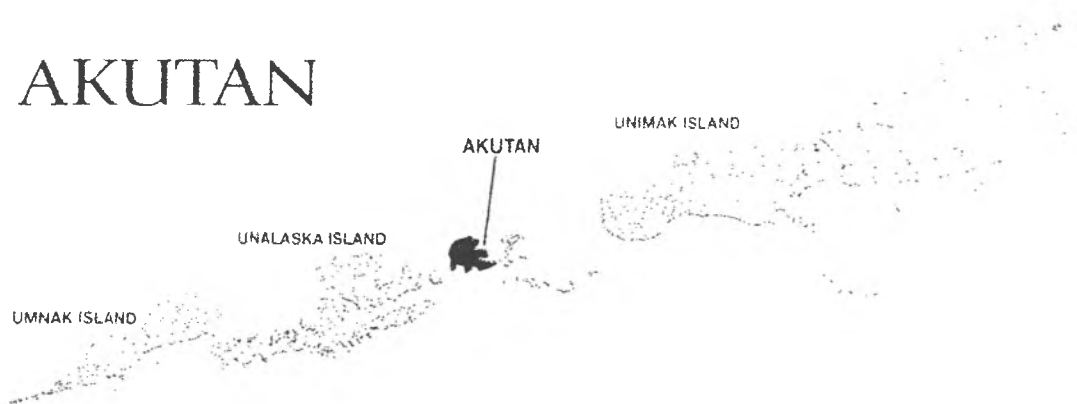
To turn renewable resource potential into reality, we need funding for projects to prove the validity and reliability of alternate energy projects in the unique conditions that we face in our state, with the wide variation and extremes of climate and ecology and the challenges of transportation and technology in remote areas. We also need funding to build projects that involve proven technology with an up-front capital cost that our smaller communities can't fund through local resources.

My community of Tok has benefited from the program with the building of an efficient wood-fired boiler to heat the Tok School and eventually also power it electrically. Already the school is saving thousands of dollars per year in heating costs, using a carbon-neutral fuel that otherwise threatens our homes with wildfire—and produces less pollution than standard oil boilers. Extending the renewable energy grant fund so that other communities can enjoy similar benefits is the right thing to do.

Sincerely,

Kathy I. Morgan, President

# AKUTAN



March 8, 2012

The Honorable Representative Bill Thomas  
Alaska State Capital  
Room 505  
Juneau, AK 99801-1182

Re: HB 250

Dear Representative Thomas:

The City of Akutan is writing to express its support for passage of House Bill No. 250, An Act Relating to the Renewable Energy Grant Fund. We support an extension of at least five years, and suggest making it a longer period.

As a result of the grant fund, the City of Akutan and Alaska Energy Authority (AEA) have jointly funded the exploration of a geothermal power resource located in the Hot Springs Bay Valley of Akutan Island, approximately five miles from the City and Native Village of Akutan. Our feasibility work is very promising as we work to bring the project to fruition. Continuation of the grant fund will be instrumental in helping communities to pursue a wide range of renewable energy projects.

Thank you for your leadership in sponsoring this bill.

Sincerely,

/s/

Mayor Joe Bereskin

cc: Hermann Scanlan, City Administrator  
Representative Bryce Edgmon



Alaska Power Association  
703 West Tudor Road, Suite 200  
Anchorage, Alaska 99503-6650  
907-561-6103  
Fax: 907-561-5547  
www.alaskapower.org

January 27, 2012

Representative Neal Foster, Co-Chairman, House Special Committee on Energy  
Representative Lance Pruitt, Co-Chairman, House Special Committee on Energy  
Representative Bob Lynn  
Representative Kurt Olson  
Representative Pete Petersen  
Representative Dan Saddler  
Representative Chris Tuck

Honorable Members of the House Special Committee on Energy:

Alaska Power Association respectfully requests your support for House Bill 250. Since its creation in 2008, the Alaska Renewable Energy Fund has provided \$80 million in funding for projects that utilize renewable energy resources in communities throughout the state.

