

AFN 2009 House Energy
Committee Testimony for
Chugach Region
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Chugachmiut Executive Director
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Unique Energy Problems in the Chugach Region

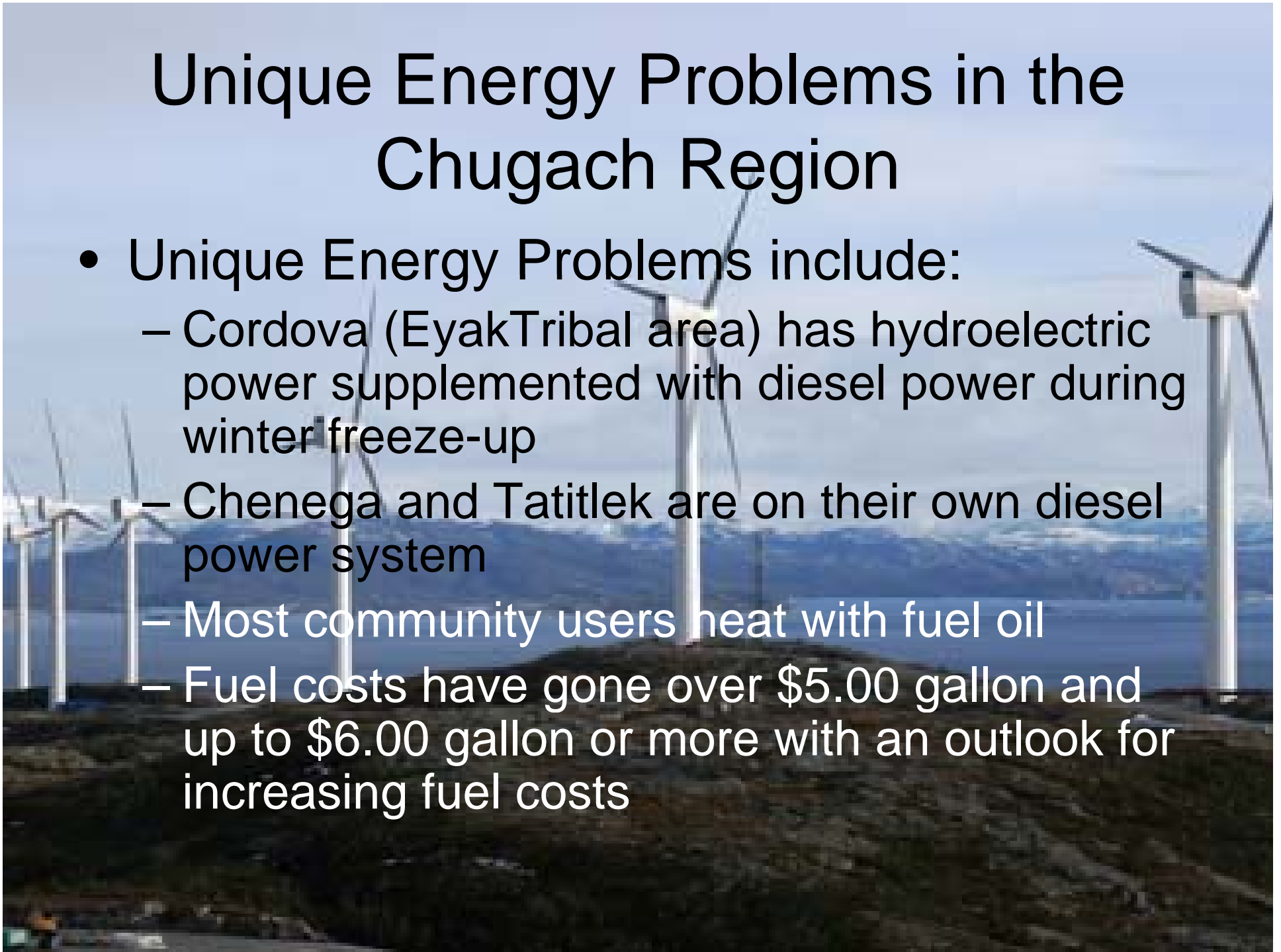
- There are 7 Tribal Communities in the region
 - Seward is on the Railbelt electrical grid system as well as Port Graham and Nanwalek
 - Valdez is on the Copper Valley Electric Association electrical grid
 - Cordova is a municipal utility powered by hydroelectric power and diesel supplemental power in winter
 - Chenega and Tatitlek are on their own diesel power system
 - Most of these communities use fuel oil for heat

Unique Energy Problems in the Chugach Region

- Unique Energy Problems include:
 - Cook Inlet natural gas power is experiencing decreasing supply and high capital energy replacement costs that will affect Railbelt power consumers
 - This winter, Railbelt customers will experience brown outs
 - Port Graham and Nanwalek have single-phase 220-volt power supplied by Homer Electric Association
 - Port Graham Cannery, Port Graham Hatchery Project, Nanwalek Hatchery Project, and potential Nanwalek area material rock source project all require three-phase 220-volt power

