Southeast Conference

Skagway, Alaska

September 2007
Upper Lynn Canal Regional Power Supply System

• Hydroelectric Generation with Storage
  Goat Lake Hydro built and on line in December 1997
  Lutak Hydro purchased in 2001

• Run-of-River Hydroelectric Generation
  Dewey Lake Hydro on line 1909
  Kasidaya Creek Hydro construction started April 2006
  Completion estimated for Spring 2008

• Transmission system to connect projects and load centers.
  Intertie to Dyea Valley completed December 2005
  5 to 10 mile intertie – completed in June 2007
  Intertie to IPEC system to the Canadian Border – completed Aug 31, 2007
  Intertie to the Lutak Community – scheduled for completion Sept. 2007
PROJECTS

• Goat Lake Hydro. – 4.0 MW
  – Located 6.5 Miles NE of Skagway
  – Constructed in 1996-1997
  – Submarine Cable – 35 kV, 3-Phase
    • Skagway To Haines
    • Laid in 1998
GOAT LAKE HYDRO

Goat Lake

Powerhouse
Goat Lake Hydro (cont.)

- Lake El. 2925, Surface Acres: 204, 40 Foot Maximum Drawdown 5640 Acre Feet of Storage
- 5.5-Years To Permit And License
  - Federal and State Permits
- $12 Million To Permit and Construct,
Visual Quality Objective:
  - Maintains Pitchfork Falls at 8.5 cfs from May 15 to September 30, 8 hrs a day
Goat Lake Hydro (cont.)

Sky Crane Helicopter (Highway Staging Area)
Goat Lake Hydro (cont.)

- Features: Intake, Siphon, Catchbasin & Pumpback House, Valve House and Bypass, Penstock, Powerhouse, Switchyard, Transmission Line
- Has Generated 108,000,000 kWh
- Has Been On-Line 86,500 Hrs.
- Has Off-Set 16.6 million gallons of diesel.
Goat Lake Hydro (cont.)

Catchbasin and Pumpback House

Siphon House
Goat Lake Hydro (cont.)

Bypass At Valve House
Goat Lake Hydro (cont.)

Powerhouse At The Skagway River

6,500 Feet Of Penstock
Goat Lake Hydro (cont.)

Pelton Turbine (in blue) And Generator
Dewey Lakes FERC 1051

- Dewey Creek natural flow from Upper Dewey Lake basin into Lower Dewey Lake. Drainage Area 2 square miles.
- Icy Creek natural flow from Icy Lake into Lower Dewey Lake. Drainage Area 1.75 square miles.
- Reid Falls diverted into 14” steel pipe discharging into Icy Lake. Diversion is a concrete dam 26’ long X 8’ high. Drainage Area 1.5 square miles.
- Snyder Creek diverted into channel discharging into Lower Dewey Lake. Diversion is a rock and earth dam. Drainage Area 1.8 square miles.
- Total Drainage Area: 6.05 square miles
Dewey Lakes Water Wheel Room
Dewey Lakes Turbines

- **Unit 1:**
  - Type of Turbine: Single-Jet Dual Bucket Pelton
  - Generator Rating: 380 kW
  - Flow: 25 cubic feet / sec
  - Voltage: 2.4 kV delta

- **Unit 2:**
  - Type of Turbine: Single-Jet Pelton
  - Generator Rating: 100 kW
  - Flow: 6 cubic feet / sec
  - Voltage: 2.4 kV delta

- **Unit 3:**
  - Type of Turbine: Single-Jet Pelton
  - Generator Rating: 300 kW
  - Flow: 20 cubic feet / sec
  - Voltage: 2.4 kV delta

- **Unit 4:**
  - Type of Turbine: Cornell centrifugal pump
  - Generator Rating: 200 kW
  - Flow: 14 cubic feet / sec
  - Voltage: 2.4 kV delta
Lutak Hydro

