Kenai Hydro, LLC
3977 Lake Street
Homer, AK 99603

October 1, 2011

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

Preliminary Permit Application No. 2 for Kenai Hydro, LLC - Grant Lake Project (FERC No. 13212)

Dear Secretary Bose:

Kenai Hydro, LLC (KHL) is submitting a second preliminary permit application for the proposed Grant Lake Hydroelectric Project. KHL was issued a preliminary permit to begin exploring the feasibility of constructing this hydropower project on October 1, 2008. This initial preliminary permit is set to expire on September 30, 2011. The Project would be located on Grant Creek, which drains Grant Lake, in south-central Alaska near the town of Moose Pass.

KHL has made substantial progress on the proposed Grant Lake Project, as documented in the six, 6-month progress reports (Attachment 1) filed since the Commission granted the Project's preliminary permit on October 7, 2008.

This application, along with the attached progress reports, documents KHL's advancement toward the filing of a license application for the proposed Grant Lake Project. Exhibits 1 through 4 contain information that reflects progress made over the past three years in identifying and addressing issues associated with the proposed Project, conducting resource studies and engineering analyses, and coordinating with appropriate resource agencies and other stakeholders.

KHL is currently solidifying plans, in consultation with stakeholders, for completing resource evaluations; developing a detailed preliminary engineering design, including access and transmission corridors; assessing potential Project impacts; developing proposed protection, mitigation, and enhancement measures; and resolving any remaining outstanding issues. Based on progress to date, and plans for the near future, KHL believes the issuance by the Commission of a second preliminary permit for the proposed Grant Lake Project is justified.

Sincerely:

Mike Salzetti

Mike Salzetti

Kenai Hydro, LLC
3977 Lake Street
Homer, AK 99603

Project Manager
Kenai Hydro, LLC
3977 Lake Street Homer,
AK 99603
(907) 283-2375

cc:

Regional Director
Portland Regional Office
Federal Energy Regulatory Commission
101 S. W. Main Street
Suite 905
Portland, OR 97204

Kenai Hydro, LLC
3977 Lake Street
Homer, AK 99603

LIST OF POTENTIALLY AFFECTED ENTITIES AND INTERESTED PARTIES

Alaska Center for the Environment
807 G Street, Suite 100
Anchorage, AK 99501

Alaska Conservation Foundation
441 W. 5th Ave, #402
Anchorage, AK 99501-2340

Alaska Department of Environmental Conservation
555 Cordova Street
Anchorage, AK 99501

Alaska Department of Fish and Game
Director, Sport Fish Division
P.O. Box 25526
Juneau, AK 99802-5526

Alaska Department of Natural Resources
Director, Division of Mining, Land, and Water
550 W. 13th Ave., Suite 1070
Anchorage, Alaska 99501

Alaska Department of Natural Resources
State Historic Preservation Office
550 w. 7th Avenue, Suite 1310
Anchorage, Alaska 9950 7-3565

Alaska Fly Fishers
200 W. 34th Avenue #1233
Anchorage, AK 99503

American Rivers
1025 Vermont Ave NW, #720
Washington, DC 20005

Anchorage Fish & Game Advisory Committee
P.O. Box 90386
Anchorage, AK 99509

Anchorage Fish and Wildlife Field Office
605 W. 4th Ave., Room G-61
Anchorage, AK 99501

CIRI (Cook Inlet Region, Inc.)
P.O. Box 93330
Anchorage, AK 99509-3330

Cooper Landing
PO Box 809
Cooper Landing, AK 99572

Friends of Cooper Landing
P.O. Box 815
Cooper Landing, AK 99572

Alaska Power & Telephone Company
P.O. Box 3222
193 Otto Street
Port Townsend, WA 98368

Kenai Natives Association
215 Fidalgo Ave., Suite 101
Kenai, AK 99611-7776

Kenai Peninsula Borough
514 Funny River Road
Soldotna, AK 99669

Kenai River Center
514 Funny River Rd
Soldotna, AK 99669

Kenai River Special Management Area Advisory Board
P.O. Box 1247
Soldotna, AK 99669

White Rock Mining
Tom Harkreader
7400 Clairborne Circle
Anchorage, AK 99502

Kenai Hydro, LLC
3977 Lake Street
Homer, AK 99603

Kenai River Sportfishing Association
P.O. Box
Soldotna, AK 99669

US Fish and Wildlife Service
Kenai River Special Management Area
P.O. Box 104
Soldotna, AK 99669

Kenai Watershed Forum
P.O. Box 2937
Soldotna, AK 99669

Kenaitze Indian Tribe
P.O. Box 988
Kenai, AK 996 1

National Marine Fisheries Service
700 W. 9th Street, P.O. Box 21668
Juneau, AK 99802-1 668

National Park Service, Rivers and Trails Program
240 W. 5th Ave.
Anchorage, AK 99501

Salamatof Native Association, Inc.
P.O. Box 2682
Kenai, AK 99611-2682

Natural Heritage Institute
7511 Labrador Circle, Suite 100
Anchorage, AK 99502

Moose Pass Chamber of Commerce
P.O. Box 558
Moose Pass, AK 99631

Trout Unlimited, Alaska Council
P.O. Box 876675
Wasilla, AK 99687-6675

US Bureau of Land Management
6881 Abbott Loop Road
Anchorage, AK 99507

US Department of Interior
Office Environmental Policy
1689 C Street, Room 119
Anchorage, AK 99501-5126

US Environmental Protection Agency
514 Funny River Road
Soldotna, AK 99669

USDA Forest Service
Chugach National Forest
3301 C. Street, Suite 300
Anchorage, AK 99503

US Geological Survey
1209 Orca Street
Anchorage, AK 99501-4898

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BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION
APPLICATION FOR PRELIMINARY PERMIT

(1) Kenai Hydro, LLC applies to the Federal Energy Regulatory Commission (Commission) for a second preliminary permit for the proposed Grant Lake Project, as described in the attached exhibits. This application is submitted so that the Applicant may acquire and maintain priority of application for a project license under Part I of the Federal Power Act, while obtaining data and performing tasks needed to determine the project's feasibility and to support an application for a license.

(2) The location of the proposed project is:

State or Territory: Alaska
County: Kenai Peninsula Borough
Township or nearby town: Moose Pass
Stream or other body of water: Grant Lake, Grant Creek (see Exhibit 4 for location map)

(3) The exact name, business address, and telephone number of the applicant are:

Kenai Hydro, LLC
3977 Lake Street
Homer, AK 99603
(907) 283-2375

The exact name and business address of the person authorized to act as agent for the applicant in this application is:

Mike Salzetti
Project Manager
3977 Lake Street
Homer, AK 99603
(907) 283-2375

(4) Kenai Hydro, LLC is a limited liability company and is not claiming preference under section 7(a) of the Federal Power Act.