Unique Energy Problems in the Chugach Region

- Unique Energy Problems include:
 - Cordova (Eyak Tribal area) has hydroelectric power supplemented with diesel power during winter freeze-up
 - Chenega and Tatitlek are on their own diesel power system
 - Most community users heat with fuel oil
 - Fuel costs have gone over \$5.00 gallon and up to \$6.00 gallon or more with an outlook for increasing fuel costs

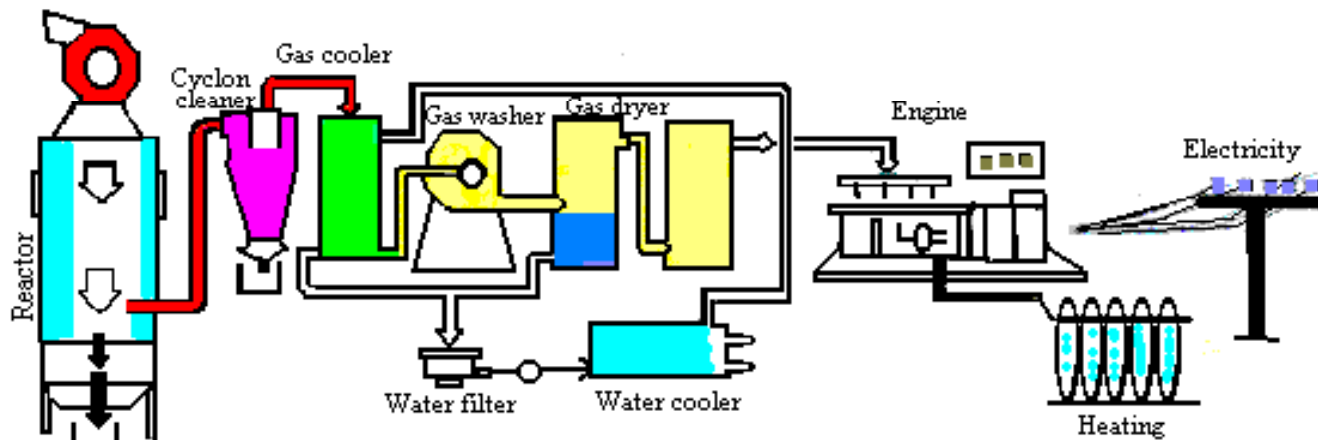


Local Solutions and Results

Community Project	Feasibility Study	Project Funding
Chenega Small Hydroelectric Power Project (250 kW) Revitalization	Turbine replacement of existing old cannery small hydropower project	Alaska Energy Grant Phase II awarded for project development
Eyak Tribal Council in Cordova Biomass/Refuse Gasifier Heat and Power Project—size not determined yet	Unknown	Alaska Energy Grant Phase II awarded for project development Power to burn municipal waste and biomass to supplement power loads
Eyak Tribal Council Wind Power Study Project	2-year Wind Tower Data Study completed	Seeking data on other sites before apply for funding To supplement power loads
Tatitlek Wind Power Study Project	Desire to conduct Wind Tower Data Study	To displace diesel fuel heat consumption and cost
Silver Lake Hydroelectric Project near Tatitlek and Valdez, could include Cordova intertie	Interest in region renewed since studies done 1988-92 by U.S. Department of Agriculture and others	Feasibility study may be applied for and project could produce up to 15 megawatts of power to Copper Valley grid system

Local Solutions and Results

Community Project	Feasibility Study	Project Funding
Nanwalek Community Heat Project	May apply for feasibility study for community heating	To displace diesel fuel heat consumption and cost
Port Graham Biomass Community Heat and Power Project (1.5 megawatts), excess power to Nanwalek and Seldovia and to Homer Electric Association grid	Department of Energy Grant completed July 2007 by Energy and Environment Research Center out of the University of North Dakota	Applying for Alaska Energy Authority Grant Phase III and/ or Department of Energy Tribal Energy Program Grant And BIA or DoE 80/20 loan



What State of Alaska Could Do for Cost of High Energy

1. Continue Funding Alaska Energy Authority's Renewable Energy Fund
2. Support University Research
3. Support Weatherization and **Green Design** Building Efficiency Efforts such as the Fairbanks Cold Climate Research Center
4. Work with State Regulatory Authority to allow Independent Power Producers to supply power to existing utilities and grid system through power purchase agreements and green credits
5. Have State Legislature Fund 3-Phase 220 volt power line to Nanwalek and Port Graham within 2 years
6. When the Silver Lake Hydro Project becomes ready, help fund intertie to Valdez, Tatitlek and Cordova