- Intake is a screened cement chamber behind a small dam.
- Run-of-River Operation level of intake is controlled by needles
- 360 feet Gross Head
- Penstock 2000’ 18” ductile iron
- One dual jet single runner Pelton
- 250 KW, 523 rpm
- Located on private land, permitted under state law.
Lutak Hydro
How to pay for the System

• Tax-exempt Bonds sold through AIDEA as a conduit.
• To the extent possible seek federal and state support.
• Because of the regulated nature of the system grant support has zero cost to the customers of the area.
NEW ISSUE
BOOK-ENTRY ONLY
Rating: S&P: BB+
(See "Rating" herein)

In the opinion of Wohlfarth, Argetsinger, Johnson & Brecht, Bond Counsel, based on an analysis of existing statutes, regulations and court decisions, and assuming, among other things, compliance by the Authority and the Company with their respective covenants relating to certain requirements contained in the Internal Revenue Code of 1986, as amended (the "Code"), interest on the 1997 Bonds is excluded from gross income for federal income tax purposes. However, no opinion is expressed for any 1997 Bond with respect to any period during which such 1997 Bond is held by a "substantial user" of the financed facilities or by a "related person" to such substantial user. The 1997 Bonds are private activity bonds. Interest on the 1997 Bonds will be a specific preference item for purposes of the individual and corporate alternative minimum taxes. Interest on the Bonds is included in the computation of certain federal taxes on corporations. Interest on the 1997 Bonds is exempt from taxation by the State of Alaska except for transfer, estate, and inheritance taxes and except to the extent that inclusion of such interest in computing the corporate alternative minimum tax under Section 55 of the Code may affect the corresponding provisions of the State of Alaska corporate income tax. Bond Counsel expresses no opinion regarding any other tax consequences relating to the ownership or disposition of, or the accrual or receipt of interest on the 1997 Bonds. See "Tax Exemption" herein.

$23,000,000
Alaska Industrial Development and Export Authority
Power Revenue Bonds
(Upper Lynn Canal Regional Power Supply System)
Series 1997

Dated: December 1, 1997
Due: January 1, as shown below

The 1997 Bonds will be issued as fully registered bonds under a book-entry system, registered in the name of Cede & Co., as nominee of The Depository Trust Company, the securities depository for the 1997 Bonds. Individual purchases of the Bonds will be made in book-entry form only in the principal amounts of $5,000 or integral multiples thereof. The 1997 Bonds will bear interest payable on July 1, 1998 and semiannually thereafter on January 1 and July 1 of each year and are subject to optional redemption and mandatory sinking fund redemption as described herein.

The information in this Official Statement pertaining to the issuance of Additional Bonds under the Trust Indenture reflects a material revision of the information included in the Preliminary Statement dated December 12, 1997. Investors are advised to review carefully the revised material in this Official Statement pertaining to the issuance of Additional Bonds. Please see, "Security and Sources of Payment for the Bonds" under the heading "Additional Bonds" and Appendix B — Summary of the Trust Indenture under the heading "Additional Bonds."

The 1997 Bonds are issued for the purpose of financing costs of construction and installation of facilities for the generation and transmission of electric power and energy herein described in the Preliminary Statement in the Upper Lynn Canal Regional Power Supply System. The 1997 Bonds are special and limited obligations of the Alaska Industrial Development and Export Authority secured under a Trust Indenture by and between the Authority and First Trust National Association, as Trustee, by a pledge of revenues received by the Authority under a Loan Agreement with Great Lake Hydro, Inc., including payments to be made by the Alaska Power Company and Haines Light & Power Co., Inc., which have agreed to purchase all of the System Capacity of the Power Supply System and to pay the Annual Costs of the Power Supply System pursuant to the Power Sales Agreement described herein.

