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June 1, 2012

Secretary Kimberly Bose  
Federal Energy Regulatory Commission  
ATTN: DHAC, PJ-12.2  
888 First Street, N.E.  
Washington, D.C. 20426

**Re: Project No. 13563 Alaska  
Sweetheart Lake Hydroelectric Project  
Juneau Hydropower Inc.  
Subject: Fifth Six Month Progress Report**

Dear Secretary Bose,

Pursuant to Article 4 of the Preliminary Permit issued to Juneau Hydropower Inc. (JHI) on December 14, 2009, please find enclosed for this filing the Fifth 6-Month Progress Report covering the period of December 2011 through May 2012.

This report has been prepared by Duff Mitchell, Business Manager, Juneau Hydropower Inc. All questions can be directed to Duff Mitchell at 907-789-2775.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Duff W. Mitchell", is written over a horizontal line.

Duff W. Mitchell  
Business Manager  
Juneau Hydropower Inc.

Encl.

SWEETHEART LAKE HYDROELECTRIC PROJECT  
FIFTH PROGRESS REPORT  
June 1, 2012  
Project No. 13563  
Juneau Hydropower Inc.

1. General

This six month progress report is prepared in accordance with the requirements of Article 4 of the Preliminary Permit issued to Juneau Hydropower Inc by the Federal Energy Regulatory Commission (FERC) on December 14, 2009. This report documents licensing activities for the Sweetheart Lake Hydroelectric Project during the Period December 2011 through June 2012.

2. Project background

The Project would be an approximately 30 megawatt (MW) installation located at Sweetheart Lake and Sweetheart Creek, southeast of Juneau, Alaska. Details of the proposal are in the Permit Application, filed with the Commission on August 4, 2009.

3. Point of Contact

The FERC Point of Contact for the Sweetheart Lake Hydroelectric Project is:

Duff Mitchell, Business Manager  
PO Box 22775  
Juneau, AK 99802  
(907) 789-2775

4. Schedule of Submitting License Application

JHI anticipates that a license application for the project will be submitted on or before December 1, 2012.

5. Summary of Consultation During Last Period:

On December 23, 2011 issued Final Terrestrial and Wetland Delineation Study Plan for agency comment. Plan development involved consultations with various agencies.

On January 13, 2012 issued Recreational Resources Study Plan for agency and public review.

On February 1, 2012 Scoping Document 2 was issued.

On March 13, 2012. Angel Drobica, SEACC Energy Coordinator and JHI held discussion I regarding personal use fishermen survey. Ms. Drobica suggested that JHI develop a brochure that outlined the project and its particulars for the personal use fishermen to help them understand the project when completing their personal use survey. JHI prepared a brochure and sent it out on a follow up mailing to all personal use fishermen.

March 30, 2012. Met with Ryan Scott, ADFG and Cathy Needham of Kai Environmental to go over and review wildlife study components.

On April 5, 2012 JHI issued Draft Aquatics Study Plan/Scope of Work.

May 9, 2012 JHI received correspondence and comments from ADFG related to JHI's Draft Aquatic Study Plan.

May 10, 2012 Duff Mitchell met with USFS personnel, Marti Marshall and Jim Case to go over JHI 2012 study season and USFS Special Use Permit amendment request.

On May 12, 2012 telephonic conversation with Cassie Thomas, Department of Interior-National Park Service regarding JHI's Recreational study plan and JHI surveys. JHI received suggestions from Ms. Thomas on our recreational plan and suggestions for our Surveys. JHI provided NPS an update on survey actions and responses to date. Discussed aesthetic issues related to plan of operations. Further, NPS suggestions were integrated into our survey design and incentives made to prospective participants to encourage survey participation.

On May 15, 2012 received approval for USFS Special Use Permit amendment for 2012.

On May 17, 2012 received NOAA/NMFS comments on JHI Aquatics study plan. Follow up conversation with Sue Walker was to schedule a meeting after June 1, 2012 to go over comments and JHI commitment to have individual contractors of study plan components provide details on methodology to be used in specific study plan components.

On May 25, 2012 Meeting with ADFG representative Shawn Johnson and Cathy Needham of Kai Environmental to discuss and review Aquatics Study plan tidewater component study plan. JHI asked for arrangements to have a follow on meeting with NOAA/NMFS personnel at a later date to go over their comments on study plan. JHI will consult ADFG on Aquatic Study plan components to ensure that JHI is meeting ADFG requirements.

May 29, 2012. Separate discussions with DIPAC and ADFG on previous sockeye enhancement pens in Gilbert Bay. Apparently a Sockeye enhancement program was

previously conducted in Gilbert Bay in cooperation with DIPAC and ADFG. Data from this program should provide useful information for the JHI Aquatics study requirements.

6. Studies conducted During Last Period:

Initiated Recreational Study components to include Socio Economic and Aesthetic surveys:

Sweetheart Creek Personal Use Fishermen. In cooperation with ADFG, JHI conducted a detailed recreational use/visual aesthetics survey with all ADFG permitted (2010, 2011 participants) Sweetheart Creek Personal Use Fishermen. Survey was conducted via mail (two mailings per addressee) and through the web based Survey Monkey system. The Recreational Personal Use Survey was incentivized to encourage participation. JHI received a response rate of 40%

Recreational Air Charter Operators Survey. JHI Conducted 100% face to face interviews with all air charter and air taxi services in Juneau to determine frequency and use of Sweetheart Lake and Sweetheart Creek use for recreational clients. This survey is important because Sweetheart Lake is only accessible by air service via float plane and helicopters. Air Charter Operator interviews also included socio economic questions and aspects to determine the impact on their operations from a future hydropower development at Sweetheart Lake and Creek.

