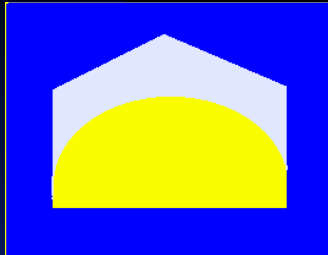


AVCP Calista Regional Energy



Middle *Kuskokwim* Electric Cooperative

 Chaninik Wind Group

Kwethluk Power House

Introduction

- The AVCP CALISTA Regional Biennial Energy Plan is the work and the progress of the AVCP Calista Regional Leadership to:
 - ◆ develop and adopt a long term energy policy for sustainable energy
 - ◆ work collectively and combine our resources
 - ◆ identifying conventional and non-conventional renewable energy development
 - ◆ identify strategies for funding and deployments methods

Regional Leadership

- Executive officers, board members, staff of the major regional organizations, local governments, utilities and the business community.
- The Leadership is using the Nuvista Light and Electric Cooperative on the Biennial Energy Plan.
- The Nuvista Light and Electric Cooperative, Inc. a regional wholesale utility formed by Calista Corporation and currently administered by the Association of Village Council Presidents.

Energy Planning Participants

- *Sven Paukan, Nuvista Chairman, AVCP Board, Algaaciq Tribe*
- *Paul George Guy, Nuvista Vice-Chairman, Calista Board, Kwethluk Power Company and Kwethluk Inc.*
- *Arthur S. Heckman Sr., Nuvista Secretary, Calista Board, Pilot Station Village Corporation*
- *Daniel Waska, Nuvista Treasurer, AVCP Board, Atmautluak Tribe*
- *Moses Owen, Nuvista Board, AVCP Board, Akiak Tribe*
- *Willie Kasayulie, Nuvista Board, Calista Board*
- *Myron Naneng, AVCP President*
- *Ron Hoffman, AVCP Regional Housing Authority CEO*
- *Robert Nick, AVCP Regional Housing Authority Board Chairman*
- *Martin B. Moore, City of Emmonak*
- *William Igkurak, Chaninik Wind Group Chairman*
- *Matthew Nicolai, Calista Corp., President & CEO*
- *Andrew Guy, Calista Corp., General Counsel*
- *Doug Nicholson, Donlin Creek, LLC, General Manager*
- *Brent Petrie, Alaska Village Electric Cooperative, VP*
- *Ernie Baumgartner, Middle Kuskokwim Electric Cooperative, CEO*
- *Gene Peltola, Yukon Kuskokwim Health Corporation, CEO*

Task Force and Committees

Western Alaska Fuel Task Force

- ◆ ***Chair - Meera Kohler, AVEC***
- ◆ ***Elaine Brown, Northstar Gas***
- ◆ ***Greg McIntyre, YKHC***
- ◆ ***Ivan M. Ivan, Akiak TC***
- ◆ ***Willie Kasayulie, Calista Corporation***
- ◆ ***Deborah Vo, Yukon Delta Fisheries Development Association***
- ◆ ***Allen Joseph, AVCP Regional Housing***

Legislative Committee

- ◆ ***Chair- Michelle Sparck, AVCP***
- ◆ ***Elaine Brown, North Star Gas***
- ◆ ***Rep. Bob Herron***
- ◆ ***Allen Joseph, AVCP Regional Housing Authority***
- ◆ ***Meera Kohler, AVEC***
- ◆ ***Mary Nelson, Donlin Creek LLC Biennial Energy Plan***

Renewable Energy Committee

- ◆ ***Chair - John Sargent, City of Bethel***
- ◆ ***William Igkurak, Chaninik Wind Group***
- ◆ ***Brent Petrie, AVEC***

Goals and Deployment Objectives

Energy Security and Economic Stability

- *Develop integrated energy solutions that meet local energy requirements and economic development needs*

Energy Parity and Stability

- *Establish statewide energy cost parity to make home heating affordable and equitable*

Energy Generation and Transmission

- *Pursue an All Alaskan Generation and Transmission Utility to save energy dollars and reduce electricity rates across All Alaska*

Goals and Deployment Objectives

Integrated Renewable Energy Solutions

- *Expand Wind Energy Projects along the eastern Bering Sea Coast and the Bethel area*
 - ★ *determine feasibility for integrated wind/diesel/solar/biomass heating and electric systems with community heat storage system.*
- *Determine feasibility of Regional Hydroelectric Project (Lake Chikuminuk) to provide region-wide electricity and heat.*
- *Develop and install Biomass projects: including wood fired boilers, heaters and wood chippers for community facilities and buildings.*

Goals and Deployment Objectives

All Alaskan G&T Utility

- Takes ownership of G&T Assets across Alaska
- Power costs are pooled and power bought back at postage-stamp rate or a 2 tier rate (utilities then add their costs and sell it to customers)
 - ◆ Costs range from 5¢ to 50¢ kWh
 - ◆ Distribution costs range from 3¢ to 20¢ kWh
 - ◆ PCE currently costs \$30 million per year
 - ◆ Rural school electricity costs \$20 million per year
 - ◆ Other state rural offices pay \$20 million per year

Goals and Deployment Objectives

- By going to All Alaska G&T the state saves energy money to pay for a significant portion of major project investments thereby driving generation costs down to stabilize rates.
- Rural utilities can work together to reduce their delivered costs via shared services and other methods.
- End results are rates costing about 25¢ kWh and making PCE unnecessary.
- Regions and communities no longer have to compete for investment grants as the AAG&T would build the projects to benefit all Alaskans.
- Rural villages will no longer have to struggle with O&M.