THE 1997 BONDS DO NOT constitute an indebtedness or other liability of the State of Alaska or of any political subdivision thereof. The Authority may not pledge the faith or credit of the State of Alaska or of any political subdivision thereof to the payment of the 1997 Bonds. The issuance of the 1997 Bonds by the Authority does not constitute a direct or contingent liability of the State of Alaska or any political subdivision thereof to apply money from, or levy or pledge any form of taxation whatsoever to the payment of the 1997 Bonds. The Authority has no taxing power.

Maturity Schedule

<table>
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<th>$705,000</th>
<th>5.00%</th>
<th>Term Bonds Due January 1, 2002; Yield 5.00%</th>
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<td>$4,460,000</td>
<td>5.70%</td>
<td>Term Bonds Due January 1, 2012; Yield 5.80%</td>
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<td>Term Bonds Due January 1, 2016; Yield 5.90%</td>
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<td>$13,685,000</td>
<td>5.78%</td>
<td>Term Bonds Due January 1, 2032; Yield 6.00%</td>
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</table>

(Accrued Interest to be added)

The 1997 Bonds are offered when, as and if issued and received by the Underwriter, subject to the approving legal opinion of Wohlfarth, Argetsinger, Johnson & Brecht, Anchorage, Alaska, Bond Counsel, and certain other conditions. Certain legal matters will be passed on for the Company and the Power Purchasers by their counsel Davis Wright Tremaine LLP, Seattle, Washington and the Underwriter by its counsel, Katzen Muchin & Zavis, Chicago, Illinois. It is expected that the 1997 Bonds will be issued on or about December 30, 1997 and will be available for delivery through the facilities of The Depository Trust Company, in New York, New York, on or about December 31, 1997.

John Nueen & Co.
Incorporated

Dated: December 18, 1997
Haines - Skagway Submarine Cable InterTie Project, Haines to Skagway, Alaska

Final Technical and Construction Report

Glen Martin, Project Manager
Alan See, President, Goat Lake Hydro, Inc.
Alaska Power and Telephone Company

Bennie N. Rinehart, INEEL Consultant
Major Milestone and Tasks

• Bathymetric and side scan sonar survey  April 1997
• Design of cable  1997
• Place and manufacturing of Cable  1997
• Permitting of Cable begins  July 1997
• Studies EMF  August 1997
• Permits in Place  May 1998
• Cable Ship arrives Skagway  June 1998
• Cable Installation Complete  July 1998
• Cable Energized  Aug 1998
• Final “As-Laid” drawing filed  Sept 1998
1. Tinned Copper Conductor
2. Semi-Conducting Conductor Shield
3. EPR insulation
4. Semi-Conducting Conductor Shield
5. Metallic Shield
6. Polypropylene Fillers
7. Binder Tape
8. Polypropylene Bedding
9. Galvanized Steel Wire Armour
10. Polypropylene Serving
Design of cable 1997

- Primary design criteria Mechanical due to depth of water
- Copper Conductor size increased to gain adequate Strength
- Counter concentric armor not used to eliminate need to turn-table on cable ship
- Length 87,000 feet (15 miles)
- Three splice vaults (one place for future hydro project along route)
- 35 kV, 3 phase
- Capacity 15 MW continuous
- Conductor size 365 MCM
TESTING CABLE IN ENGLAND.

CABLE BEING PREPARED TO STORE IN ENGLAND UNTIL READY TO LOAD ONTO SHIP.
Permitting of Cable begins
May 1997 Completed May 1998

• Only 4 permits required
• U.S. Army Corps of Engineers for a nationwide permit 12 (NWP) #d-970592

• Alaska Department of Governmental Coordination CZMP consistency determination #AK 9709-11JJ

• U.S. Forest Service Special Use Permit for Kasidaya Creek Landing

• Department of Natural Resources right-of-way easement
DETAIL OF CABLE SPLICE VAULT ANCHORING.
AN EXAMPLE OF THE SIZE OF THE CABLE.

CABLE SPOOLED ON THE SHIP AS IT LAYS THE CABLE ALONG TAIYA INLET.
AN EXAMPLE OF THE SIZE OF THE CABLE.

