

**BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

APPLICATION FOR PRELIMINARY PERMIT

Takatz Lake Project - Alaska

SUBMITTED BY:

City and Borough of Sitka Electric Department

105 Jarvis Street

Sitka, Alaska 99835

June, 2008

Initial Statement

Before The Federal Energy Regulatory Commission:

Application for Preliminary Permit

The City and Borough of Sitka (“City”, “Applicant”), applies to the Federal Energy Regulatory Commission (FERC) for a Preliminary Permit for the proposed Takatz Lake Hydroelectric Project (“Project”), as described in the attached Exhibits. The Project would connect with the existing transmission facilities of the City’s Green Lake (FERC P-2818) and Blue Lake (FERC P-2230) hydroelectric projects to increase the City’s renewable energy generation capacity and to protect Sitka ratepayers from energy cost increases due to diesel generation.

This application is made in order that the Applicant may secure priority of application for a license for the Project under Part 1 of the Federal Power Act while obtaining the data and performing the acts required to determine the feasibility of the Project and to support an application for a license.

The proposed location of the Project would be:

Takatz Lake and the proposed Powerhouse are located in:

Sections 35, 36 of Township 54S, Range 66E of the Copper River Meridian, and
Sections 1, 2, 3, 4, 10 of Township 55S, Range 66E of the Copper River Meridian

The approximate powerhouse location is: longitude 134 degrees 52.07’ west; latitude 57 degrees 08.21’ north.

State: Alaska

County: City and Borough of Sitka, Alaska

Nearby Town: Sitka, Alaska

Stream or Other Body of Water: Takatz Lake and its outlet Takatz Creek

The exact name, business address, and telephone number of the applicant is:

City and Borough of Sitka
100 Lincoln Street
Sitka, Alaska 99835
907-747-3294.

The exact name, business address and phone number of each person authorized to act as agent for the Applicant in this application are:

James E. Dinley, Municipal Administrator
100 Lincoln Street
Sitka, Alaska 99835
Phone 907-747-1808
E-mail: jimdinley@cityofsitka.com

Charles Y. Walls, Utility Director, Electric Department
City and Borough of Sitka
105 Jarvis St.
Sitka, Alaska 99835
Phone: 907- 747- 4000 Electric Department
907-747-1870 Charles Walls
Fax: 907-747-3208 Electric Department
E-mail: charlie@cityofsitka.com

The City and Borough of Sitka is organized and existing in the State of Alaska.

The City and Borough of Sitka is claiming preference under Section 7 (a) of the Federal Power Act.

The proposed term of the requested Preliminary Permit is 36 months.

There are no existing dams, or other project facilities.

The following Exhibits are filed herewith and are hereby made a part of this application:

- EXHIBIT 1 DESCRIPTION OF THE PROJECT**
- EXHIBIT 2 DESCRIPTION OF STUDIES TO DETERMINE THE
 FEASIBILITY OF THE PROJECT**
- EXHIBIT 3 ESTIMATED COSTS AND FINANCING**
- EXHIBIT 4 PROJECT MAPS**

EXHIBIT 1, DESCRIPTION OF THE PROJECT

PROJECT FEATURES

The project description and much basic data presented herein was obtained from a report by the U.S. Department of Interior, Alaska Power Administration (APA), entitled *Takatz Creek Project – Alaska* dated January, 1968. The City cites the proposed project design and other supporting data from that report in this application.

In the following description, elevations are in feet above mean low sea level and are denoted “El”.

General. The proposed project would be located about 21 airline miles east of the City of Sitka, Alaska on the eastern shore of Baranof Island. Development of hydroelectric power at the site would include construction of a lake tap, concrete dam, power intake, unlined tunnel, power penstock, power plant, tailrace, and transmission line segments (See Maps and written description below).