Goals and Deployment Objectives

Consolidate local individual utilities into Regional Cooperative Utilities

- ◆ ***Bethel and nearby 12 villages***
- ◆ ***Coastal and Tundra villages***

Pursue sub-regional inter-ties and distribution systems beginning with an inter-tie to connect the villages of Alakanuk and Emmonak; and the villages of St. Mary's, Mountain Village and Pilot Station.

Goals and Deployment Objectives

Bulk Fuel – Western Alaska Fuel Task Force

- *1. Reduce fuel consumption in 2009 by 10%*
 - ★ *a. Determine fuel users, consumption, and storage capacity of each community (utility, schools, village corporations, local organizations, tribal council)*
 - ★ *b. Link villages/users together under cooperative purchase agreements*
- *2. Seek changes to State and Federal Fuel Programs*
- *3. Conduct Education Outreach*

Goals and Deployment Objectives

Statewide heating fuel price parity capped at \$3 per gallon (Sept. 1 through March 31) to reduce the cost of heating for all Alaska residents

- ★ Formula (delivered fuel cost above \$3.00 X total gallons for number of households served) not including O&M, overhead cost, etc.***
- ★ Fuel Price Parity set only when price of oil per barrel results in delivered cost of fuel above \$3.00 per gallon (note: in 2009 most communities delivered costs are under \$3.00 per gallon)***

Alaska State Legislative Priorities for 2010

- *Statewide G&T utility to include Rural, Southeast and Railbelt*
- *Introduce statewide heating fuel price parity legislation to cap at \$3 per gallon (September 1 through March 31) for all Alaska residents*
 - ★ *Formula (delivered cost above \$3.00 X total gallons for number of households served) not including O&M, overhead cost, etc.*

Alaska Energy Authority Renewable Energy Grants Round I

	Cost	Grant
■ <i>Bethel Wind Power x 4</i>	<i>\$3,197,986</i>	<i>\$2,598,320</i>
■ <i>Hooper Bay Wind Farm</i>	<i>\$2,220,141</i>	<i>\$2,220,141</i>
■ <i>Kongiganak Wind Farm</i>	<i>\$3,200,000</i>	<i>\$1,700,000</i>
■ <i>Kwigillingok Wind Farm</i>	<i>\$3,200,000</i>	<i>\$1,700,000</i>
■ <i>Mekoryuk Wind Farm</i>	<i>\$3,506,406</i>	<i>\$3,155,765</i>
■ <i>Quinhagak Wind Farm</i>	<i>\$4,313,603</i>	<i>\$3,882,243</i>
■ <i>Toksook Bay Wind Farm</i>	<i><u>\$1,153,056</u></i>	<i><u>\$1,037,750</u></i>
TOTALS	\$20,791,192	\$16,294,219

AEA Grants Round II - pending

	Cost	Grant
<i>Akiachak Wind ANCEC</i>	<i>\$600,000</i>	<i>\$4,500,000</i>
<i>Akiak Wind</i>	<i>\$200,000</i>	
<i>Emmonak Wind & Transmission AVEC</i>	<i>\$1,062,818</i>	<i>\$10,733,179</i>
<i>Scammon Bay Wind Analysis AVEC</i>	<i>\$6,190</i>	<i>\$4,436,800</i>
<i>St. Mary's Wind Analysis AVEC</i>	<i>\$5,500</i>	<i>\$6,310,000</i>
<i>Mountain Village Wind City and Tribe</i>	<i>\$11,155</i>	<i>\$133,255</i>
<i>Chikuminuk Lake Hydro AVCP</i>	<i>\$150,000</i>	<i>\$400,000</i>
<i>Bethel Wind Power x4</i>	<i>\$599,666</i>	<i>\$3,197,986</i>
<i>Crooked Creek Hydro Kinetic</i>		<i>\$368,000</i>
<i>Kipnuk Wind Diesel Heat</i>	<i>\$1,600,000</i>	<i>\$10,188,000</i>
<i>Kotlik Pellet Stove KYE</i>	<i>\$50,000</i>	<i>\$626,400</i>
<i>Orutsaramiut Native Council</i>	<i>\$771,900</i>	<i>\$70,200</i>
<i>Tuntutuliak Wind Diesel</i>	<i>\$1,600,000</i>	<i>\$3,360,000</i>

American Recovery & Reinvestment Act

- DoE Energy Efficiency and Conservation Block Grant: tribes receive 2% set-aside of \$2.8 billion.
- Clean Renewable Energy Bonds: One-third of the authorized amount is available to tribes.
- Qualified Energy Conservation Bonds: allocations to tribes as local governments.
- DoE support for tribal Smart Grid Demonstration projects.
- \$18,142,580 Alaska Weatherization Assistance Program and \$28,232,000 for the State Energy Program (currently declined by Governor Palin)

DoE Energy Efficiency and Conservation Block Grants

- The amount of funding for each Tribe will be based on a formula to be published in the Federal Register.
- In addition to the \$56 million EECBG tribal set-aside funds, tribes are eligible to receive awards on a competitive basis for \$400,000,000 made available under the Act. These funding amounts include administrative, training, and technical assistance costs that will reduce available funding for grants by 1-2%.
- General program information is available at http://apps1.eere.energy.gov/wip/block_grants.cfm

2009 Omnibus Appropriation Act

Appropriations Act Provides Nearly \$2 Billion in New Funding to DoE Energy Efficiency & Renewable Energy

- \$217 million for biomass energy;
- \$175 million for solar energy
- \$30 million for concentrating solar power
- \$55 million for wind energy
- \$40 million for "water power," which includes both conventional hydropower and tidal and marine technologies.
- Infrastructure development activities, and other supporting activities also received funding increases under the appropriations act.



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