(5) The proposed term of the requested permit is 36 months.

(6) There is no existing dam or other project facility at the proposed project location.

Kenai Hydro, LLC
3977 Lake Street
Homer, AK 99603

EXHIBIT 1: PROJECT DESCRIPTION

Proposed Project Location

The proposed Grant Lake Hydroelectric Project would be located near the community of Moose Pass, Alaska (pop. 206), approximately 25 miles north of Seward, Alaska (pop. 3,016), just east of the Seward Highway (State Route 9); this highway connects Anchorage (pop. 279,671) to Seward. The Alaska Railroad parallels the route of the Seward Highway, and is also adjacent to the Project area. The community of Cooper Landing (pop. 369) is located 24 miles to the northwest and is accessible via the Sterling Highway (State Route 1) which connects to the Seward Highway approximately 10 miles northwest of Moose Pass. The proposed Project location is in the mountainous terrain of the Kenai Mountain Range.

Proposed Project Facilities

The proposed Project is comprised of a diversion dam at the outlet to Grant Lake (under consideration), an intake structure in Grant Lake, a tunnel, a surge tank, a penstock, a powerhouse, a tailrace detention pond, a switchyard with disconnect switch and step-up transformer, an overhead or underground transmission line, and a pole-mounted disconnect switch where the line intersects the existing City of Seward distribution line or Chugach Electric's transmission line depending on the selected access road. The powerhouse would contain two Francis turbine generating units with a combined rated capacity of 5.0 MW with a total design flow of 385 cfs.

Project Features

The proposed Project features have been developed based upon existing physical and environmental information and are conceptual in nature. As part of the pre-filing consultation process, additional information would be obtained through technical and environmental studies, research, and consultation with equipment manufacturers and resource agencies. As new information becomes available, the design features presented below will continue to be refined and/or modified to accommodate any changed conditions, including maintenance of instream flow requirements or other resource management needs. A final proposal will be presented in the license application to the Commission. Project features as currently envisioned are summarized in the following table.

Number of Generating Units	2
Turbine Type	Francis
Rated Generator Output	
Unit 1	1.0 MW
Unit 2	4.0 MW
Maximum Rated Turbine Discharge	
Unit 1	75 cfs
Unit 2	310 cfs

Turbine Centerline Elevation	521 ft msl	
Normal Tailwater Elevation		
Minimum	512 ft msl	
Maximum	515 ft msl	
Average Annual Energy	19,700 MWh	
Normal Maximum Reservoir Elevation	698 ft msl	
Normal Minimum Reservoir Elevation	687 ft msl	
Gross Head	183 ft	
Net Head at Maximum Rated Discharge	171.6 ft	
Grant Lake		
Drainage Area	44 mi^2	
Surface Area	1,790 ac	
Active Storage Volume	15,900 ac-ft (Elevation 698 to 687 feet msl)	
Average Annual Natural Outflow	139,650 ac-ft	
Average Annual Natural Outflow	193 cfs	
Grant Creek Diversion		
Type (2 options under consideration)	None (natural lake outlet)	Concrete Gravity Dam
Maximum Height	NA	2 ft
Overall Width	NA	120 ft
Spillway Crest Length	NA	60 ft
Crest Elevation	698 ft msl	700 ft msl
Water Conveyance		
Intake	Tower	
Invert Elevation	655 ft msl	
Lower Pressure Pipeline		
Type	Welded steel	
Length	200 ft	
Diameter	48 in	
Pressure Tunnel		
Type	10-ft horseshoe	
Length	3,200 ft	
Velocity at Maximum Turbine Discharge	3.9 fps	
Surge Tank		
Diameter	96 in	
Base Elevation (preliminary)	650 ft msl	
Top Elevation (preliminary)	760 ft msl	
Penstock		
Type	Welded steel	
Length	360 ft	
Diameter	72 in	
Powerhouse		
Approximate Dimensions	45 ft x 60 ft x 30 ft high	
Finished Floor Elevation	526 ft msl	

Tailrace Detention Pond	
Approximate Acreage	5 ac
Approximate Capacity	15 ac-ft
Outlet Conveyance Length	300 ft
Tailrace	
Type	Open channel
Length	200 ft
Option 1	
Transmission Line	
Type	Overhead or underground
Length	Approximately 3.5 miles
Voltage	24.9 kV
Access Roads	
Type	Single lane gravel surfacing with turnouts
Length	Approximately 4.0 miles; including 3.0 miles to the powerhouse and 1.0 mile to the intake (portions will be new road)
Option 2	
Transmission Line	
Type	Overhead or underground
Length	Approximately 1.0 mile
Voltage	115 kV
Access Roads	
Type	Single lane gravel surfacing with turnouts
Length	Approximately 1.95 miles; including 1.0 mile to the powerhouse and 0.95 mile to the intake (this will be a new road)

Grant Creek Diversion

Two concepts are currently being evaluated for water control at the outlet of Grant Lake. The first option would consist of a natural lake outlet that would provide control of flows out of Grant Lake. A new low level outlet would be constructed on the south side of the natural outlet to release any required environmental flows when the lake is drawdown below the natural outlet level. The outlet works would consist of a 48-inch diameter pipe extending back into Grant Lake, a gate house, regulating gate, controls and associated monitoring equipment. The outlet would discharge into Grant Creek immediately below the natural lake outlet.

In the second option, a concrete gravity diversion structure would be constructed near the outlet of Grant Lake. The gravity diversion structure would raise the pool level by a maximum height of approximately 2 ft, and the structure would have an overall width of approximately 120 ft. The center 60 ft of the structure would have an uncontrolled spillway section with a crest elevation at approximately 700 ft mean sea level (msl). Similar to the first option, a low level outlet would be constructed on the south side of the natural outlet to release any required

environmental flows when the lake is drawn down below the natural outlet level. The outlet works would consist of a 48-in diameter pipe extending back into Grant Lake, a gate house a regulating gate, controls, and associated monitoring equipment. The outlet would discharge into Grant Creek immediately below the diversion structure.

Grant Lake Intake

The water intake would be a concrete tower structure located approximately 500 ft east of the natural outlet of Grant Lake and adjacent to the shore. The intake structure would have base dimensions of approximately 15 ft by 15 ft. A small house at the top of the intake would contain the gate hoist mechanism and controls.

The intake would allow for drawdown of Grant Lake to elevation 687 ft msl thereby creating approximately 15,900 ac-ft of active storage for the project between elevations 698 ft msl and 687 ft msl. The intake can be designed to allow the Project to draw water near the surface at various levels of storage, if deemed necessary. The invert of the intake would be at elevation 655 ft to provide for adequate submergence to the tunnel. The front of the intake would be protected by a steel trashrack. Downstream of the trashrack would be a shut-off gate.