Many electric utility members of our statewide trade association are recipients of this funding, and they have several success stories of how their renewable energy projects have significantly reduced reliance on diesel fuel.

The Alaska Renewable Energy Fund is one of the most successful policy mechanisms in the nation for stimulating rapid renewable energy development.

- By the end of 2011, 58 projects (Rounds I-IV) were completed.
- Eleven of the projects in operation at the end of 2011 produce power for Power Cost Equalization utilities.
- By the end of 2012, 120 projects are expected to have been completed.
- By the end of 2013, 184 projects are expected to have been completed and fuel displacement is expected to be approximately 3.4 million gallons equivalent per year.
- By the end of 2016, fuel displacement is anticipated to be 11.6 million gallons per year.

*(Source: Alaska Renewable Energy Fund Status Report, January 21, 2012)*

Thank you for your dedication to ensuring that all Alaskans have access to safe, reliable and affordable energy. We believe that continued funding of the Alaska Renewable Energy Fund will keep us moving in this direction.

Sincerely,

Marilyn Leland  
Executive Director

cc: Representative Bill Thomas



# ALASKA POWER ASSOCIATION R E S O L U T I O N

## A Resolution Urging Capital Funding In Support of Alaska Energy Policy (12-2)

In light of the ambitious and aggressive goals set forth in the Alaska Sustainable Energy Act (SB 220) and State Energy Policy (HB 306), the Alaska electric utility sector needs sources of capital for infrastructure and transmission.

Alaska Power Association urges the Alaska Legislature to fully support the following funding mechanisms:

- Extend the authorizing language for the Renewable Energy Grant Fund, which supports the intent of the legislature to provide funds annually for projects recommended by the Renewable Energy Fund Advisory Committee;
- Properly capitalize the Power Project Loan Fund, enabling meaningful funding for infrastructure projects; and
- Establish a State of Alaska-funded and administered revolving loan fund for the sustainable financing of infrastructure projects.

(Adopted Dec. 2010, updated Dec. 2011)

### Association Members

Alaska Electric and Energy Co-op  
Alaska Electric Light & Power  
Alaska Power & Telephone  
Alaska Railroad Energy Authority JAA  
Alaska Village Electric Cooperative  
Anchorage Municipal Light & Power  
Aurora Energy  
Barrow Utilities & Electric Co-op  
Chugach Electric Association  
Copper Valley Electric Association  
Copper Valley Telephone Co-op  
Cordova Electric Cooperative  
Doyon Utilities  
City of Gakona  
Golden Valley Electric Association  
Homer Electric Association  
INN Electric Cooperative  
Inside Passage Electric Co-op  
Kodiak Electric Association  
Kotzebue Electric Association  
Kwaan Electric Transmission  
Interie Cooperative  
Matanuska Electric Association  
McGrath Light and Power  
Metlakatle Power & Light  
Middle Kuskokwim Electric Co-op  
Naknek Electric Association  
Nome Joint Utility System  
North Slope Borough  
Nushagak Cooperative  
OTZ Telephone Cooperative  
City of Seward  
Southeast Alaska Power Agency  
Tanalian Electric Cooperative  
Tanana Power Company  
TDX Power  
Unalakleet Valley Electric Co-op  
Yakutat Power

### Anchorage office

1000 W. 11th Avenue, Room 200  
Anchorage, AK 99501  
Phone: (907) 562-1111  
Fax: (907) 562-1112  
E-mail: [info@alaska-power.org](mailto:info@alaska-power.org)

### Juneau office

1000 W. 11th Avenue, Room 200  
Juneau, AK 99801  
Phone: (907) 586-1111  
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E-mail: [info@alaska-power.org](mailto:info@alaska-power.org)

