SE Conference Mid-Session Summit
Alternative Electrical Generation
For SE Alaska

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Alaska Energy Authority:
A Public Corporation of the State of Alaska
Sister Agency to AIDEA

Alternative Energy Program Manager:
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Recent Developments in Alternative Energy

- Renewable Energy Bill
- Governor’s Directive to Inventory Alaska Energy Resources (DNR/AEA, $500k authorized)
- AEA contract with EPRI to study river in-stream potential at 10 sites in Alaska (analogous to tidal study)
- Senator Murkowski introduced legislation to provide funding and tax incentives for geothermal, ocean and river in stream development
Types of alternative energy available for power generation

- Hydro (see next slide)
- Wind (onshore and offshore)
- Geothermal (first AK powerplant in 2006)
- Biomass
- Generation and end-use efficiency
Hydropower

- Traditional: storage and run-of-river
- Ocean: tidal (impoundment and in-stream), wave, OTEC
- River In-stream
Hydroelectric

Cordova Electric: Power Creek 6 MW

**Current SE Hydro Projects:**
- Pelican hydro upgrade design
- Gustavus/Falls Creek hydro funding

AP&T: South Fork 2 MW

AEA: Chuniisax (Atka) 270 kW
Ocean Energy

- EPRI study on tidal energy potential of Knik Arm completed in May 2006
- Ten new FERC preliminary FERC tidal energy applications filed since May 2006
- Tidal energy conference in Ketchikan, January 2007
- Program Manager: David Lockard, DLockard@aidea.org
Wind

- **Anemometer Loan Program:**
  - Provide met towers and project siting assistance
  - Wind resource data analysis

- **Project Feasibility Assessment:**
  - Training and use of Homer model for project optimization

- **Project Financing:**
  - RFP 1: TDX Sand Point Wind (1MW)
  - RFP 2: Release in late October

- **Program Manager:** Martina Dabo, MDabo@aidea.org
Geothermal

- **Alaska Geothermal Working Group**: 47 participants with REAP assistance.
- **Chena Hot Springs Project**: $846k total grant and loan participation in
- **Project Development**: Mt. Spurr, Manley Hot Springs, Bell Island, Akutan, Pilgrim Hot Springs, etc.
- **Program Manager**: David Lockard, DLockard@aidea.org
Biomass

- **Wood Energy Program:**
  - Alaska Wood Energy Dev Task Group
  - Craig District Heating project

- **Fish Oil Biodiesel Program:**
  - Engine and handling tests at UAF and NPS
  - Develop fish oil rendering module

- **Municipal Waste:**
  - Anchorage Landfill Gas feasibility analysis

- **Program Manager:** Peter Crimp
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End Use Efficiency

• **EE Tech Asst Program**: Facility and power system energy audits.

• **Village EUE Measures**: Upgrades in 100+ facilities in 30 communities.

• **State Building Effic Program**: Help DOTPF establish energy services contract

• **Program Manager**: Rebecca Garrett, RGarrett@aidea.org
AEAs’s Approach:

- Feasibility studies and modeling
- Demonstration or Pilot Projects
- Commercial Technology
- Not Research (UAF and USDOE do that)
Want to learn more about alternative energy?

Attend the 2007 Alaska Rural Energy Conference!
April 24-26
Fairbanks