Reservoir/Dam. Takatz Lake is located approximately 4,000 feet upstream of the mouth of Takatz Creek which flows into Chatham Strait by way of Takatz Bay on the eastern shore of Baranof Island. Normal water surface of the lake is at approximately El 840. Construction of a concrete arch dam approximately 200 feet high at the existing outlet of the lake would raise the lake level to El 1040. The reservoir would contain an active storage of volume of approximately 82,400 acre-feet.

Lake Tap/Power Conduit. Water would be withdrawn through a lake tap into an approximately 2,800 foot-long, 6.5 foot by 7 foot modified horseshoe tunnel. The tunnel’s downstream portal would connect to a 72-inch diameter, 1000 foot-long steel penstock leading to the powerhouse.

Powerhouse, Switchyard and Tailrace. A surface powerhouse approximately 10,000 square feet in area would be constructed at ground level near Takatz Bay. The powerhouse would house two 18,600 hp Francis turbines, driving two 13.8 megawatt (MW) generators. A switch yard would be located near the Takatz Bay powerhouse and at the intersection with the existing transmission system near the existing Medvejie Fish Hatchery on Silver Bay. The powerhouse tailrace would provide an average of about 166 cubic feet per second (cfs) discharge into tidewater.

Access Roads. Access for construction and long-term operation and maintenance of the Project would be via seaplane, helicopter and boat. An approximately 3-mile long gravel surfaced access and maintenance road would lead to Takatz Lake from a dock to be constructed on Takatz Bay.

Transmission Facilities: Power generated by the Project would be transmitted by a new 26-mile long 138 kilovolt (kV) transmission line energized initially at 69 kV. The transmission line

could consist of a combination of overhead, underground and submarine segments. Exact transmission type and routing will be determined based on further field investigations and feasibility studies. The line would interconnect with the existing 69 kV transmission system which currently connects the Blue Lake and Green Lake Projects to the City of Sitka Electric Department service area.

The 138 kV transmission line insulation level would provide capacity for future power supply projects, including potential geothermal resources at Baranof Warm Springs and as many as five other potential hydroelectric project sites near Takatz Lake on the east side of Baranof Island. These other sites may be developed in the future as needs for additional renewable energy sources in Sitka increase.

INSTALLED CAPACITY and ENERGY PRODUCTION

Installed Capacity. Total installed capacity would be 27.7 MW, depending on final design.

Annual Energy Production. The Takatz Lake project configuration evaluated in the 1968 APA feasibility study produced 97,100,000 kilowatt/hours (kWh) of firm annual energy and 9,800,000 kWh of non-firm energy for a total average capability of 106,900,000 kWh generation each year. The reservoir filled 14 years of the 19 year study, with spills occurring in 9 years.

LANDS OF THE U.S. GOVERNMENT and of the CITY AND BOROUGH OF SITKA

The project would be located within the Tongass National Forest on lands managed by the US Department of Agriculture Forest Service (USFS). The City and Borough of Sitka owns the shoreline lands of Takatz Lake and Takatz Bay. The transmission line would traverse Baranof Island on Federal lands managed by the USFS. The project would not use any Federal facilities. The Sitka Tribe of Alaska may be interested in the project.

EXHIBIT 2, DESCRIPTION OF STUDIES TO DETERMINE THE FEASIBILITY OF THE PROJECT

The Applicant proposes to conduct several studies to determine Project feasibility and environmental effects. The exact extent and nature of these studies will be determined during early stage consultation with Alaska state and Federal resource agencies, and results of more detailed engineering calculations.

ECONOMIC and ENGINEERING FEASIBILITY EVALUATION

Hydrology

Stream flow records for 15 complete water years are available at a point on Takatz Creek downstream of the dam site with a drainage area of 17.5 square miles. The stream gage would be re-established to continue gathering stream flow data.

Generation

A generation study will be performed to determine the exact size and type of turbine/generator, switchgear, transmissions facilities and other electrical equipment.

Engineering Feasibility

Engineering feasibility studies will be performed in association with field surveys and topographic mapping to determine the constructability of the various project features in relation to surface and subsurface conditions, vegetation and topography.