Tunnel

An approximately 3,200-ft-long, 10-ft diameter horseshoe tunnel would convey water from the intake to directly above the powerhouse at about elevation 623 ft msl. It is expected that the tunnel would be supported with rock bolts and shotcrete. It may be partially lined depending upon the geotechnical conditions encountered during excavation.

Near the end of the tunnel an 8-ft diameter surge shaft would be constructed. The surge shaft would extend to the ground surface at approximately elevation 750 ft msl. At the ground surface the shaft would transition to a steel pipe section. The pipe section would have a top elevation of 760 ft msl.

Penstock

At the outlet to the tunnel, a section of penstock would convey water to the powerhouse. The penstock would be constructed of welded steel and would be approximately 360 ft long with an outside diameter of 72 in. The penstock would bifurcate at the bottom immediately upstream of the powerhouse.

Tailrace

The tailrace would be an open channel approximately 200 ft long and would convey water back to Grant Creek at an approximate elevation of 508 ft msl. The tailrace would be excavated from in-situ material and armored with riprap to prevent erosion. A control weir with an elevation of 512 ft msl would be constructed immediately downstream of the powerhouse at the beginning of the tailrace section.

Tailrace Detention Pond

An off-stream detention pond would be created to provide a storage reservoir for flows generated during the rare instance when the units being used for emergency spinning reserve are needed to provide full load. In this situation, the additional powerhouse flows would be diverted into the detention pond and then released slowly back into Grant Creek. The detention pond would be located immediately south of the powerhouse and would have a capacity of approximately 15 ac-ft and a surface area of approximately 5 ac. Water would be conveyed back to Grant Creek through a pipeline.

Powerhouse

The powerhouse would be located on the south bank of Grant Creek near the end of the canyon section. The powerhouse would be approximately 45 ft by 60 ft by 30 ft high and would have a finished floor elevation of 526 ft msl. The powerhouse would be a pre-engineered metal building on a concrete foundation.

The powerhouse would contain two horizontal Francis type turbine/ generator units with a rated total capacity of 5,000 kW, guard valves, and associated switchgear and controls. Unit 1 would have a design flow of 75 cfs and a rated capacity of 1,000 kW. Unit 2 would have a design flow of 310 cfs and a rated capacity of 4,000 kW. The size of each unit would be optimized once all flow conditions are known. Centerline of the turbine and generator units would be approximately 521 ft msl. The turbines could operate over a range of flows from the maximum of 385 cfs to a minimum of around 22 cfs depending on conditions. The tailwater elevation at the powerhouse would range from approximately elevation 512 to 515 ft msl depending upon the output level. The powerhouse would also contain a bypass valve to release flows during power generation outages.

Transmission Line/Switchyard

Both underground and overhead transmission lines to deliver energy from the Project to the grid are being evaluated. In addition to any overhead transmission structures, the facilities would include a switchyard at the powerhouse consisting of a pad-mounted disconnect switch and a pad-mounted step-up transformer. The transmission line would run from the powerhouse parallel to the access road where it would intersect the City of Seward distribution line or Chugach Electric's transmission line depending on the selected access road. The interconnection would have a pole mounted disconnect switch.

If used, the poles would be designed as tangent line structures on about 250-ft centers. Design of the line would also incorporate the latest raptor protection guidelines. Collision avoidance devices would be installed on the line at appropriate locations to protect migratory birds.

Access Roads

The Grant Lake Project would require an access road to both the powerhouse located near the base of the Grant Creek canyon and to the intake at Grant Lake. This access road would be

primarily used during project construction but afterwards, the powerhouse would be visited approximately once a week and the intake visited approximately once a month beginning just after the ice melts and continuing until just before freeze up. The powerhouse access road would be maintained year around. The intake access road would not be maintained in winter.

Two access road routes to the powerhouse are being evaluated. The first option would be approximately three miles long beginning at the south end of Lower Trail Lake and crossing the Alaska Railroad tracks at an existing crossing located at approximately MP 25.2 of the Seward Highway. The first mile of this road would follow the existing Falls Creek mining road. At a point approximately one mile up the Falls Creek road the access road would continue northward to the powerhouse staying between Lower Trail Lake and Vagt Lake. As currently proposed, portions of the road come near, or intersect with the commemorative Iditarod National Historic Trail (INHT) that would be under construction soon. The location of the road or the trail may be adjusted to avoid or mitigate potential impacts of the access road on the trail.

The second option would leave the Seward Highway at approximately MP 26.9. This route would travel eastward to cross Trail Lakes at the downstream end of the narrows between Upper and Lower Trail Lakes and then continue eastward to the powerhouse. This route would be approximately 1 mile long. It would cross the Alaska Railroad (ARRC) tracks near an existing railroad crossing for a private driveway. The road would cross the narrow channel connecting Upper and Lower Trail Lakes with an approximately a 100-foot-long single lane bridge. This bridge is proposed as a clear span with the west abutment located on bedrock and the east abutment on fill. The proposed route would avoid cuts and travel along the base of some small hills on the south side of Grant Creek to the Power House. This proposed access road would have one 90-degree crossing of the INHT.

The intake access road would be approximately one mile long, beginning at the powerhouse. The road would ascend a 230-foot bluff to get to the top of the southern lip of the Grant Creek canyon. The road would then generally follow the southern edge of the canyon until it descends to Grant Lake.

The road would be gravel with a 14-foot top width. Maximum grade would be 16 percent. Periodic turnouts would be provided to allow construction traffic to pass. Fifty-foot radius curves would be used to more closely contour around the small steep hills of bedrock to limit the extent of the excavation and the height of the embankments.

Proposed Project Boundary

The proposed Project boundary for the Grant Lake Project is shown in Exhibit 4. The proposed Project Boundary would encompass each of the Project features described above, and the area around Grant Lake up to approximately contour elevation 700 ft msl. The corridors for the access roads/transmission line and penstock would be approximately 75 ft from each side of the centerline. The specific delineation of the proposed Project Boundary, in terms of survey coordinates, would be made after study work has been completed and would be included as part of the license application.

The legal description and ownership of lands (ADNR 2006) within the proposed Project boundary are provided in the table below. All land is referenced to the Seward Meridian.

