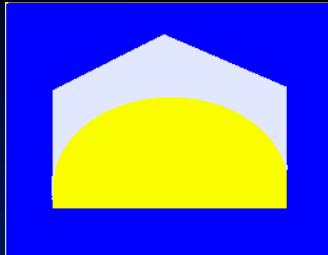


# AVCP Calista Regional Energy



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*

## *Regional CEO's*

- ◆ *Ron Hoffman, AVCP Regional Housing*
- ◆ *Myron Naneng, AVCP*
- ◆ *Matt Nicolai, Calista*
- ◆ *Gene Peltola, YKHC*
- ◆ *Meera Kohler, AVEC*
- ◆ *Elaine Brown, NorthStar Gas*
- ◆ *Deborah Vo, YDFDA*

## *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.*

[illegible]



	Coast		L Kusko		M Kusko		U Kusko		Yukon	
	UL Spring	UL Fall	UL Spring	UL Fall	UL Spring	UL Fall	UL Spring	UL Fall	UL Spring	UL Fall
2004	2.4260	2.2090	2.4260	2.2090	2.5060	2.2890	2.5660	2.3490	2.4260	2.2090
2005	2.5770	2.8670	2.5770	2.8670	2.6570	2.9470	2.7170	3.0070	2.5770	2.8670
2006	3.3650	3.1430	3.3650	3.1430	3.4450	3.2230	3.6320	3.4100	3.3650	3.1430
2007	3.4600	2.9460	3.4600	2.9460	3.5420	3.0280	3.6040	3.0900	3.4600	2.9460
2008	4.2400	4.1200	4.2400	4.1200	4.3220	4.2020	4.3830	4.2640	4.2400	4.1200
2009	3.2636	3.3069	3.2513	3.2944	3.2738	3.4943	3.7242	4.0173	3.6242	3.4514

# *Alaska Energy Authority Renewable Energy Grants Round I*

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

# ***AEA Grants Round II - pending***

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

# 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 (declined by Governor Palin)

# DoE Energy Efficiency and Conservation Block Grants

- The amount of funding for each Tribe based on a formula published in the Federal Register.
- In addition to the \$56 million EECBG tribal set-aside funds, tribes were 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](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.



Quyana Cakneq