Alaska Energy Authority (AEA)

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The State’s Role in
Rural Energy Projects
Mission Statement:

- Assist in the development of safe, reliable and efficient energy systems throughout Alaska, which are financially viable and environmentally sound.
- Operation and maintenance of existing Authority-owned projects with maximum utility control
- Funder for Alternative Energy Projects (new)
AEA has two distinct functions:

**Projects**
- SE Alaska Intertie Projects
- Bradley Lake and Larsen Bay Hydroelectric Projects
- Alaska Intertie
- Small Rural Interties
- Railbelt Electrical Grid Authority Project

**Programs**
- Power Cost Equalization
- Bulk Fuel Upgrades
- Rural Power System Upgrades
- Training
- Alternative Energy
- Loans
- Circuit Rider & Emergency Response

Two of our energy partners:
- DENALI COMMISSION
- ALASKA VILLAGE ELECTRIC COOPERATIVE
The Unexpected Energy Situation

- A new and different world
  - Market forces intrude into Alaska’s economy
  - Causes primary fossil fuel prices to increase
  - Affects consumer heating and electricity costs – business shut down
  - Results in major influx of dollars into State Treasury
Our Join Challenge

This is what will happen if we don’t work together
AEA – the State Energy Plan

The Vision

- Use Alaska’s vast energy resources to
- Lower costs of heating, transportation and power
- Community by Community
- Utility by Utility
AEA’s challenge to Alaska’s Utilities

- Alaska’s Utilities
  - Expertise in owning and operating electric utilities; knows its customers
  - Know about alternative energy sources in service areas
  - Knows supply chain of how to move fossil fuels into town

[Image: Generator]
Alaska Energy Authority

- Has Alternate Energy Programs
- Funding for projects
- Reliable Agency Partner to pursue energy infrastructure projects
- Is producing statewide energy plan

AEA’s challenge to Alaska’s Utilities
AEA’s challenge to Alaska’s Utilities

- Things AEA can do
  - Statewide, pursue with Alaska utilities the right alternate energy projects with energy plan
  - Assist Rural utilities to secure inexpensive fuels and efficient business structures
  - Assist Railbelt Utilities through the REGA project to create the Electrical Grid of the future
  - Assist SE Alaska to develop hydro/interties

An un-named Alaska high mountain lake with hydro potential
The Challenge

AEA and Utilities should

- Develop new thinking on the worth of renewable and alternative energy projects
- Embrace a sophisticated approach built on future scenarios, risk analysis, and regional development issues

Use the Energy Plan
Live the Vision
Consider the Long Run

A low head hydro opportunity
Get it right – how to evaluate and decide
Consider the range of energy futures
  - Economic Feasibility
  - Future Risk Assessment
  - Long term energy security
Consider potential scenarios for fuel supply availability and cost – risk analysis
Do for all parts of Alaska
Energy challenges in Alaska

- Consider interconnecting rural utilities with transmission lines
Energy challenges in Alaska

A common situation for rural communities -

Alternative Energy vs conventional fossil fuel vs both

- Choose either hydro project or new diesel power plant?
- Do both for redundant power supplies?
Energy challenges in Alaska

The Alaskan Railbelt

- Continue to make available AEA power and transmission assets to Railbelt Utilities
- Maintain current high level of network reliability and minimize the cost of power.
- Pursue jointly with Railbelt Utilities the Railbelt Electrical Grid Authority (REGA) process
Energy challenges in Alaska

- Accomplish regional integrated resource planning
- Identify large projects which can be jointly pursued under the IRP
- Jointly develop transition period energy portfolio

The Alaska Intertie near Willow Alaska – designed at 345 kv, operated at 138 kv
Energy challenges in Alaska

The task before us – energy projects

ALASKA ENERGY AUTHORITY
Thank you, from the Alaska Energy Authority. (www.akenergyauthority.org)