

# The Southeast Intertie

#### Presentation to the House Energy Special Committee

Co-Chair, Representative Charisse Millet Co-Chair, Representative Bryce Edgmon

Committee Members

Representative Nancy Dahlstrom Representative Jay Ramras Representative Kyle Johansen Representative Pete Peterson Representative Chris Tuck

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# Southeast Conference

#### **Mission Statement**

- The mission of Southeast Conference is to undertake and support activities that promote strong economies, healthy communities, and a quality environment in Southeast Alaska.
- Southeast Conference is a private membership organization that works to advance the collective interests of the people, communities, and businesses of Southeast Alaska. It is the Alaska Regional Development Organization (ARDOR), Federal Economic Development District (EDD), and USDA Resource Conservation and Development (RC&D) Council for the region.

# The SEC Energy Committee

#### **Energy Committee Mission**

- Our vision for Southeast Alaska is to reduce, to the maximum extent possible, the use of diesel as a primary fuel source for the generation of electricity.
- This will be accomplished through the utilization of the regions plentiful hydroelectric potential and the development of an interconnected transmission system to share these resources throughout the region.

# SEC Energy Committee Goals

#### PROGRAM GOALS

- Reduce dependence of fossil fuels. This is critical in light of the recent price increases in oil.
- Bring affordable hydro power to communities where this is technically and economically feasible.
- Develop a regional electrical grid interconnecting Southeast communities and utilities with hydroelectric generation.
- Work with member communities/utilities to develop adequate energy infrastructure including alternative energy sources to meet current and future needs.
- Lower costs to rate payers and communities and increase economic development opportunities.

#### Successes to Date

- > 1997 Acres Report creates first System Plan for Southeast Intertie
- 2000 Congressional Authorization for the S.E. Intertie (bill signed into law, authorizes up to \$384 million with a 20% local match)
- > 2002 SEC hires Energy Coordinator
- 2003 USDA Rural Development grant for economic analysis of interties to Kake & Hoonah (SEC top priority)
- > 2004 Kwaan Electric Transmission Intertie Cooperative formed
- > 2005- Denali Grant funds D. Hittle Report (Kake Intertie)
- > 2006 Intertie from Juneau to Greens Creek built (halfway to Hoonah)
- 2007 AK/BC Study Completed, \$2 million dedicated to Kake Intertie, Legislative grant received to finish Swan-Tyee intertie (Nov '09)
- 2008 Legislative grants of \$500,000 for Kake Petersburg Intertie and \$2 million for Reynolds Creek awarded to Southeast Conference
- 2008 Public Meetings held in Kake and Petersburg on Intertie, ADOT&PF announces joint-project for road, intertie a top priority. Intertie meetings also held in Hoonah (with State & Federal Gov.)

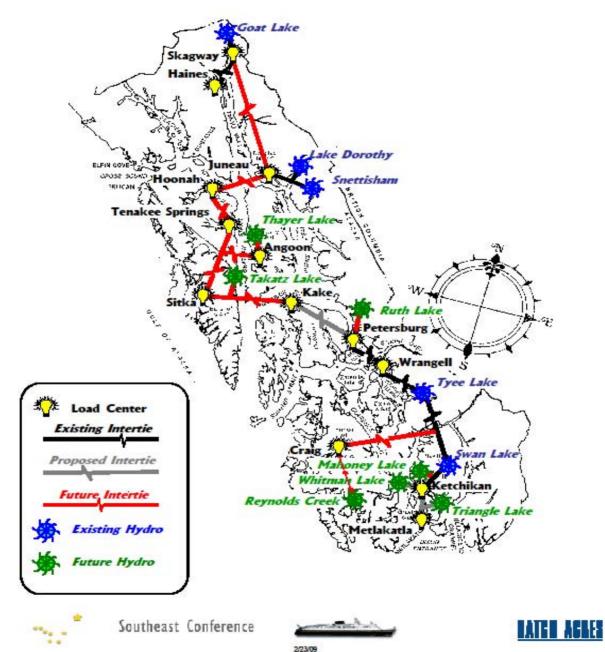
## Why the Southeast Intertie?

- Immediate purpose is to provide lower cost hydroelectric generation to communities supplied with diesel-generated electricity.
- An integrated grid system can allow for the development of resources on a regional basis.
- As surplus energy is developed and rates lowered, economic development ventures will emerge.
- The Intertie system will be an enabler of other renewable resource development.