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MUNICIPAL  
LIGHT & POWER

January 27, 2012

faxed / mailed  
907-465-2652

The Honorable Bill Thomas  
House of Representatives  
Alaska State Capitol  
Juneau, Alaska 99801-1182

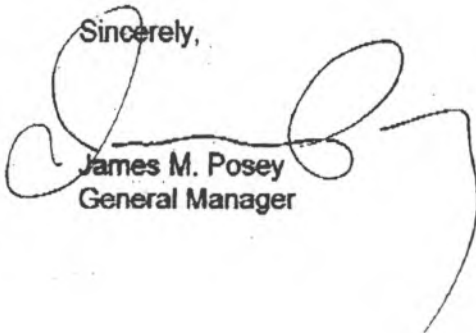
Subject: HB 250

Dear Representative Thomas:

*Mr. Chair*

- Municipal Light and Power Supports HB 250, the time extension of the Alaska Renewal Energy Grant Fund until 2023. Dozens of projects currently in the reconnaissance, feasibility and design stage will be put into limbo if the program is not extended this year.
- So far 21 projects have been constructed under the program, which have cumulatively displaced over \$7 million in fuel since 2009. By the end of 2016, AEA estimates that diesel fuel displacement from Fund projects will be approximately 11.6 million gallons per year.
- The program has so far leveraged over \$100 million federal and other dollars in matching funds for projects funded.

Sincerely,



James M. Posey  
General Manager

*Dated*  
JAN 30 2012  
*+ mailed*



## Homer Electric Association, Inc.

Corporate Office  
3977 Lake Street  
Homer, Alaska 99603-7680  
Phone (907) 235-8551  
FAX (907) 235-3313

Central Peninsula Service Center  
280 Airport Way  
Kenai, Alaska 99611-5280  
Phone (907) 283-5831  
FAX (907) 283-7122

January 30, 2012

Representative Bill Thomas, Jr.  
State Capitol, Room 505  
Juneau AK, 99801

Dear Representative Thomas:

Homer Electric Association, Inc. (HEA) strongly supports HB 250, extending the sunset clause of the renewable energy grant program to 2023. This bill will allow the state to continue to support a wide variety of renewable energy technologies that holds great promise for Alaska such as wind, hydroelectric, biomass, and geothermal.

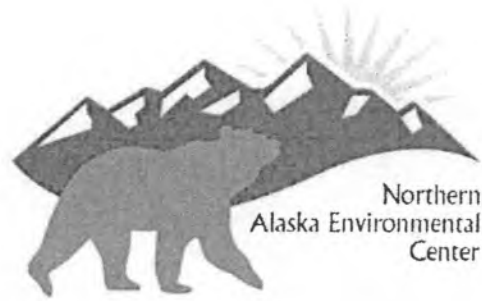
HEA has been fortunate to receive two grants from the renewable energy program that have allowed us to proceed with field work and scoping for a hydroelectric project on the Kenai Peninsula. This renewable energy project would not be possible without the support of the renewable energy grant program.

On behalf of Homer Electric Association, thank you very much for your unwavering commitment to renewable energy.

Sincerely,

Bradley P. Janorschke  
General Manager

# Memo



To: Representative Bill Thomas  
via FAX, 907-465-2652

From: Karen Kelly, Executive Director

Cc: The House Energy Committee via e-mail:

- Representative Foster Co-Chair
- Representative Pruitt Co-Chair
- Representative Lynn
- Representative Olson
- Representative Saddler
- Representative Petersen
- Representative Tuck

Date: January 30, 2012

Re: Support for HB 250

---

The Northern Alaska Environmental Center (NAEC) Board of Directors and staff extend our thanks and appreciation for your support and consideration of HB 250, "An Act relating to the renewable energy grant fund and recommendation program; and providing for an effective date"

The NAEC is also dedicated to supporting renewable energy projects that promote the health, wealth and sustainability of our Interior Alaskan communities, while maintaining the integrity of the wild places in which we live. Extending the Renewable Energy Grant Fund for another 10 years through HB 250 will help provide opportunities for renewable energy projects that we need to meet the economic demands of the present and future. The Interior's unique geography, remote rural communities and incredible diversity of abundant renewable energy resources provides an excellent opportunity to become a world leader in energy technology development. Renewable technologies like wind, geothermal, biomass, solar, tidal or small scale hydropower, have the potential to impart significant environmental, health and economic benefits to communities throughout Alaska.