CABLE SPOOLED ON THE SHIP AS IT LAYS THE CABLE ALONG TAIYA INLET.

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Dyea Valley Intertie

- Intertie to Dyea Valley was an approximately 5 mile extension into Dyea proper.
- This intertie provided power to approximately 21 un-served customers and was completed on December 30, 2005.
- Funding for this intertie was made available through an Alaska Energy Authority (AEA) loan grant in the amount of $444,450.
5 to 10 mile Haines Highway

To connect an un-served AP&T corridor of approximately 12 customers and allow the connection to IPEC (cooperative currently powered by hydro and diesel) with Goat Lake Power

• Funded via a Rural Utilities Service (RUS) US Dept of Agriculture grant in the amount of $675,687.
• Construction started in 2006 and completed in early 2007
• Connection to IPEC completed August 31, 2007.
Lutak Community

- To connect an un-served corridor in AP&T’s power service area and to connect the residents of Lutak to telephone service. (approximately 35 customers)
- Funded via a Rural Utilities Service (RUS) US Dept of Agriculture grant in the amount of $1,100,750.
- First customers were connected in early August and the balance of the customers can be connected as soon as the Chilkoot River Bridge crossing is complete.
Kasidaya Creek

UNDER CONSTRUCTION

Another Hydroelectric Alternative Energy Source

By Alaska Power & Telephone
Kasidaya on the map!
Kasidaya Project Details:

- 3 Megawatt Output
- Drainage Area 19 Square miles
- Penstock 42”’ Ductile Iron
- Net Head of 520 Feet
- Flow 88 Cubic feet per second
- Turgo Turbine
Kasidaya Project Cost Summary

• Estimated Project Cost $9.8 million

• Over 5 years to acquire necessary permits and licenses
Kasidaya Project Features:

• A diversion structure at the approximate elevation of 570 feet that would be approximately 80 feet long and have a structural height of approximately 10 feet at the spillway crest

• 3,500 foot of penstock, including 2,600 feet of buried 42-inch diameter pipe and 900 feet of saddle supported 42-inch diameter pipe
42” Ductile Iron Pipe – 3000 pounds each!
Kasidaya Project Features:

• A 36 foot by 45 foot power plant at about 30 feet above sea level will include a concrete foundation, metal superstructure, 4,000 HP impulse turbine, 3,000 kW generator, and associated control equipment and panels
Powerhouse
Kasidaya Project Features:

• The 150 foot tailrace blasted through a rock wall will discharge onto the beach and into Taiya Inlet
Kasidaya Project Features:

- A small switchyard adjacent to the powerhouse which will intertie with the 34.5-kV Haines-Skagway submarine cable at a vault about 200 feet south of the powerhouse
Submarine Cable

Hydro cable insertion
Kasidaya Project Features:

• All generation by the hydro project will be used to offset diesel generation. The project as proposed has the potential to generate on average as much as 12,000 MWh annually.

• Kasidaya will run in sync with AP&T’s Goat Lake Hydro Plant, Dewey Lake Hydro Plant, and Lutak Hydro Plant.

• Output capacity when this project is on-line will total over 8200 Kilowatts of hydro power.
Kasidaya Project Features:

• Access facilities:

• Three helicopter landing pads
  one at the diversion structure
  one below the diversion
  one at the beach landing

• Boat ramps with a partial breakwater
Working concrete in the cold
The Skipper
Engee Express (LCM 8)
M/V IXOYE

Former Prince of Wales School bus
Project hurdles to overcome

• Building a staging yard on a beach
• Dealing with sediment runoff
• Steep grades
• MUD
• Timing equipment transfers with tides
• Remote access
Building the Staging areas
The Crew
The Equipment
The Equipment
The Equipment

• Prepping for a blast
The Equipment
The Equipment
The Equipment

- Mechanic on duty
Fuel for the Equipment
AP&T expects generation online by Spring of 2008
Community Minded
Employee Owned

[AP&T Logo]