Conducted Outfitter and Guide Survey. In cooperation with USFS, JHI conducted a detailed recreational use/visual aesthetics/socio economics survey with all USFS registered Guides and Outfitters with a list provided by USFS. Survey was conducted via mail (two mailings per addressee) and through the web based Survey Monkey system to determine frequency of use for Sweetheart Lake and Sweetheart Creek use for recreational clients. Survey also included socio economic questions and aspects to determine impact on their operations from a future hydropower development at Sweetheart Lake and Creek. The Recreational Outfitter and Guide survey was incentivized to encourage participation. JHI received a response rate of 15.3%. Further, some of the survey responses received indicated that the Outfitter and Guide did not use Gilbert Bay or Sweetheart Lake for their operations.

Commercial Fishermen. JHI has initiated interviews with commercial fishermen who traditionally use Gilbert Bay to determine impact if any, with their socio economic considerations on proposed transmission routes and planning. JHI attempted to obtain fishermen information from ADFG, but fisher information is confidential under commercial harvest regulations and JHI has sought other means to identify and locate fishermen using the Gilbert Bay area.

Initiated Wildlife studies by Kai Environmental. JHI conducted two (2) aerial goat surveys (February 6, 2012 and April 13, 2012) in cooperation with ADFG.

Wetlands Delineation progress report developed by Bosworth and Associates which will be used to help refine 2012 wetlands delineation and assessment plan. JHI contractor shared wetland delineation progress report with Army Corp of Engineers for review.

Archaeological and Cultural studies. Pre-field archaeological and cultural studies initiated that included but was not limited to comprehensive research on past mining and cultural use of Gilbert Bay and Port Snettisham areas within and adjacent to project boundaries. Filed and received permits from USFS for JHI's contracted archaeologist.

Continued Fisheries and Aquatics Study research conducted by Juneau Hydropower Inc. based on last year's baseline studies, Scoping Document 2, Draft Aquatics Plan and feedback received by NMFS and ADFG on study plan. Continued review of extensive prior aquatic and fisheries investigation work conducted by ADFG from 1989 to 1993 at Sweetheart Lake which includes a detailed limnology report, bathymetrics, water sampling, temperatures, and overall biological study/assessment of the Sweetheart Lake. This source of information has been incorporated in contractor study plans for tidewater, anadromous/ bypass reach, and lake study plans.

Geological. Received detailed laboratory rock sample testing for rock in dam area and potential borrow sites for engineering and constructions suitability as well as testing for mineralization and potential leaching aspects of rock.

Surveying. Initiated Dock, Road and Powerhouse surveying in May and performed survey reconnaissance of dam site for follow on surveying in the next 6 month period.

JHI Contractor and JHI personnel installed two project stream gages last September and have had 2 subsequent readings (February 6, 2012 and March 14, 2012) and discharge measurements taken over this six month period.

Energy Market Analysis. JHI has conducted a preliminary Juneau Energy Market Analysis and will continue to refine analysis. Juneau market electrical demand grew 5.7% last year.

JHI has engaged a transmission line management contractor to assist in transmission line routing and interconnections.

Ensured that that our project website and public files kept at the Downtown Juneau Public Library are consistently updated and maintained for all project documents.

7. Outline of Engineering, Environmental and Other Investigations to be Conducted during the Ensuing 6-Month Period:

Aquatics Study Plan. JHI will complete a multi-component Aquatics study plan in the next 6 months with consultations with ADFG and NOAA/NMFS to ensure that JHI study plan and contractors utilize agency condoned or approved methodologies.

Wildlife and Terrestrial Study Plan. JHI will complete wildlife, botanical and wetland study components.

Recreational Study Plan. JHI will complete surveys and complete recreational study plan components.

Cultural Study Plan. JHI will complete cultural study plan components.

Surveying . JHI will complete surveying for dock, road, powerhouse, and dam.

Engineering Preliminary design. JHI will complete preliminary engineering designs on proposed infrastructure: dam, powerhouse, tunnel, switchyard, dock, marine terminal, transmission line in sufficient detail to file for FERC license application.

Geology. JHI will complete geology requirements to assist in engineering the hydropower infrastructure and resolve leaching issues raised in scoping.

Meteorological. JHI will install weather station at Sweetheart Lake.

Water quantity and water quality. JHI will complete flow studies for use in environmental and engineering considerations. JHI will complete water quality study requirements as outlined in study plans and Scoping Document 2.

8. Summary of Consultations that will take place During Ensuing 6-month Period:

JHI will continue to work with and engage regulatory agencies on an as needed basis in the execution of study plans issued and as identified in Scoping Document #2.

JHI has initiated studies and will work closely with agencies in order to file PDEA and License Application in 2012.

Pictures of work conducted in last 6 months

Sweetheart Creek Stream Discharge measurement



Sweetheart Lake Goat Survey April 2012. No goats were found on this trip, but there is many snow slides and avalanche areas on the steep shores of Sweetheart Lake.