Township	Range	Section	Ownership
5N	1E	28	USDA Forest Service
5N	1E	29	USDA Forest Service
5N	1E	31	State patented land
5N	1E	32	State patented land
5N	1E	33	USDA Forest Service
5N	1E	34	USDA Forest Service
5N	1E	35	USDA Forest Service
5N	1E	36	USDA Forest Service
4N	1E	1	USDA Forest Service
4N	1E	2	USDA Forest Service
4N	1E	5	USDA Forest Service
4N	1E	6	State patented land
4N	1E	7	State patented land
4N	1E	18	State patented land
4N	1W	1	State patented land
4N	1W	12	State patented land/Private
4N	1W	13	State patented land/Private

No portion of the potential Project area has been designated as a Wilderness Area, recommended for designation as a Wilderness Area, or designated as Wilderness Study Area. No portion of the potential Project area has been included in the Wild and Scenic River System.

Proposed Construction and Development Schedule

The Project will be constructed over a 30-36 month timeframe after the issuance of the Project license. Construction will begin in the April timeframe with the construction of access roads. Construction of the Grant Lake diversion structure (if necessary) and intake will be performed by first drawing down the lake elevation using a pair of diversion trenches cut through the outlet of the lake. This method will allow the lake to be drawn down to approximately elevation 680 ft msl over the winter, if necessary. Next, the intake will be constructed behind an in-situ rock cofferdam. Once the intake and tunnel are complete the in-situ cofferdam will be removed by blasting. The Grant Lake diversion structure, if needed, will be constructed at the same time. The precise construction schedule and methods will be described further in the license application.

Benefits of the Proposed Project

Power from the Project would be available to customers of Homer Electric Association and other areas served by the existing transmission grid. Power from the proposed Project would be important to the citizens of the Kenai Peninsula and would be environmentally beneficial and cost effective as an alternative source of energy to offset fossil fuel generation. The power from the proposed Project would reduce consumption of non-renewable carbon-based energy sources, thereby helping to improve air quality in Kenai Peninsula Borough. Kenai Hydro, LLC will be the sole owners of property rights as the "Applicant."

Kenai Hydro, LLC
3977 Lake Street
Homer, AK 99603

EXHIBIT 2: PROPOSED ONGOING STUDY PROGRAM

The study program under the second preliminary permit term would constitute a continuation of that developed and executed during the initial permit term. Attachment 1 contains the six progress reports submitted during the initial preliminary permit term. The reports detail the advancements made during the period from October 1, 2008 through September 30, 2011. Completion of studies and analyses will culminate in the filing of a License Application with the Commission and conducted according to the Commission's licensing regulations.

Study Program Elements

Engineering and Feasibility

- Hydrology
- Bathymetry
- Stream gauging
- Dam stability and soils tests and analysis
- Preliminary design
- Tunnel geotechnical feasibility study
- Transmission line route
- Access corridors
- Financial analysis

Environmental Studies

- Aquatic resources
- Water resources
- Terrestrial resources
- Rare, Threatened and Endangered (RTE) species inventory
- Cultural resources
- Visual and recreation resources
- Project effects analysis

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Stakeholder Consultation

The following entities have been, or are potential, stakeholders (i.e., agencies, NGOs, Native Corporations, and communities) in the licensing process for the Grant Lake Project):

Alaska Center for the Environment
Alaska Conservation Foundation
Alaska Department of Environmental Conservation
Alaska Department of Fish and Game, Director, Sport Fish Division
Alaska Department of Natural Resources, Director, Division of Mining, Land, and Water
Alaska Department of Natural Resources, State Historic Preservation Office
Alaska Fly Fishers
American Rivers
Anchorage Fish & Game Advisory Committee
Anchorage Fish and Wildlife Field Office
CIRI (Cook Inlet Region, Inc.)
Cooper Landing
Crown Point
Friends of Cooper Landing
Kenai Natives Association
Kenai Peninsula Borough
Kenai River Center
Kenai River Special Management Area Advisory Board
Kenai River Sportfishing Association
Kenai River Special Management Area
Kenai Watershed Forum
Kenaitze Indian Tribe
Lawing
Moose Pass
National Marine Fisheries Service
National Park Service, Rivers and Trails Program
Natural Heritage Institute
Salamatof Native Association, Inc.
Trout Unlimited, Alaska Council
US Bureau of Land Management
US Department of Interior
US Environmental Protection Agency
USDA Forest Service, Chugach National Forest
US Geological Survey
White Rock Mining

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Study Program Schedule

	2011	2012				2013				2014			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Project Critical Path Issues													
INHT location/Project compatibility determination													
Confirm Road Access Option													
Confirm Study Team													
Engineering Facilities Proposal													
Confirm initial operations proposal/facilities feasibility prior to study													
Revise ops proposal in coordination with fisheries/Reach 5 information													
Aquatic Resources													
Consult regarding changes to study plan (water & aquatic resources)													
Field Season (Start January 2012)													
Consult regarding data gaps/contingencies for 2013 efforts													
Draft Study Report													
Final Study Report													
Water Resources													
Hydrology/Temperature Field Collection													
Other Study Components Field Season													
Draft Study Report													
Final Study Report													
Cultural Resources													
Consult regarding changes to study plan													
Field Work													
Draft Study Report													
Final Study Report &HPMP (if necessary)													
Terrestrial Resources (Recreation and Visual & Wildlife)													
Consult regarding changes to study plan													
Field Work													
Draft Study Report													
Final Study Report													
Licensing													
Draft License Application (March 2014)													
Final License Application (August 2014)													
Preliminary Permit Expires (December 31, 2014)													

Milestones Fieldwork and related consultation Report drafting/consultation with agencies regarding reports Contingency fieldwork

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EXHIBIT 3: COSTS, FINANCING, AND MARKETING

The estimated cost of conducting studies, investigations, tests, surveys, and mapping and developing preliminary design specifications for the proposed Grant Lake Project is:

