

NORTHERN TRANSMISSION LINE OF THE SOUTHEAST INTERTIE and DOCK ELECTRIFICATION FOR NORTHERN LYNN CANAL COMMUNITIES-SKAGWAY, HAINES, JUNEAU

Description. The Northern Transmission Line (NTL). A high voltage 138 kV and 69 kV transmission line that interconnects Skagway, Haines, and Juneau for Energy Security, Energy Reliability, and Resilience to support sustainable economies of Northern Southeast Alaska.

Purpose and Need. The Purpose of the NTL is to create an integrated transmission grid for northern Lynn Canal communities to transfer locally developed electricity between the communities to optimize renewable energy resources, drive down energy costs, open economic opportunities and to create value to the interconnected communities and their industries. Time is Now.

Background. Envisioned in 1997, and passed into Public Law in 2000 to create a Southeast Intertie from Ketchikan to Skagway. PL 105-511 authorized \$384M for a 25-year plan for interconnecting existing and planned power generation sites with a high voltage electrical intertie serving the communities of the region. The time is now to build the next phase of the SE Intertie to serve northern Lynn Canal communities. The NTL is a fully permitted and construction-ready high voltage transmission line infrastructure to span Skagway, Haines, and Juneau with substations and overhead and submarine transmission segments to serve these communities for the next century.

Benefits.

- Creates family-wage jobs now to supplement the Alaska economy circulating federal and private infrastructure dollars by building keystone energy infrastructure.
- Upgrades and replaces impaired Skagway to Haines undersea transmission cable.
- Future proof the Northern Lynn Canal economies and opens up more trade opportunities between communities and with Yukon.
- NTL Provides a distribution system for renewable energy development to supply power for dock electrification, future electric ferry and vehicle transportation transformation, economic development and mining.
- Removes transmission bottlenecks and positions region for future dock electrification for the Cruise Industry.
- Buttresses State Energy Policy and local plans and policies to increase renewable energy and reduce emissions.
- The NTL and dock electrification infrastructure initiative has local, regional, state and federal support

Cost. Transmission and substation costs Juneau to Berners Bay \$65M; Transmission and Substation costs Berners Bay to Haines \$65M, Transmission and Substation costs Haines to Skagway \$30M; **Total \$160M**

Dock Electrification costs Juneau 5, Haines 1, Skagway 4. 10 docks electrified @ \$10M estimate per dock. **Total \$100M.**

Total \$260M

Support:



2020 Skagway Comprehensive Plan page 34 of the plan-

5. Inexpensive hydroelectric energy is abundant with more sources nearby and a major energy developer located in town.

Hydroelectric facilities at Dewey Lakes, Goat Lake and (soon) Kasidaya Creek supply 7.94MW electrical energy to Skagway and Haines (through a 13-mile underwater cable). (Haines's Lutak facility adds another 0.35 MW capacity to this grid.)

More capacity exists in the area. The Municipality of Skagway supports development of renewable hydroelectric energy and a Southeast Alaska and Canadian electrical intertie. Skagway's experience with AP&T hydroelectric development is that it can be accomplished in a way that minimized the development footprint, protects the environment and can be compatible with outdoor recreation opportunities.

Skagway is interested in developing enough area wide hydroelectric energy to plug cruise ships into shore side power, especially on days when weather conditions cause a local inversion in the Skagway and Taiya valleys.

HAINES BOROUGH Alaska

Comprehensive Plan 2025

Objective 15M: Develop renewable energy sources sufficient to meet current and future year round residential, institutional, commercial, and industrial needs in the Haines Borough. This includes enough local power from renewable sources to, where reasonably economic and practical, first provide year-round power to meet demand from 460 more residents over next 20 years and second, to tie freighters, barges and cruise ships to shore power while in port.

3. If it will benefit Haines consumers and rate payers, support extension of Southeast Alaska electrical intertie grid from Upper Lynn Canal (Haines and Skagway) to the Canadian and Juneau electrical grid. Borough, Southeast Conference, State Legislators, AP&T, IPEC



City and Borough of Juneau Comprehensive Plan Ordinance 2013-26:

POLICY 6.3. TO SUPPORT THE DEVELOPMENT OF A SOUTHEAST ALASKA INTERTIE.
6.3 – IA1 Work with the State of Alaska, Southeast Conference, Tlingit Haida Central Council, Douglas Indian Association, AEL&P, independent energy producers, and other interested entities toward the planning, funding, and development of a regional electrical intertie.

