

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 sit 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 Hohudodetlaatl 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 thorough 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@yukontel.com](mailto:nalaska@yukontel.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 ([btriplett@aidea.org](mailto:btriplett@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

!DSPAM:16,4d87c05a40044646080157!

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No virus found in this message.  
Checked by AVG - [www.avg.com](http://www.avg.com)  
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*

Jennie Peter  
City Clerk



*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:

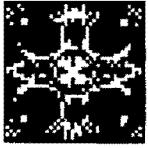
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Sincerely,

*Jennie Peter*

Jennie Peter  
City Clerk



## RUBY ELECTRIC CO.

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

RECEIVED AUG 11 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,

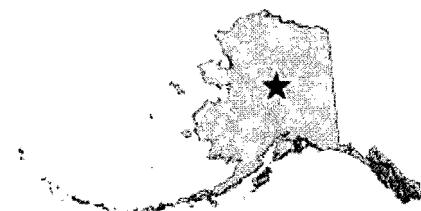


Jennie Peter  
City Clerk

# Tanana

## Energy Used

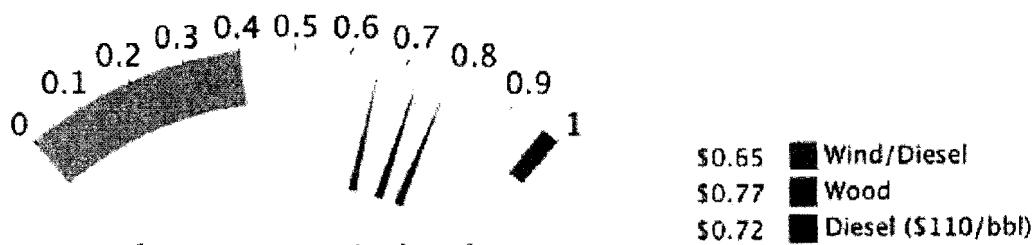
Heat  
Transportation  
Electric



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

Heat **\$1,632** Per capita  
Transportation **\$590** Per capita  
Electricity: **\$3,087** Per capita

POPULATION: 258



**Electricity \$/kWh**  
(Including fixed cost of electricity)

Green: Less than \$50/bbl crude  
Yellow: \$50/bbl to \$150/bbl crude.  
Red: Greater than \$150/bbl crude.

\$181.4 Wind  
\$33.27 Wood  
\$55.65 Fuel Oil (\$110/bbl)

**Heat \$/mmBTU**

(Tanana)

# Tanana

Regional Corporation

**Doyon, Limited**

House 6

Senate : C

POPULATION

258

LATITUDE: 65d 10m N

LONGITUDE: 152d 04m

**Unorganized**

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.

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## Current Energy Status PCE

| Electric (Estimates based on PCE) |           |           | Estimated Local Fuel cost @ \$110/bbl \$5.15 /kw-hr |        |                  |
|-----------------------------------|-----------|-----------|---|--------|------------------|
| Current efficiency                | 13.41     | kW-hr/gal | Fuel COE  | \$0.40 | /kw-hr           |
| Consumption in 200                | 93,988    | gal       | Est OM  | \$0.02 | /kw-hr           |
| Average Load                      | 137       | kW        | NF COE:   | \$0.30 | /kw-hr           |
| Estimated peak loa                | 274.31    | kW        | Total   | \$0.73 |                  |
| Average Sales                     | 1,201,487 | kW-hours  |   |        |                  |
|                                   |           |           |   |        | <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   |                 |
| Status Pending               | Estimated Diesel OM     | \$24,030  | \$0.01 /kw-hr   |
| Acheivable efficiency 14 kW- | New fuel cost           | \$463,511 | \$0.02          |
| New Fuel use 90,016          | Avg Non-Fuel Costs:     | \$389,116 | \$0.39          |
|                              |                         |           | <b>Savings</b>  |
|                              | New cost of electricity | \$0.70    | \$0.30          |
|                              | per kW-hr               |           | <b>\$12,076</b> |

### 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>            |              |                    |                 |
| Water Jacket 14,098 gal           | Value        | Total Annual costs | \$39,850        |
| Stack Heat 0 gal                  | \$86,693     | Heat cost          | \$25.58 /MMBtu  |
|                                   | \$0          |                    | <b>\$46,842</b> |

## Alternative Energy Resources

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

## Alternative Energy Resources

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

| 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

**Cost of Power:** \$0.57 /kWh

**Requested Grant Funds:** \$303,060

**Matched Funds Provided:** \$90,238.5

**Total Potential Grant Amount:** \$393,298.5

**Existing RE Fund Grant Offer:**

**AEA Funding Recommendation:**  
(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

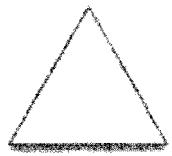
**Proposer:** Tanana Power Company

**AEA Program Manager:** Lenny Landis

**Applicant Type:** Utility

**Scoring & Location**

 Overall Rank  
 (out of 60)

 Stage 3 Total Score  
 (out of 100)

**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

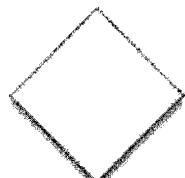
**Applicant Type:** Utility

**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](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 over looked 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](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

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