- Natural Resource Studies and Licensing - $1,735,000
- Engineering - $140,000

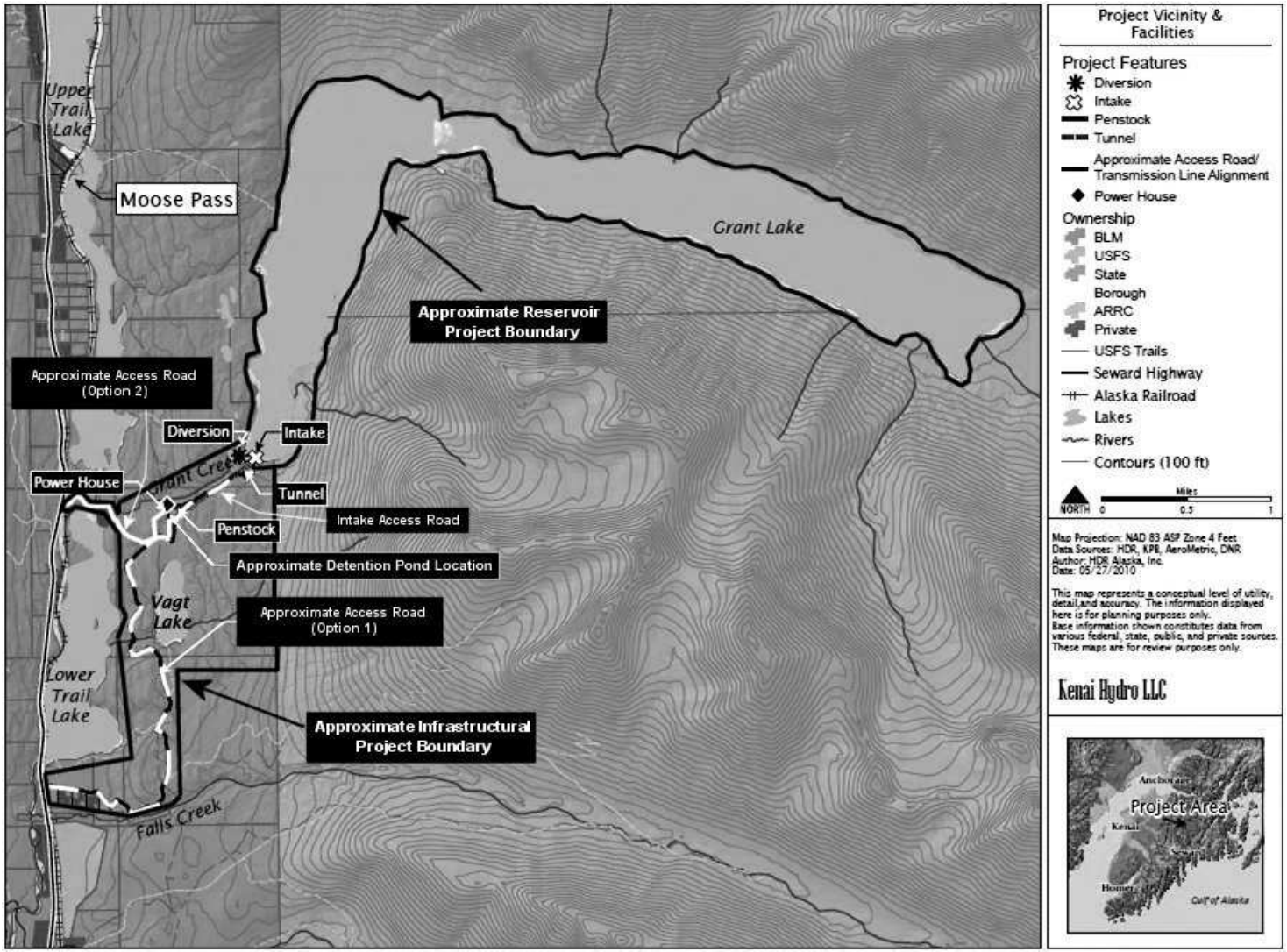
Costs detailed are for work to be conducted under the second preliminary permit and do not include expenses incurred during the first preliminary permit.

Funds will be drawn from a combination of grant funding and internal financing as identified below:

- AEA Round V G - $1,184,000
- Internal Financing - $296,000
- Internal Financing, Legislative Appropriation and/or Grant Funding - $395,000

The power will be sold to Homer Electric Association.

EXHIBIT 4: MAP OF PROPOSED PROJECT AREA



Map of the proposed and approximate Grant Lake Project boundary.

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LITERATURE CITED

Alaska Department of Natural Resources, Land Records Information Section. 2006. General Land Status, vector digital data. ADNR, LRIS: Anchorage, AK.

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3977 Lake Street
Homer, AK 99603

THIS APPLICATION FOR A PRELIMINARY PERMIT FOR GRANT LAKE / CREEK PROJECT IS EXECUTED IN THE

State of: Alaska

Borough of: Kenai Peninsula

by: Kenai Hydro, LLC, 2525 C Street, Suite 500, Anchorage, AK 99503

being duly sworn, deposes and says that the contents of this application are true to the best of his knowledge or belief

The undersigned applicant has signed the application this 30th day of September 2011.

Kenai Hydro, LLC

By: Mike Salzetti

Mike Salzetti (Project Manager)

Subscribed and sworn before me, a Notary Public of the State of Alaska, this 30th day of September 2011.

/SEAL/ Teresa L. Gamble

(Notary Public in and of Alaska)

My Commission expires: 2/2/12

OFFICIAL SEAL
STATE OF ALASKA
TERESA L. GAMBLE
NOTARY PUBLIC
My Comm. Exp.: 2/2/12

Kenai Hydro, LLC
3977 Lake Street
Homer, AK 99603

Attachment 1

Grant Lake Progress Reports During 1st Preliminary Permit Term
(October 1, 2008 – September 30, 2011)

Kenai Hydro, LLC
2525 C Street, Suite 500
Anchorage, AK 99503

March 31, 2009

The Secretary
Federal Energy Regulatory Commission
ATTN: DHAC, PJ-12.2
888 First Street, NE
Washington, DC 20426

- FILED ELECTRONICALLY -

RE: First Six Month Progress Report for the Grant Lake Project, FERC Project No. 13212

Dear Secretary:

Kenai Hydro, LLC (KHL) hereby submits the first six month report for the period of October 1, 2008 to March 31, 2009 for the Grant Lake project, pursuant to Article 4 of the Preliminary Permit issued on October 7, 2008.

ACTIVITIES DURING THE REPORTING PERIOD

Engineering and Environmental Studies

The following reconnaissance level engineering and environmental efforts were initiated:

- Field investigation of the project site
- Review of existing information available on the project
- Development of Conceptual Facility Arrangements and Alternatives
- Facility Cost Estimates
- Energy Production Estimates
- Identification of Potential Environmental Considerations
- Land, Mineral and Water Rights Status
- Permitting and Licensing Requirements
- Prepared Draft Preliminary Environmental Baseline Study Plans

Stakeholder Outreach and Consultation

KHL conducted several individual and public interactive meetings with the organizations and agencies listed below, as well as numerous private individuals and businesses. The purpose of these meetings was to introduce the project concepts and proposed studies and to solicit feedback from these interested parties.

- US Forest Service
- US Fish and Wildlife Service
- US Army Corps of Engineers
- US National Parks Service

- Alaska Department of Fish and Game
- Alaska Department of Natural Resources
- Alaska State Parks
- NOAA Fisheries
- Resurrection Bay Conservation Alliance
- Alaska Center for the Environment
- National Heritage Institute – Hydropower Reform Coalition
- Kenai River Sportfishing Association
- Kenai River Special Management Area Advisory Board
- Kenai River Center Multi-Agency Staff Meeting

KHL started development of a web site to facilitate the exchange and update of information related to the project(s). The domain name registered for the site is www.kenaihydro.com.