We are honored to be among those in support of your ongoing efforts to encourage renewable energy. If there is anything the NAEC can do to further this legislation, please do not hesitate to contact us.

Page 1 of 1



CORDOVA  
ELECTRIC  
COOPERATIVE, INC

P.O. Box 20, 705 Second Street, Cordova, Alaska 99574-0020 \* (907) 424-5555 \* Fax (907) 424-5527

January 31, 2012

The Honorable Bill Thomas, Neal Foster, Lance Pruitt, and  
House Special Energy Committee Members

RE: HB 250 Extension

Dear Representative Thomas and Committee,

Cordova Electric Cooperative (CEC) strongly supports HB 250 reauthorization to "Extend the Renewable Energy Grant Fund". CEC was a recipient of renewable energy grant funds for the Humpback Creek Hydroelectric Project, which was matched with Federal and CEC funds. Since the project went into operation on July 13, 2011 just over 6 months ago, it has produced over 1,500,000 kWh of energy or 110,000 gallons of diesel fuel savings despite a dry 2011 and low fall production. The project is designed to save 370,000 gallons of diesel a year average for at least 50 years.

The program benefits both rural and railbelt utilities, large and small. The application, review, and award process is straightforward, fair, and accountable. It has been touted as the most successful renewable energy grant incentive program in the world and I am inclined to agree.

This program is an excellent investment of State resources that will pay dividends for generations. While it would be nice to commit to this successful program for ten years, the State of Alaska has other priorities and a five year commitment is appropriate.

CEC urges reauthorization of this important bill and thanks you for your colleagues' efforts to support and cosponsor the original bill and this extension.

Sincerely,

Clay Koplín, CEO

January 31, 2012

Representative Bill Thomas  
State Capitol, Room 505  
Juneau, Alaska 99801

Subject: Support for HB 250

Dear Representative Bill Thomas:

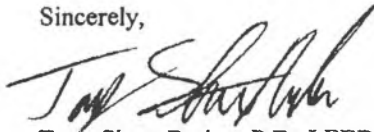
Myself and Coffman Engineers is in support of HB 250. The Alaska Renewable Energy Grant Fund allows alternative energy projects to be funded throughout the state. The communities benefit from this in many ways:

- By creating local jobs maintaining and operating equipment (wind turbines, wood fired boilers, etc)
- By creating local jobs to provide fuel that is locally created (wood/pellets)
- Reduce the impact of high fuel prices and fuel price volatility
- Reducing the overall cost of energy and increasing energy security
- Taking advantage of locally renewable energy sources
- Reduces environmental pollution

Additionally, so far 21 projects have been constructed under the program, which have cumulatively displaced over \$7 million in fuel since 2009. By the end of 2016, AEA estimates that diesel fuel displacement from Fund projects will be approximately *11.6 million gallons per year*. The program has so far leveraged over \$100 million federal and other dollars in matching funds for projects funded. Dozens of projects currently in the reconnaissance, feasibility and design stage will be put into limbo if the program is not extended this year.