#### Southeast's Hydros = "Bullet Line"

Hydroelectric Site	Location	Planned Capacity	Community/Utility		
Anita-Kunk Lakes	Wrangell	8.0 MW	Wrangell		
Cascade Creek	Thomas Bay	80.0 MW	Cascade Creek, LLC		
Connelly Lake	Haines Borough	10.0 MW	Alaska Power and Telephone		
Connell Lake	Ketchikan	2.0 MW	Ketchikan Public Utilities		
Elephant Falls	Hoonah	.6 MW			
Gartina Creek	Hoonah	.6 MW			
Kasidaya Creek*	Skagway	2.0 MW	Alaska Power and Telephone		
Katlian River	Sitka	7.0 MW			
Lake 3160	Lace River	4.0 MW	Alaska Power and Telephone		
Lake Dorothy*	Juneau	15.0 MW	Alaska Electric Light and Power		
Lake Dorothy	Juneau	32.0 MW	Alaska Electric Light and Power		
Mahoney Lake	Ketchikan	9.6 MW	Ketchikan Public Utilities		
Neck Lake	Whale Pass	.3 MW	Alaska Power and Telephone		
Reynolds Creek*	Prince of Wales Island	5.0 MW	Haida Corp.		
Ruth Lake	Thomas Bay	20.0 MW	Multiple pending FERC applications		
Scenery Creek	Thomas Bay	40.0 MW	Pending FERC application		
Soule River	Hyder	42.0 MW	Alaska Power and Telephone		
Sunrise Lake	Wrangell	4.0 MW			
Takatz Lake	Sitka	28.0 MW	City and Borough of Sitka		
Thayer Creek	Angoon	1.0 MW	Kootznoowoo, Inc.		
Thoms Lake	Wrangell	7.5 MW	,		
Triangle Lake	Metlakatla	4.0 MW	Metlakatla Power and Light		
Tyee Lake expansion	Wrangell	11.5 MW	Southeast Alaska Power Agency		
Water Supply Creek	Hoonah	.6 MW			
Whitman Lake	Ketchikan	4.6 MW	Ketchikan Public Utilities		
TOTAL		339+ MW			

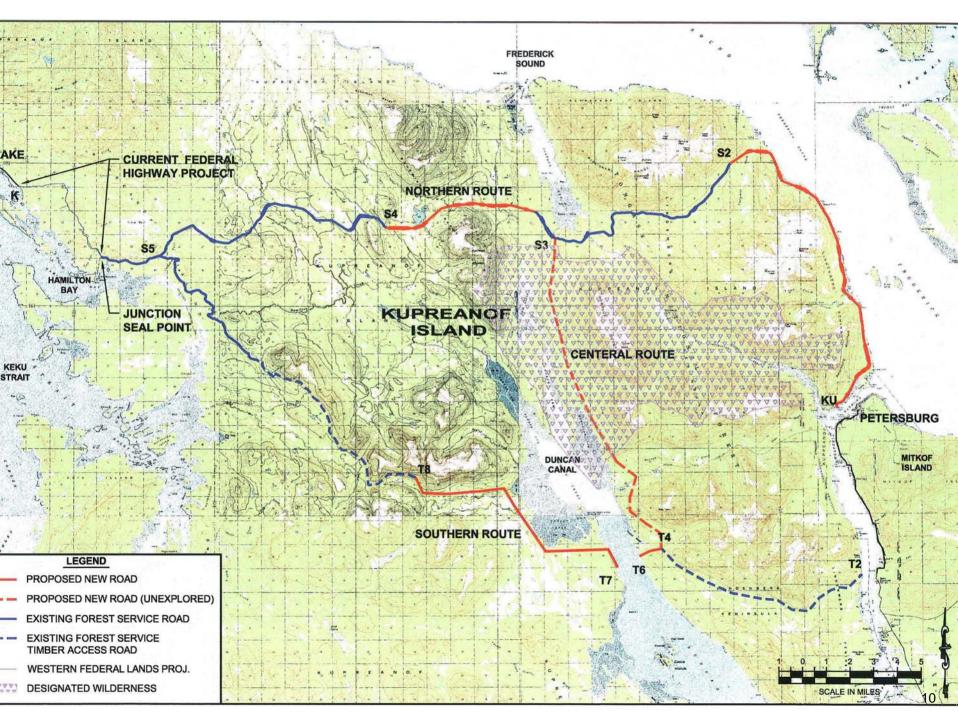
#### SOUTHEAST ALASKA ELECTRICAL INTERTIE





