STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES DIVISION OF MINING, LAND AND WATER

PRELIMINARY DECISION

ADL 232556 Kodiak Electric Association Application for Lease

Application for Leas AS 38.05.810(e)

This Preliminary Decision (PD) is the initial determination on a proposed disposal of interest in State land and is subject to comments received during the public notice period. The public is invited to comment on this PD. The deadline for commenting is **5:00 PM December 19, 2017**. Please see the Comments section on page 10 of this decision for details on how and where to send comments for consideration. Only the applicant and those who comment have the right to appeal the Final Finding and Decision (FFD).

Proposed Action:

The Department of Natural Resources (DNR), Division of Mining, Land and Water (DMLW), Southcentral Regional Office (SCRO), has received a request from Kodiak Electric Association (KEA) to lease approximately 20 acres of land for 55 years near Terror Lake on Kodiak Island, Alaska. The location of the project area is further described as being within Sections 5, 6, and 8 of Township 30 South, Range 23 West, Seward Meridian. KEA is proposing to use the site for the construction, operation, and maintenance of a water conveyance system, referred to as the Upper Hidden Basin Diversion project (UHBD), to divert supplementary water to the existing Terror Lake reservoir. The supplementary water will allow for more hydropower to be generated from the existing Terror Lake Hydroelectric project (TLH) for the community of Kodiak Island.

Background:

The TLH project is one of the four hydroelectric projects which comprise the Four Dam Pool project, which originated in the 1980s. The other projects that make up Four Dam Pool include the Soloman Gulch, Swan Lake, and Tyee Lake projects.

The proposed UHBD project supplements the existing and adjacent TLH project, which includes four DNR, DMLW authorization components: an issued private non-exclusive easement under

ADL 204024; two issued leases under ADL 204022 and ADL 206462; and an application for reissuance of an expired lease under ADL 215520.

ADLs 204024, 204022, and 206462 are currently issued to the Southeast Alaska Power Agency (SAPA). In 2009, SAPA sold the TLH project to KEA. Prior to issuance of the lease, ADL 232556, KEA is required to complete all steps necessary for SCRO to consider the assignments of ADLs 204022, 204024, and 206462. This includes, but is not limited to, submitting a request for SCRO to approve these assignments, submitting all required fees related to this request, and providing all information that SCRO needs in order to fully consider this request and make its determination. Additionally, if the requested assignments are approved, KEA is required to fulfill any further obligations necessary to complete the assignment of these authorizations prior to the issuance of a lease under ADL 232556.

The UHBD project infrastructure will consist of two diversion dams (D-East and D-West), a buried water conveyance pipe, an upstream and downstream tunnel portal, and a subterranean tunnel. The eastern dam embankment (D-East) will convey water to the western dam embankment (D-West) through a five-foot diameter buried conveyance pipe, approximately 0.4 miles long. From D-West, the water will be conveyed to an upstream tunnel portal, through a 1.2-mile subterranean tunnel to a downstream tunnel portal eventually flowing into Terror Lake. Some of the subterranean tunnel and the entire downstream portal are not included in the proposed lease area as this infrastructure will be located on federal lands.

The UHBD project will be accessed by a 4.5-mile gravel road from the existing Terror Lake project to the two dam embankments. The 4.5-mile gravel road accessing the UHBD project infrastructure will be authorized under an easement, ADL 232213. The Entry Authorization (EA) for KEA to begin constructing the access road was issued on April 12, 2017. ADL 232213 will connect the D-West and D-East dams on the surface.

SCRO is considering the issuance of a 55-year lease under AS 38.05.810(e) to KEA for the construction, operation, and maintenance of infrastructure related to the UHBD project. SCRO would issue an EA for construction of the site prior to lease issuance.

Scope of Review:

The scope of this decision is to determine if it is the State's best interest to issue a 55-year lease to KEA.

<u>Authority:</u>

This lease application is being adjudicated pursuant to AS 38.05.035(b)(1) and AS 38.05.035(e) Powers and Duties of the Director; AS 38.05.070(c) Generally; AS 38.05.810(e) Public and Charitable Use; and AS 38.05.945 Notice.

The authority to execute the FFD, the EA, and the lease has been delegated to the Regional Managers of DMLW.

Administrative Record:

Case file ADL 232556 constitutes the administrative record for this lease application.

