November 30, 2011

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: Fourth 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 Fourth 6-Month Progress Report covering the period of June 2011 through November 2011.

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,

[Signature]

Duff W. Mitchell  
Business Manager  
Juneau Hydropower Inc.

Encl.
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 June 2011 through November 2011.

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 July 20 issued Draft Terrestrial and Wetland Delineation Study Plan for agency comment. Draft plan development involved consultations with various agencies.

On August 8, 2011 issued Scoping Document 1 for agency and public review.
August 25, 2011 received Fish Resource Permit from Alaska Department of Fish and Game Permit # SF 2011-280O to conduct fisheries assessment.


September 7, 2011 met with USFS personnel who were quite helpful in assisting JHI in submitting and getting approved USFS modifications to JHI special use permit to allow JHI to establish base camp and transport boat to Sweetheart Lake for the purpose of conducting environmental investigations at Sweetheart Lake.

September 8, 2011 conducted agency site visit with personnel from FERC, Alaska Department of Fish and Game, US Fish and Wildlife service and JHI personnel.
Site visit consisted of fly over of Sweetheart Lake and then hike from Gilbert Bay to the barrier falls of Sweetheart Lake.

October 7, 2011 submitted Notice of Affidavit of proof of publishing for Scoping Meeting notices.

October 7, 2011 submitted Alternative Licensing Progress Report

October 27, 2011 submitted final Cultural Studies Plan

October 2011, Kai Environmental, Terrestrial Resources contractor for JHI had three meetings set up with agencies that responded to the “Draft Terrestrial Resources and Wetland Delineation Study Plan/Scope of Work” dated July, 2011. The purpose of the meetings was to clarify the agency response comments and determine what field studies and reports would be needed for the Sweetheart Lake Hydropower Project. The meetings were scheduled with:

- Dennis Chester with the U.S. Forest Service
- Ryan Scott with the Alaska Department of Fish and Game Wildlife Conservation Service
- Scott Frickey with the U.S. Fish and Wildlife Service

October 2011, Duff Mitchell had conversations with Sue Walker, NOAA; Terry Schwartz, Alaska Department of Natural Resources and Rick McClure of USDA NRCS regarding the use and equipment of weather stations and powering weather stations in inclement weather without refueling.

October 2011, Duff Mitchell met with ADFG management personnel to inquire on: obtaining personal use fisheries names for future recreational survey; and past ADFG research data on limnology, water quality, aquatics, bathymetric and sockeye stocking information. ADFG has been extremely helpful in locating and making available prior research material.
November 2011, received detailed aquatics and limnology study information from ADFG for work performed from 1989 to 1993 at Sweetheart Lake. This data will be incorporated in our on-going studies. In addition, we received a list of the 2011 personal use fisher permit holders that we will use in upcoming recreational user surveying.

November 29, 2011 JHI submitted ADFG Fish Resource Permit data submission form outlining dates and fish capture/recording data conducted in our fall expedition/studies to Sweetheart Lake.

6. Studies conducted During Last Period:

Initiated study components in the following areas:

Wetlands Delineation conducted by Bosworth and Associates
Began Terrestrial vegetative studies by Bosworth and Associates

Initiated Wildlife studies by Kai Environmental

Hired contractor to conduct Cultural studies

Initiated Fisheries and Aquatics Study research conducted by Juneau Hydropower Inc. This research required the establishment of a base camp at Sweetheart Lake for the month of September 2011. In addition to providing bear protection for geology, engineer and environmental contractors; the following research was conducted by JHI personnel: Conducted several weeks of fisheries hoop net and minnow trap collections in Sweetheart Lake and incoming streams. Emplaced and installed temperature recording devices in Sweetheart Lake and in surrounding incoming streams to monitor year round water temperatures. Collected temperature readings along with Dissolved Oxygen and pH readings in the outlet and mid lakes of Sweetheart Lake. Conducted bathymetric readings for the outlet lake and portion of the mid lake portions of Sweetheart Lake. JHI personnel conducted wildlife viewing to determine specific species presence at Sweetheart Lake. JHI personnel conducted stream survey and salmon count for Sweetheart Creek from high tide to barrier falls in early September 2011.

Conducted Geological assessment and analysis for construction suitability for rock resources located at Sweetheart Lake. Study and assessment conducted by Lachel and Associates. Substantial rock samples sent to laboratory for analysis for construction purposes as well as to determine mineralization and leaching aspects of shoreline rock that potentially could be quarried at potential borrow sites.

JHI Engineers performed Engineering reconnaissance and evaluation for proposed infrastructure sites.
Reviewed 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.

JHI Contractor and JHI personnel installed two project stream gages and took discharge measurements. One gage was installed at Sweetheart Creek near the location of the original 1915 to 1927 USGS stream gage. A second stream gage was installed near the outlet of Sweetheart Lake. The stream gages deployed are designed and programmed to take daily readings.

JHI has initiated and conducted discussions with prospective transmission line management and contractors for Project powerhouse and interconnections to Snettisham transmission line.

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. This includes posting of Scoping Meeting videos.

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

JHI will work with FERC to issue Scoping Document 2 based on agency input from Scoping Document 1.

JHI will issue: final Terrestrial and Wetlands Study; Recreational Study and Aquatics Study Plan in the next 6 months and will continue to complete components of these studies.

JHI will conduct and complete components of the Cultural Study Plan in the next six months.

JHI will continue its engineering design of key infrastructure components.

JHI will apply for and obtain 2012 ADFG Fish Resource Permit for 2012 fisheries studies.

JHI will apply for and obtain Cultural Studies permit from the USFS before commencing 2012 on the ground investigation for the JHI Cultural Studies Plan.

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 preparation of study plans and Scoping Document #2.

JHI will meet with US Army Corp. of Engineers to go over Wetlands delineation study preliminary results.

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 Base Camp  
Installation of Sweetheart Lake Stream gage
Sweetheart Lake Minnow Traps  Sweetheart Lake Hoop Net Fish Specimens

Sweetheart Lake Temperature Gage  Temperature Gage emplacement

Wetlands Delineation and Vegetative mapping
Sweetheart Lake Geological Study Rock samples for lab testing