City & Borough of Sitka
Electric Department
105 Jarvis Street, Sitka AK. 99835
Telephone: 907-747-4000 Fax: 907-747-3208

Ms. Kimberly Bose, Secretary,
Federal Energy Regulatory Commission
888 First Street NE,
Washington D.C. 20426

Filed Electronically
March 10, 2008

Subject: **Notification of Intent to apply for license amendment, Blue Lake hydroelectric project (Project), FERC No. 2230, Sitka, Alaska.**

Ms. Bose:

This letter is the City and Borough of Sitka's (City's) Notification of Intent (NOI) to apply for a capacity-related amendment to the existing Federal Energy Regulatory Commission (FERC, Commission) license for the Subject Project. Specifically, the City proposes to 1) add a third generating turbine near the existing powerhouse site and 2) raise the Project dam as much as 83 feet above its existing height. At an additional turbine capacity 160 percent greater than existing and with maximum geotechnically feasible dam height, annual average project generation would be 98,000 Megawatt hours, an increase of 54 percent over existing generation.

The City is a municipality and licensee for the Project.

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

City and Borough of Sitka
100 Lincoln St.
Sitka, Alaska, 99835

The exact name, business address and phone number of the person authorized to act as agent for the licensee is:

Charlie Walls, Director
City and Borough of Sitka Electric Department
105 Jarvis Street
Sitka Alaska, 99835
907-747-1870
charlie@cityofsitka.com

Attached is a brief description of the conditions which have led to the City's decision to seek a license amendment to expand the Blue Lake Hydro Project.

We will be coordinating with FERC's Division of Hydropower Administration and Compliance (DHAC) throughout the amendment process. We intend to request use of the Alternative Licensing Procedures (ALP) under which to conduct consultation and amendment application preparation. If you have immediate questions or comments about this proposed action, don't hesitate to contact me at the phone number or email address listed above.

Sincerely,

Charlie Walls, Utility Director
City and Borough of Sitka Electric Department

cc: James E. Dinley, Sitka City Administrator
William Guey-Lee, FERC DHAC

1 attachment

BLUE LAKE PROJECT EXPANSION, BACKGROUND and RATIONALE

Blue Lake Hydroelectric Project, FERC No. 2230

Prepared by:

City and Borough of Sitka Electric Department

March, 2008

The City and Borough of Sitka Electric Department ("City") has begun evaluation of the feasibility of expanding its Blue Lake Hydroelectric Project ("Project"). The expansion would include addition of a third generating turbine and raising the height of the Project dam by as much as 83 feet. Changes of this scale would require a "Capacity-Related" amendment to the existing FERC license and all associated procedural steps under the FERC regulations.

Reviewers may question why the City is pursuing a major project expansion so soon after completion of the recent issuance by FERC of a new, 30-year Project license. This document provides background and rationale for why the proposed expansion was not included in the relicensing, and why it is necessary for the City to proceed rapidly at this time. It further addresses questions regarding why the City favors the proposed expansion relative to other potential generating alternatives.

Background

The original Project license was issued by FERC Order dated April 24th, 1958, and expires on March 31, 2008. Amendments to the original license were issued on June 12, 1980 to increase the transmission line voltage and September 6, 1991 for installation of additional small generating units. A new license was issued by the Commission on July 10, 2007, and becomes effective on March 31, 2008. The Blue Lake Project operates in conjunction with the Green Lake Hydroelectric Project (FERC No. 2818), also licensed to the City. The Green Lake Project was licensed on April 5, 1979 and its license term is 30 years

Need for Blue Lake Expansion

At the time of the Notice of Intent (NOI) to file for a new license for the Blue Lake Project (November, 2002), the City based its future energy needs on existing population growth forecasts and prevailing petroleum-based fuel costs. Early in the relicensing process, the City commissioned a load forecast study (2005 Electrical System Load Forecast) which predicted Sitka load growth over a 20-year period to be less than 1 percent annually. At that rate, the existing generation system would have economically met Sitka's energy needs until about 2020. Accordingly, during the relicensing process, the City did not propose significant changes to the Blue Lake Project design or operation.

Between 2002 and 2008, fuel oil prices in Sitka increased from $0.71 to $3.24 per gallon, a factor of 4.6 (Table 1)

Table 1. Fuel costs in Sitka from 2002 through 2008.

Date	Fuel Cost per Gallon
1/2002	$.71
1/2003	$1.12
1/2004	$1.23
1/2005	$1.71
1/2006	$2.50
1/2007	$2.64
1/2008	$3.24

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At a fuel oil price of about $2.85 per gallon, electric heating becomes cheaper than fuel heating, and many residences and businesses have begun the switch to electric heating, either by switching to existing baseboard heat or through installation of new electric heating systems.

In 2006, the City experienced a 7 percent load increase, followed by a 5 percent increase in 2007. About half this growth resulted from increased use of electricity for heating, the other half from expansion of Sitka's seafood processing industry. (Note that these increases began in 2006, the year the City submitted the final application for a new Blue Lake Project license to the FERC.)

These increases, which are expected to remain in the load base, have essentially consumed Sitka's 12-year energy "comfort zone". Annual hydro generation shortages as great as 10,000 MWh could occur within 6 years. At the current cost of diesel fuel, a shortfall of 10,000 MWh in hydro generation replaced by diesel would cost Sitka ratepayers an additional $3.3 million per year, equivalent to an electric rate increase of 30 percent.

Why Hydroelectric? Why Blue Lake?

Beginning in 2007, the City began feasibility studies to determine how to meet these dramatic electrical load increases. Theses studies generally evaluated hydro, diesel, wind, tidal and geothermal energy. Generally, hydroelectric generation was considered the best alternative. It has a relatively low and predictable incremental cost and a predictable and well-developed regulatory environment. Hydroelectric generation uses very reliable equipment supplied and supported by well-established large scale industry.

Diesel power, as already demonstrated, results in dramatically higher rate-payer costs and has negative air quality and other environmental effects. Wind, tidal and geothermal generation are attractive alternatives from an environmental standpoint, but, as untested

technologies in Alaska could not be installed soon enough or at a competitive cost to hydro.

To increase the overall hydroelectric generation capacity, expansion of the Blue Lake Project makes more sense than expansion of either the Green Lake Project or development of an entirely new hydro project. The Blue Lake Project is to some extent "under installed" relative to Green Lake and has more water inflow than the existing turbines can use. The Blue Lake dam is in a canyon which could geotechnically support a significantly higher dam. The Green Lake project, while having more installed capacity, has a much smaller water inflow located at a site which does not favor adding additional reservoir capacity by dam raising.

The City's energy studies have considered building a new hydro project on Baranof Island, including the Lake Diana and Takatz Lake projects. The Lake Diana project was suspended because of cost and regulatory/environmental challenges. The Takatz Lake project, which has been under evaluation for some time, is more expensive per installed MW, and much larger than the Blue Lake expansion. The debt service on the Takatz Lake project makes the project uneconomical at this time. The licensing and permitting process for the Takatz Lake project is expected to be much more extensive than amending the existing Blue Lake project license. The Blue Lake expansion, in terms of cost and regulatory feasibility, betters both Lake Diana and Takatz Lake among competing hydro sites.

In sum, the City considers the Blue Lake expansion to be the most feasible alternative to meet Sitka's critical energy needs quickly and at the least cost.