ACTIVITIES PROPOSED FOR THE NEXT REPORTING PERIOD

Engineering and Environmental Studies
KHL will continue to refine its engineering evaluation and modeling of the project and finalize study plans for the 2009 summer season to obtain baseline environmental information. Field data collection should begin in the late spring and continue to the end of the summer season.

Stakeholder Outreach and Consultation
Meetings will continue to be conducted with interested parties, both as outreach events and to obtain input as study plans are developed and finalized prior to the field season.

License Application Determination
KHL will continue to evaluate project feasibility and whether or not to proceed with filing an NOI and PAD for this project. If the project remains viable, it is expected that KHL would file a license application before the preliminary permit expires in October 2011.

Please feel free to contact me with any questions regarding this report or for additional information as needed.

Sincerely,

Steve Gilbert
Manager
6921 Howard Avenue
Anchorage, AK 99504
(907) 333-0810

Kenai Hydro, LLC
2525 C Street, Suite 500
Anchorage, AK 99503

September 30, 2009

The Secretary
Federal Energy Regulatory Commission
ATTN: DHAC, PJ-12.2
888 First Street, NE
Washington, DC 20426

- FILED ELECTRONICALLY -

RE: Second Six Month Progress Report for the Grant Lake Project, FERC Project No. 13212, April 2009 – September 2009

Dear Secretary:

Kenai Hydro, LLC (KHL) hereby submits its second six month report for the period of April 1, 2008 to September 30, 2009 for the Grant Lake project, pursuant to Article 4 of the Preliminary Permit issued on October 7, 2008.

ACTIVITIES DURING THE REPORTING PERIOD

Engineering and Environmental Studies

The following reconnaissance level engineering and environmental efforts were initiated:

- Field Investigation of Design Elements
- Finalized Baseline or Reconnaissance Level Environmental Field Study Plans
- Collected Baseline Aquatics Field Data (Study Plan Implementation)
- Continued Search & Review of Existing Information Available on the Project
- Applied for Water Rights
- Refined Conceptual Facility Arrangements and Alternatives
- Obtained ground survey and LiDAR topographic data
- Prepared Draft and Filed Final Notice of Intent (NOI) and Pre-Application Document (PAD) for the combined Grant Lake/Creek and Falls Creek hydro project

Stakeholder Outreach and Consultation

KHL conducted many individual consultations and public interactive meetings with the organizations and agencies listed below. The purpose of these consultations and meetings was to introduce the project concepts and solicit feedback to prepare study plans and inform the Pre-Application Document. A complete consultation record is available in the PAD filed with FERC on August 6, 2009.

- US Forest Service
- US Fish and Wildlife Service
- US Army Corps of Engineers

- US National Parks Service
- Alaska Department of Fish and Game
- Alaska Department of Natural Resources
- Alaska State Parks
- NOAA Fisheries
- Kenai Peninsula Borough Lands Committee
- Kenai Area Fisherman's Coalition
- Kenai River Professional Guides Association

KHL actively maintains a web site to facilitate the exchange and update of information and calendar related to the project(s). The domain name registered for the site is www.kenaihydro.com.

ACTIVITIES PROPOSED FOR THE NEXT REPORTING PERIOD

Engineering and Environmental Studies
KHL expects to receive and review reports summarizing the engineering and field data collection from the summer's activities. KHL will also be preparing draft study plans for the 2010 field season for review and comment during the formal TLP consultation process over the winter.

Stakeholder Outreach and Consultation
Consultations and outreach activities will be formally conducted as part of the TLP process FERC approved for the project. Schedule details are still being confirmed, but the intent is to have formal study plans approved in advance of the spring 2010 field season.

License Application Determination
KHL filed the NOI and PAD for this project on August 6, 2009 to maintain a timely schedule for filing a license application within the term of the preliminary permit period; however, KHL continues to update and evaluate the project feasibility. If the project remains viable, it is expected that KHL would file a license application before the preliminary permit expires in October 2011.

Please feel free to contact me with any questions regarding this report or for additional information as needed.

Sincerely,

Steve Gilbert
Manager
6921 Howard Avenue
Anchorage, AK 99504
(907) 333-0810

Kenai Hydro, LLC
3977 Lake Street
Homer, AK 99603

March 31, 2010

The Secretary
Federal Energy Regulatory Commission
ATTN: DHAC, PJ-12.2
888 First Street, NE
Washington, DC 20426

- FILED ELECTRONICALLY -

RE: Third Six Month Progress Report for the Falls Creek (Project No. 13211) and Grant Lake (Project No. 13212) Hydroelectric Projects, October 2009 – March 2010

Dear Secretary:

Kenai Hydro, LLC (KHL) hereby submits its third six month report for the period of October 1, 2009 to March 31, 2010 for the Falls Creek and Grant Lake hydroelectric projects, pursuant to Article 4 of the Preliminary Permits issued on October 7, 2008.

ACTIVITIES DURING THE REPORTING PERIOD

Engineering and Environmental Studies

The following reconnaissance level engineering and environmental efforts were initiated:

- Prepared draft study plans for the various resource areas
- Finalized the 2009 Baseline Environmental Field Study Report

Stakeholder Outreach and Consultation

KHL held its joint meeting of agencies, public and tribes on November 12, 2009 and invited public comment on the project. This meeting was held in Seward, Alaska approximately 25-miles from the project site.

KHL also held a meeting in Moose Pass on January 13, 2010 to invite public comment on the project. The content of this meeting was identical to the November 12 presentation with additional slides detailing comments already received from the public.

Comments received as a result of the November 12, 2009 and January 13, 2010 meetings have been summarized and filed with FERC.

KHL provided presentations at the following public meetings:

- Alaska Department of Fish & Game Advisory Committee Meeting, January 11, 2010 at the Central Peninsula Sports Center in Soldotna, Alaska.

- Kenai River Special Management Area Board Meeting, January 14, 2010 at the Kenai River Center, Soldotna, Alaska.
- National Hydropower Association, Alaska Regional Meeting, March 11, 2010 in Juneau, Alaska.

KHL Partnership Update

Alaska Wind Energy withdrew from the Kenai Hydro, LLC partnership in early February 2010, leaving Homer Electric Association as the sole owner of the business entity. KHL updated contact information with FERC following this change.

KHL actively maintains a web site to facilitate the exchange and update of information and calendar related to the project(s). The domain name registered for the site is www.kenaihydro.com.

ACTIVITIES PROPOSED FOR THE NEXT REPORTING PERIOD

Engineering and Environmental Studies

KHL will be determining what field studies to conduct during the 2010 field season. Funding constraints may limit the scope of studies this year. If KHL can afford the full scope of study work, KHL will notify FERC so that it may begin the Early Scoping process.