ENVIRONMENTAL and GEOTECHNICAL STUDIES

Environmental Studies

The exact nature and scale of environmental studies will be determined during agency consultation and study planning. Generally, however, environmental studies are required to meet information needs in the following areas:

- Aquatic Resources
- Terrestrial Resources
- Water Use and Quality
- Geology and Soils
- Socioeconomics
- Cultural Resources
- Land Use and Recreation
- Aesthetics

Geotechnical, Seismic and other Subsurface Investigations

The 1968 APA report documented the geology at the site and concluded that conditions were adequate for construction of a concrete arch dam. The City will evaluate the need for additional geotechnical studies.

NEW ROADS for CONDUCTING STUDIES

No new roads are planned for conducting general environmental and engineering studies. Access by road may be necessary if additional geotechnical work is done.

WORK PLAN FOR NEW DAM CONSTRUCTION

Work for the proposed dam would occur over a three to four year period, including mobilization and demobilization. Work would be concentrated during the spring, summer and fall to minimize problems associated with winter weather and potentially deep snowfall.

DISTURBANCES FROM CONDUCTING STUDIES

Disturbances from conducting studies would be minimal. The only expected disturbance could arise if extensive additional geotechnical work were required, but previous studies in this area should preclude such a need. Any onsite work will be coordinated with the USFS, including obtaining a USFS Special Use Permit, if applicable.

SCHEDULE FOR STUDY COMPLETION

Engineering and environmental studies will be completed as necessary prior to expiration of the Preliminary Permit. Some environmental studies may continue through the post-application period and even during the construction period to satisfy requirements for environmental monitoring.

EXHIBIT 3, ESTIMATED COSTS AND FINANCING

ENGINEERING AND ENVIRONMENTAL STUDIES AND CONSULTATION COSTS

Engineering and Economic Evaluation Costs. Based on review of existing information and data, and on our experience with other such evaluations in Alaska, we expect total Engineering and Economics studies to cost between \$6,000,000 and \$10,000,000 from inception through the final design stage.

Environmental Consultation and Studies Costs. The Applicant, based on prior experience with remote project studies and construction, expects environmental consultation and studies to cost between \$1,000,000 to \$1,500,000, or higher, depending upon study requests from state and federal agencies and the FERC.

FINANCING

Financing is expected to come from a mix of sources, including municipal investments, State of Alaska energy development monies, federal funds, and bank financing. The exact mix of financing will be determined as the licensing proceeds.

MARKET FOR POWER GENERATED

Proposed Power Purchaser(s). Power purchasers would initially be electric utility customers of the City and Borough of Sitka. Over time, with increasing costs of petroleum-based fuel, demand for hydroelectric energy is expected to increase throughout Southeast Alaska. If electrical intertie facilities within the Southeast Alaska region become available, the Takatz Lake Project could help to meet renewable energy needs throughout the region.

USE OF ENERGY BY THE APPLICANT

The Applicant operates the power generation, transmission and distribution systems to provide electrical service to the community of Sitka, approximately 5000 consumers (meters), in the City of Borough of Sitka.