Please take what steps you can so this program does not lapse. Thank you

Sincerely,



Tony SlatonBarker, P.E., LEED AP  
Program Manager, Alternative Energy and Sustainability  
Coffman Engineers

cc: House Energy Committee Members



**City & Borough of Wrangell**  
**P.O. Box 531**  
**Wrangell, AK 99929**  
**Phone: 907-874-2381**  
**Fax: 907-874-3952**

January 30, 2012

Honorable Members,

**Please accept this letter of support for HB 250 to "Extend the Renewable Energy Grant Fund."** Over the past four years, this fund has brought together various stakeholders throughout Alaska to evaluate and fund renewable energy proposals that by 2013 will have displaced nearly six million galls of diesel fuel.

In Wrangell, a \$2 million grant helped our community replace diesel boilers in municipal buildings that will result in long-term savings of millions of dollars. These savings keep our precious dollars in our communities for reinvestment in our local economy.

Having participated in the Southeast Alaska Integrated Resource Plan Advisory Working Group, it is also clear that major investments in demand side management, energy efficiency, biofuels, and future hydro projects must continue to meet our growing energy needs in an affordable and sustainable way. HB 250 and the \$50 million per year over 10 years investment will be absolutely critical to meet these challenges and ensure our communities, and all of Southeast, remain viable and competitive.

I appreciate your consideration and if you have questions, do not hesitate to contact the Borough Manager, Timothy D. Rooney, or me, at Wrangell City Hall, phone: 907-874-2381, or by email: [tdrooney@wrangell.com](mailto:tdrooney@wrangell.com) or [jmaxand@hotmail.com](mailto:jmaxand@hotmail.com)

Sincerely,

Jeremy M. Maxand  
Mayor



## **ALASKA PARTNERSHIP FOR ECONOMIC DEVELOPMENT**

**A RESOLUTION OF THE ALASKA PARTNERSHIP FOR ECONOMIC  
DEVELOPMENT BOARD OF DIRECTORS SUPPORTING HOUSE BILL NUMBER  
250; "AN ACT RELATING TO THE RENEWABLE ENERGY GRANT FUND AND  
RECOMMENDATION PROGRAM; AND PROVIDING FOR AN EFFECTIVE  
DATE"**

**Resolution # 12-13**

Whereas; the Alaska Regional Development Organizations (ARDOR) was established by the Alaska Legislature in 1988; and

Whereas; the ARDOR's statutory mandate is to encourage the formation of regions development organizations to prepare and implement regional development strategies; and

Whereas; the ARDOR's represent a diverse network of public, private and economic development groups that drive local initiatives and advance economic diversification through partnerships with state and local governments; and

Whereas; the ARDOR's established the Alaska Partnership for Economic Development, (APED), in 2009, to advance economic development and address initiatives affecting development and to help develop a state-wide comprehensive strategic plan; and

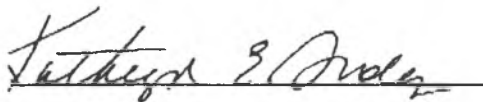
Whereas; the ARDOR/APED programs have established partnerships with more than 300 local, regional, private, municipal and public organizations to pool resources, decrease duplication and foster new businesses; and

Whereas; the APED now comes in support of the following legislation being considered by the Alaska State Legislature:

**NOW THEREFORE BE IT RESOLVED;** the Alaska Partnership for Economic Development supports House Bill 250; **"AN ACT RELATING TO THE RENEWABLE ENERGY GRANT FUND AND RECCOMENDATION PROGRAM; AND PROVIDING FOR AN EFFECTIVE DATE"**

**BE IT FURTHER RESOLVED** that a copy of this resolution be sent to the REPRESENTATIVES THOMAS, P. WILSON, MILLETT, the prime sponsors of SB250.

APPROVED THIS 24<sup>th</sup> DAY of FEBRUARY 2012.

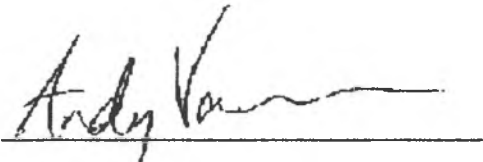


President

2/24/2012

Date

ATTEST:



Secretary

2/24/2012

Date