Stakeholder Outreach and Consultation

KHL will continue consultations as necessary with agencies, tribes and the public.

License Application Determination

KHL will endeavor to file a license application before the preliminary permit expires in October 2011.

Please feel free to contact me with any questions regarding this report or for additional information as needed.

Sincerely,

Brad Zubeck
Project Engineer

Kenai Hydro, LLC
3977 Lake Street
Homer, AK 99603

September 30, 2010

Secretary Kimberly D. Bose
Federal Energy Regulatory Commission
Attn: DHAC, PJ-12.2
888 First Street, NE
Washington, DC 20426

- FILED ELECTRONICALLY -

RE: Fourth Six Month Preliminary Permit Progress Report for the Grant Lake (Project No. 13212) and Falls Creek (Project No. 13211) Hydroelectric Project, April 2010 – September 2010

Dear Secretary Bose:

Kenai Hydro, LLC (KHL) hereby submits its fourth six month report for the period of April 1, 2010 to September 30, 2010 for the Grant Lake and Falls Creek hydroelectric project, pursuant to Article 4 of the preliminary permits issued on October 7, 2008.

ACTIVITIES DURING THE REPORTING PERIOD (APRIL 2010 – SEPTEMBER 2010)

Engineering and Environmental Studies

The following environmental study efforts were conducted:

- A reconnaissance geological survey was conducted at the Grant Lake outlet in support of on-going engineering facilities design work.
- Preliminary engineering efforts continue to refine the operations and facilities proposal as outlined in KHL's August 13, 2010 submittal to FERC.
- Study plans for Terrestrial Resources, Aquatic Resources, Recreation and Visual Resources, Cultural Resources, and Water Resources were provided for agency and public review in May 2010.
- Field efforts as outlined in the Aquatic Resources study plan were conducted between May 2010 and July 2010.
- Wildlife and wetland surveys were conducted in the Project area in May and June 2010, as outlined in the study plans.
- Reconnaissance efforts to identify recreation uses and trail locations for the Recreation and Visual Resources study were conducted in June 2010.
- Hydrologic gaging stations were re-established at locations identified in the Water Resources study plan in May 2010.

Stakeholder Outreach and Consultation

In addition to participating in the formal scoping process hosted by FERC, KHL continued consultation regarding proposed licensing studies and Project facilities. These consultation activities included:

- KHL hosted an environmental site visit and participated in FERC's scoping meetings on June 2 and 3, 2010.
- KHL hosted a study plan review meeting with agencies and interested parties on June 3, 2010.
- KHL provided study plans identified above for a 60-day comment period.

- KHL initiated consultation with the Alaska Department of Natural Resources and the U.S. Forest Service regarding the Iditarod National Historic Trail location in the Project vicinity.
- KHL held an instream flow and aquatic resources technical work group meeting in Anchorage, Alaska on June 22, 2010.
- KHL presented its Project proposal and timeline to the Kenai Peninsula Borough Assembly on June 22, 2010.
- KHL initiated consultation under Section 106 of the National Historic Preservation Act, and held a meeting to review the study plan and proposed Area of Potential Effect with consulting parties on June 24, 2010.

ACTIVITIES PROPOSED FOR THE NEXT REPORTING PERIOD (OCTOBER 2010 – MARCH 2011)

KHL will continue resource study, engineering, and consultation efforts in support of its license application.

Engineering and Environmental Studies
KHL plans to process 2010 field study data, develop revised study plans, and respond to agency and public comments.

Stakeholder Outreach and Consultation

- KHL will continue consultation regarding the Iditarod National Historic Trail location in the Project vicinity.
- KHL will consult with agencies regarding revised study plans and an updated consultation schedule for license application development.

Please feel free to contact me (907.283.2375 or msalzetti@homerelectric.com) with any questions regarding this filing.

Sincerely,

/s/ Mike Salzetti

Mike Salzetti
Project Manager
Kenai Hydro, LLC

cc: Service List and Mailing List for Project Nos. 13211 and 13212

Kenai Hydro, LLC
3977 Lake Street
Homer, AK 99603

March 31, 2011

Secretary Kimberly D. Bose
Federal Energy Regulatory Commission
Attn: DHAC, PJ-12.2
888 First Street, NE
Washington, DC 20426

- FILED ELECTRONICALLY -

RE: Fifth Six-Month Preliminary Permit Progress Report for the Grant Lake (Project No. 13212) and Falls Creek (Project No. 13211) Hydroelectric Project, October 2010 - March 2011

Dear Secretary Bose:

Kenai Hydro, LLC (KHL) hereby submits its fifth six-month progress report, i.e., for the period of October 1, 2010 to March 31, 2011, for the proposed Grant Lake Project and Falls Creek Project, pursuant to Article 4 of the preliminary permits issued on October 7, 2008. KHL has determined that the Falls Creek Project is infeasible at this time and is submitting to FERC a petition to surrender the preliminary permit for the Falls Creek Project.

To fully evaluate Grant Lake Project design and consult with agencies regarding potential Project effects and associated study efforts, KHL determined that a revised Project development schedule was necessary. As a result, field studies were suspended in August 2010, pending resolution of the comments received on the proposed study plans. Field studies will resume, with modifications as necessary, following resolution of these issues.

ACTIVITIES DURING THE REPORTING PERIOD (OCTOBER 2010 - MARCH 2011)

Stakeholder Outreach and Consultation

- KHL received stakeholder comments regarding existing draft study plans.
- KHL/Homer Electric (HEA) hosted a legislative luncheon on December 18, 2010 in Kenai to discuss its generation plans, which include the Grant Lake Project. In attendance were state Senator Tom Wagoner and his aide Amy Seitz, state Representative Kurt Olson and his aide Jennifer Senette, and Speaker of the House Mike Chenault.
- On January 7, 2011, KHL/HEA representatives met with state Senate President Gary Stevens to discuss the Grant Lake Projects.
- KHL maintained the Kenai Hydro website (www.kenaihydro.com) posting the latest announcements and documents for public access. This site continues to serve as a conduit for information, including a library of existing information, a calendar of events, and a repository for contact information for interested parties.

Engineering and Environmental Studies

- KHL developed a table of responses to address all stakeholder comments on draft study plans.
- KHL produced a status update of 2010 resource studies.
- KHL revised all resource study plans in accordance with stakeholder comments.
- KHL developed a revised Project schedule, which will allow for the implementation of the comments received on the draft study plans and resolve the conflict with the Iditarod National Historic Trail (INHT) (see below).

Iditarod National Historic Trail

KHL continued its outreach to and consultation with concerned parties regarding possible resolutions of the conflict with the INHT.