EXHIBIT 4. PROJECT MAPS

EXHIBIT 4, Map 1

VICINITY MAP

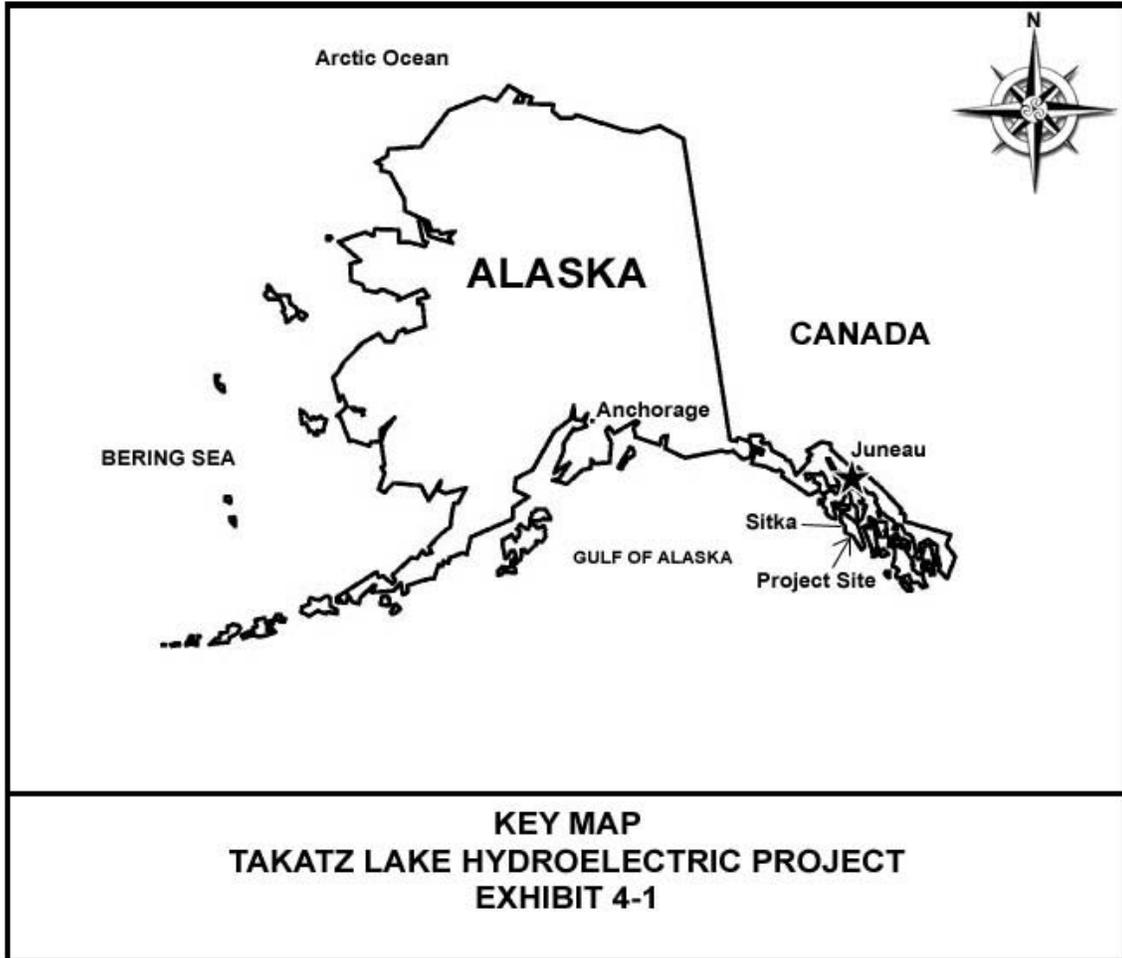
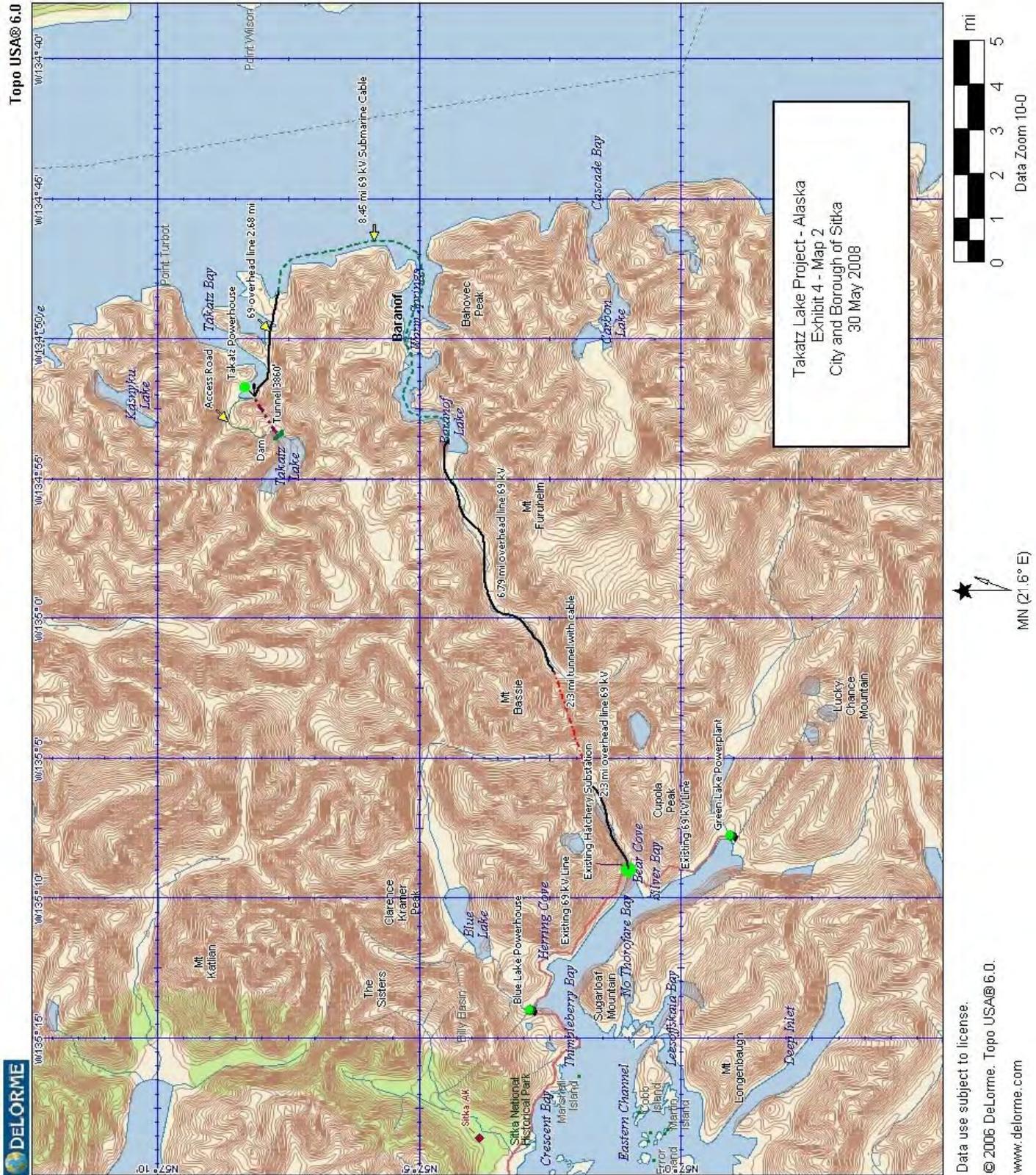


EXHIBIT 4, Map 2. PROJECT FEATURES AND BOUNDARY



THIS APPLICATION FOR PRELIMINARY PERMIT

Is executed in the State of Alaska, County of Sitka, by the City and Borough of Sitka, 105 Jarvis Street, Sitka, Alaska 99835 James E. Dinley its Municipal Administrator being duly sworn, deposes and says that the contents of this application are true to the best of his knowledge and belief. The undersigned applicant has signed the application this 2nd day of June 2008.

by James E. Dinley
James E. Dinley, Municipal Administrator

STATE OF ALASKA,

City and Borough of Sitka

On this 2nd day of June 2008, before me personally appeared James E. Dinley to me known to be the Municipal Administrator of the City and Borough of Sitka, that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said City and Borough of Sitka, for the uses and purposes therein mentioned, and on oath stated that he is authorized to execute said instrument.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

April J. Jensen
Notary Public in and for the State of Alaska, residing at
The City & Borough of Sitka, Alaska