6.3 – IA2 Support State of Alaska projects to extend electrical power along Glacier Highway to Cascade Point to improve highway safety, provide emergency services, reduce electrical costs and carbon emissions, and facilitate economic development.

Both the Juneau Renewable Energy Strategy and Juneau Climate Action Plan support dock electrification.

SE INTERTIE -JUNEAU LYNN CANAL
SEGMENT-the NORTHERN INTERTIE

Energy Security for Northern SE
Alaska.

PL 106-511 Authorized \$384M for SE
Intertie with roughly \$330M in the
remaining authorization balance.

SHOVEL and CONSTRUCTION READY

Northern Intertie to connect current and future
mines AND docks to lower cost locally produced
hydropower electricity.
Juneau to Haines, and Skagway with future trade to
Yukon and North America grid.

Hydropower and transmission puts Alaskans to
work, creates jobs, lowers energy costs and brings
prosperity to Northern SE Alaska.

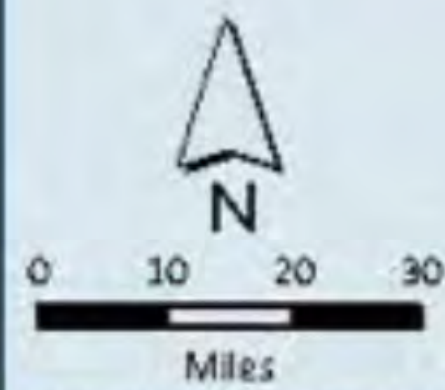
Future segment to connect Northern SE Intertie
Southern SE Intertie to connect Juneau to Petersburg

Future Tie
in to British
Columbia

"Southeast Alaska is the Saudi Arabia of Hydropower",
Congressman Don Young

Southeast Alaska has over 200 undeveloped
Hydropower sites that could be developed and exported
through Yukon and British Columbia to feed US West
Coast electricity needs for the next 100 years.

Juneau to Skagway Segment is construction ready
now.



Data Source(s): Bing Maps, Alaska DHEC, Energy Velocity, ESH

Disclaimer: Routes shown are for illustrative purposes only and are not necessarily reflective of actual routing.

Proposed Route	Submarine Cable	Hydro Projects	Transmission Lines
Alternate Route	Proposed	Existing	Existing
Cities, Substations or Load Centers	Proposed - Alt	Committed	Committed
Interconnection Points	Existing	Proposed	

Southeast Alaska Integrated Resource Plan

Proposed Transmission & Hydro Projects



CITY OF SKAGWAY, ALASKA

RESOLUTION NO. 03-06R

A RESOLUTION OF THE CITY OF SKAGWAY, ALASKA SUPPORTING THE SOUTHEAST ALASKA INTERTIE PROJECT AND THE INTERTIE WORK OF SOUTHEAST CONFERENCE.

WHEREAS, Southeast Alaska is the only place in the United States with a population its size that is not interconnected by an electrical intertie system; and

WHEREAS, the lack of interconnection increases power costs to more than four (4) times the national average in some communities; and

WHEREAS, the communities of Southeast Alaska need reliable, cost effective, long-term sources of energy for the future in order to minimize environmental impacts, stabilize electric rates, foster employment, and increase economic development opportunities; and

WHEREAS, the Alaska Congressional Delegation was successful in passing legislation authorizing the Southeast Alaska Intertie Project with Federal appropriations of up to \$384 million dollars for the project; and

WHEREAS, Southeast Conference hired an intertie coordinator to work on intertie issues full time; and

WHEREAS, Southeast Conference unanimously approved the Juneau/Hoonah and Kake/Petersburg Intertie legs as priorities and commissioned a comprehensive engineering/economic analysis of the Southeast Alaska Intertie Project; and

WHEREAS, it is vital that progress continues to be made on completing the region-wide goal of interconnecting all of Southeast Alaska with a transmission line system.

NOW, THEREFORE BE IT RESOLVED, that the City of Skagway supports the efforts of Southeast Conference to identify funding and proceed with planning and construction on the Southeast Alaska Intertie Project in order to provide steady affordable power for Southeast residents, and reduce the dependence on expensive diesel generators by our rural communities.

PASSED AND APPROVED this 3rd day of April, 2003.

J. M. Frey, Vice Mayor

ATTEST:

Marjorie D. Harris, CMC
City Clerk

(SEAL)