Legal Description, Location, and Geographical Features:

The State land where this proposed lease site is located is described as follows:

- Legal description: Sections 5, 6 and 8 of Township 30 South, Range 23 West, Seward Meridian.
- Geographical location: Terror Lake, Kodiak Island.
- Approximate Lat/Long: D-west: 57°35'48"N, 153°00'44"W; D-east: 57°35'36"N, 152°59'56"W; upstream tunnel and subterranean pipe: 57°35'37"N, 153°0'59"W.
- Area geographical features: Remote and mountainous terrain typically inundated with snow from October to June. Ground cover ranges from bare bedrock to wetlands and shrubs.
- Existing surveys: None.
- Municipality/Borough: Kodiak Island Borough.
- Native Corporations/Federally Recognized Tribes: Koniag, Inc.
- Size: 20 acres, more or less.

Title:

The State of Alaska holds fee title to the subject land under U. S. Patent No. 50-87-0022 dated October 22, 1986. A DNR Title Report (RPT-9719) issued on April 6, 2017 from DMLW's Realty Services Section attests that the patent is subject to valid existing rights, including reservations, easements, and exceptions in the U.S. Patent or any other state or federal conveyance, and in acts authorizing the issue thereof, easements, rights-of-way, covenants, conditions, reservations, notes on the plat, and restrictions of record reservations of record, if any.

Third Party Interests:

There are no known third party interests.

Classification and Planning:

The project area is subject to the Kodiak Area Plan, Upland Unit – Kodiak Region (Kodiak Island), Management Units K-36, K-37, K-51A, K-51B, and K-52, depicted on Map number 3-6. The classification for this site is General Use, Public Recreation and Tourism-Dispersed Recreation, and Grazing. General Use lands contain one or more resource values, none of which is of sufficiently high value to merit designation as a primary use, or, because of the size of the unit, a variety of uses can be accommodated with appropriate siting and design considerations. Lands classified as Public Recreation and Tourism-Dispersed apply to areas that offer or have a high potential for dispersed recreation or tourism, and where desirable recreation conditions are scattered or widespread rather than localized. Grazing lands appropriate for supporting domestic livestock are managed in a manner that provides for other public uses and minimizes impacts on habitat, recreation, water quality, and other values.

State lands near the proposed project area that are classified as General Use may be managed for a variety of uses, not limited to resource development, provided that future authorizations minimize impacts to recreation and tourism, and wildlife habitat. Due to the remoteness of the project area, it is unlikely the project will interfere with public use of state lands designated as Public Recreation and Tourism-Dispersed. Best management practices should be implemented by KEA to avoid any conflicts with the public's use of state lands for recreation activities, specifically hunting and fishing. Currently, there are no grazing leases located near the proposed project area and the potential for future grazing authorizations near the proposed project area is low due to the remoteness of the area and geographical features. In the event there is a request from the public for grazing, the State shall consult with KEA to minimize impacts of the public's use of state lands for grazing authorizations near the proposed project area and state lands for grazing authorizations near the proposed project area is low due to the public for grazing activities. Further, the State reserves the right to determine if grazing authorizations near the proposed project area area in the best interests of the State.

ADL 232556 is consistent with the Kodiak Area Plan and the plan does not prohibit the development of the UHBD project. The proposed lease is also subject to the Kodiak Island Borough Comprehensive Plan.

Traditional Use Findings:

The proposed site is located within the Kodiak Island Borough. Pursuant to AS 38.05.830 a traditional use finding is not required.

Access:

Current access to the remote proposed lease area is by helicopter or backcountry hiking. Future access to the proposed lease area will be by an easement, ADL 232213, which is currently authorized under an EA.

Agency Review:

An agency review was conducted on April 6, 2017. The deadline for agency comments was April 26, 2017.

The following agencies were included in the review:

- DNR DMLW Mining
- DNR DMLW Water
- DNR Office of History and Archaeology/State Historic Preservation Office
- DNR Contract Administration

- DNR Division of Oil and Gas
- DNR Natural Resource Conservation and Development Board
- Department of Fish and Game (ADF&G) Habitat
- ADF&G Wildlife Conservation
- Department of Environmental Conservation
- Department of Transportation and Public Facilities
- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife Service
- U.S. Coast Guard
- National Oceanic and Atmospheric Administration
- National Marine Fisheries Service
- Kodiak Island Borough
- City of Kodiak
- Kodiak Soil and Water Conservation District

SCRO received two comments, one from USACE on April 7, 2017, and a comment from ADF&G on April 18, 2017.