- On October 8, 2010, KHL met with personnel from the Alaska Department of Natural Resources (AK-DNR) to discuss possible resolutions of the conflict with the INHT route.
- On February 7, 2011, KHL met with the Kenai Watershed Forum director to discuss possible resolutions to the conflict with the INHT route and to update the director on the progress of the Grant Lake Project.
- On February 10, 2011, KHL met with a few members of the Kenai River Special Management Area to discuss possible resolutions to the conflict with the INHT route and to update them on the progress of the Grant Lake Project.

ACTIVITIES PROPOSED FOR THE NEXT REPORTING PERIOD (APRIL 2011 - SEPTEMBER 2011)

KHL will continue preparations for reinitiating resource studies, continue engineering design work, and continue efforts in support of its license application.

Engineering and Environmental Studies

- KHL plans to finalize revised resource study plans in consultation with stakeholders and process 2010 field study data in preparation for reinitiating field studies.
- KHL plans to refine and finalize designs for Project facilities.

Stakeholder Outreach and Consultation

- KHL plans to distribute the study plan comment-response table and revised study plans to stakeholders.
- KHL will continue consultation regarding the INHT location in the Project vicinity and steps needed to ameliorate potential Project impacts.
- KHL will consult with stakeholders regarding revised study plans and an updated consultation schedule for license application development.

Please feel free to contact me (907.283.2375 or msalzetti@homerelectric.com) with any questions regarding this filing.

Sincerely,

/s/ Mike Salzetti

Mike Salzetti
Project Manager
Kenai Hydro, LLC

cc: Service List and Mailing List for Project Nos. 13211 and 13212

Kenai Hydro, LLC
3977 Lake Street
Homer, AK 99603

September 30, 2011

Secretary Kimberly D. Bose
Federal Energy Regulatory Commission
Attn: DHAC, PJ-12.2
888 First Street, NE
Washington, DC 20426

- FILED ELECTRONICALLY -

RE: Sixth Six-Month Preliminary Permit Progress Report for the Grant Lake (Project No. 13212), April 1, 2011 – September 30, 2011

Dear Secretary Bose:

Kenai Hydro, LLC (KHL) hereby submits its sixth six-month progress report, i.e., for the period of April 1, 2011 through September 30, 2011, for the proposed Grant Lake Project.

To fully evaluate Grant Lake Project design and consult with agencies regarding potential Project effects and associated study efforts, KHL determined that a revised Project development schedule was necessary. As a result, field studies were suspended in August 2010, pending resolution of the comments received on certain elements of the project design, including the access road and transmission line corridors, which could have affected the remaining scope of study to support the license application. Field studies are expected to resume, with modifications as necessary, in 2012 following resolution of these issues.

With the expiration of this preliminary permit on September 30, 2011, KHL is submitting a second Preliminary Permit Application (PPA) with FERC. KHL is currently solidifying plans, in consultation with stakeholders, for completing resource evaluations; completing a detailed preliminary engineering design, including access and transmission corridors; assessing potential Project impacts; developing proposed protection, mitigation, and enhancement measures; and resolving any remaining outstanding issues. Based on the substantial progress to date, and plans for the near future, KHL believes the issuance by the Commission of a second preliminary permit for the proposed Grant Lake Project is justified.

ACTIVITIES DURING THE REPORTING PERIOD (April 2011 – SEPTEMBER 2011)

Stakeholder Outreach and Consultation

- On April 14, a Grant Lake Project update was presented to the Kenai River Special Management Area (KRSMA) board.
- On May 4th, a meeting with the US Forest Service, Alaska Department of Natural Resources (ADNR), and Alaska State Parks was conducted to address the Iditarod National Historic Trail (INHT) and project road alignment issues. The proposed solution was generally accepted, but only ADNR could outline the process required to reroute the INHT as proposed. The USFS and State Parks are working to clarify their processes required to reroute the 0.5 mile of trail that is required to resolve this issue. This meeting was an important step in achieving a successful solution to this issue.
- In August and September, KHL provided the U.S. Fish and Wildlife Service with a draft copy of the revised IFIM study plan, the gps coordinates of the previously studied instream flow transects and aerial photography of the area to assist the USFWS with an IFIM training class that the USGS was conducting for the USFWS, ADF&G and NOAA Fisheries.
- KHL maintained the Kenai Hydro website (www.kenaihydro.com), posting the latest announcements and documents for public access. This site continues to serve as a conduit for information transmittal, including a library of existing information, a calendar of events, and a repository for contact information for interested parties.

Environmental Studies

- KHL posted a summary of the 2010 Field Investigations on the Kenai Hydro website.
- KHL posted the Response to Comments Table on the 2010 Study Plans on the Kenai Hydro website.
- In September, KHL reconnoitered and flagged the proposed 0.5 mile reroute of the INHT to further study the proposed rerouted area and to facilitate a future Agency field trip.
- In September, the weather station data on Grant Creek was downloaded and stored on the project server and the batteries in the weather station were changed.

Administrative

- KHL prepared and submitted the required deliverables to gain release of the unallocated Alaska Energy Authority (AEA) grant funds. An invoice in the amount of $181,358 was submitted with Progress Report #11 and subsequently paid. Kenai Hydro has requested that AEA formally close out Grant #2195428.
- KHL met with several potential contractors to discuss their firms' capabilities and qualifications to participate in a planned competitive bid process to implement the 2012 field study plans.
- KHL received an AEA Round IV grant in the amount of $1,184,000 to support the FERC licensing effort. A grant agreement was signed on August 9th.
- KHL submitted a $4,000,000 AEA Round V grant application requesting future construction funding for the project should a FERC license be granted.

- KHL presented a short Project overview at the 2011 Regional NHA Conference in Girdwood, Alaska.

CONTINUING ACTIVITIES IN SUPPORT OF LICENSE APPLICATION DEVELOPMENT

In anticipation of being granted a second preliminary permit by FERC, KHL will continue preparations for reinitiating resource studies, completing engineering design work, and developing its license application for the Grant Lake Project.

Engineering and Environmental Studies

- KHL plans to finalize revised resource study plans in consultation with stakeholders and process 2010 field study data in preparation for reinitiating field studies.
- KHL plans to refine and finalize engineering designs for Project facilities.

Stakeholder Outreach and Consultation

- KHL plans to continue consultation with the resource agencies and other stakeholders on Project plans and resource studies.
- KHL plans to continue to work on the proposed rerouting of the INHT.

Administrative

- KHL plans to prepare a bid package for the 2012 field study efforts.

Please feel free to contact me (907.283.2375 or msalzetti@homerelectric.com) with any questions regarding this filing.

Sincerely,

/s/ Mike Salzetti

Mike Salzetti
Project Manager
Kenai Hydro, LLC

cc: Service List and Mailing List for Project No. 13212