## Kake Intertie to Petersburg

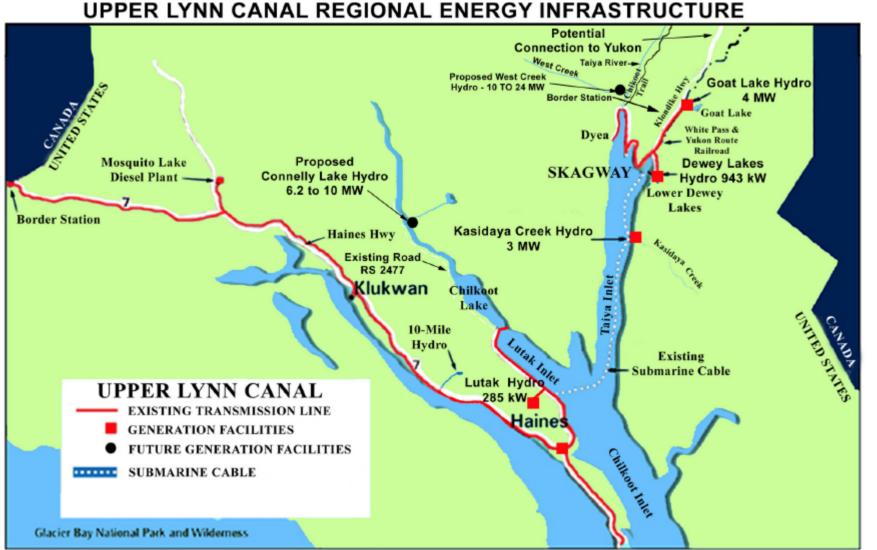
- Southeast Conference's Number 1 priority for energy!
- Facilitating Kake's project for transportation and energy.
- Working together with local municipalities, utilities and multiple governmental agencies, including the Alaska Energy Authority, the Alaska Department of Transportation and the CCTHITA Tribal Energy Department.



# Co-locating the road and inter-tie is intended to:

- Reduce combined corridor development costs and reduce environmental impact,
- Reduce intertie construction costs,
- Reduce intertie operation and maintenance costs,
- Reduce intertie emergency repair response time and duration, and
- Improve intertie inspection and reliability of the power line.





## Where do we go from Here?

- Permitting and design for Kake-Petersburg Intertie (funding secured recently through HB 152 grant).
- Work with Haida Corp. to advance the Reynolds Creek Hydro to completion.
- Begin working with federal and state funding agencies to construct Kake-Petersburg Intertie - \$25-34 million.
- Work with member communities/utilities to secure permits and funding for hydro and other alternative energy project development.
- Study alternative energy sources biomass, hydrogen, wind, geo-thermal, tidal and waste-to-energy.

 Develop regional energy plan that includes both shortterm "band-aids" (PCE to businesses, schools) and longterm solutions (hydro, interties), & S.E. governance model

#### Alaska Renewable Energy Fund Southeast Grant Allocation, HB 152

•	Coffman Cove-Naukati Intertie Construction	Alaska Power & Telephone	\$3	,752,181
•	Kake-Petersburg Intertie Final Design	Kwaan Electric	\$2	,990,000
•	Falls Creek Hydroelectric Construction	Gustavus Electric	\$	750,000
•	Reynolds Creek Hydroelectric Construction	Haida Power, Inc.	\$2	,000,000
•	Juneau Ground Source Heat Pump Construction	(Aquatic Center)	\$1	,450,000
•	Whitman Lake Hydro Construction Ketchikan Pu	blic Utilities \$1,300,000		
•	Haines Central Wood Heating System	Chilkoot Indian Association	\$	288,222
•	Yakutat Biomass Gasification Construction	Yakutat Power	\$	249,600
•	Ruth Lake Hydro Reconnaissance	City of Petersburg	\$	160,000
•	Burro Creek Hydro Feasibility Study	Burro Creek Holdings	\$	48,000
•	Metlakatla-Ketchikan Intertie Construction	Metlakatla Indian Community	\$	820,000
•	Haines Central Wood Heating Feasibility Study H	laines Borough	\$	120,500
•	Wrangell Hydro Based Electric Boilers	City and Borough of Wrangell	\$2	,000,000
•	Takatz Lake Hydroelectric Feasibility	City & Borough of Sitka	\$	514,684
•	Juneau Ground Source Heat Pump (Airport)	City & Borough of Juneau	\$	513,000

TOTAL

16,956,187

#### Thank You!

#### Southeast Conference

Robert Venables Energy Coordinator

JC Conley, Chair Energy Committee Shelly Wright Executive Director

Mike Korsmo President

Southeast Conference Mid-Session Summit, March 16-17 at Centennial Hall, Juneau, AK