USACE Comment:

USACE stated, "a preliminary review of the project area appears to contain waters of the United States. We recommend the project proponent coordinate the project plans early in their process to ensure they are taking the necessary considerations in their designs to avoid and minimize impacts to the aquatic resources within the project area.

Additionally, for unavoidable impacts to waters of the United States, the applicant would be required to submit a Department of the Army application for our review and processing."

SCRO Response:

KEA will coordinate with all federal agencies as well as comply with local, state, and federal regulations to avoid or minimize impacts to aquatic resources within the project area.

ADF&G Comment:

ADF&G stated, "The proposed lease area is known brown bear habitat. ADF&G's Kodiak wildlife biologists have been working with KEA staff and Kodiak National Wildlife Refuge staff to mitigate the potential disturbances to brown bears during the construction phase of this project. ADF&G continues to recommend that heavy construction activities in the proposed lease area not occur until after June 1 each season in order to avoid disturbances to denning brown bears. As previously discussed with KEA, ADF&G is not opposed to barge construction at the Terror Lake outflow or equipment staging prior to June 1, however, we encourage KEA to begin road clearing

along ADL 232213 as late in the season as possible in order to minimize potential disturbances to denning bears."

SCRO Response:

KEA will continue to coordinate with ADF&G and Kodiak National Wildlife refuge staff to mitigate potential disturbances to bears. KEA is required to comply with local, state, and federal laws related to wildlife, as well as comply with stipulations within the EA and final lease.

Lease Discussion:

KEA has requested a 55-year lease to construct the UHBD project for the purpose of expanding the existing TLH project in order to generate additional electricity for the Kodiak Island community.

KEA is proposing to utilize state lands to construct two dams, a buried conveyance pipe, an upstream portal, and a subterranean tunnel for the purpose of conveying additional water to the Terror Lake reservoir.

Authorizing the project under a permit or a short-term lease are not considered plausible alternatives due to KEA's intent of long-term use of state lands. Further, existing authorizations for the existing TLH project are issued under long term leases; ADL 204022 has a term of 35 years and 206462 has a term of 55 years. Issuance of a long-term lease, ADL 232556, for the UHBD project is consistent with the existing leases for the TLH project.

DMLW is proposing to issue a 55-year land lease under statutory authority AS 38.05.810(e) to KEA for the use, operation, and maintenance of a water conveyance system related to the existing TLH project, as shown on page 17 of this document. This action is in the best interests of the State as it will provide additional power generation capacity to existing renewable energy infrastructure, transmitting energy to the Kodiak Island community.

The proposed lease will be subject to the terms of SCRO's standard lease document (available for review upon request) and any Additional Stipulations based, in part, upon the following considerations.

Development Plan:

The Development Plan (DP) attached to this decision (Attachment A) and dated July 19, 2016 is under consideration by SCRO. Should the proposed lease be granted, it is anticipated that the DP will need to be updated throughout the life of the lease as activities and/or infrastructure are added or subtracted. All updates must be approved, in writing, by SCRO before any construction, deconstruction, replacement of infrastructure, or change in activity will be permitted. SCRO reserves the right to require additional agency review and/or public notice for changes that are deemed by SCRO to be beyond the scope of this decision.

Hazardous Materials and Potential Contaminants:

Once constructed, ADL 232556 will not generate, use, store, transport, dispose of or otherwise come in contact with toxic or hazardous materials. ADL 232556 consists of passive, non-mechanical infrastructure. During construction of ADL 232556, it is anticipated that it will be necessary to use and store fuel for heavy equipment use.

The use and storage of all hazardous substances must be done in accordance with existing federal, state, and local laws. Debris (such as soil) contaminated with used motor oil, solvents, or other chemicals may be classified as a hazardous substance, and must be removed from the site and disposed of in accordance with state and federal law.

Lease Performance Guaranty (bonding):

In accordance with AS 38.05.035, AS 38.05.860, and 11 AAC 96.060(a) Performance Guaranty, KEA will be required to submit performance guaranties for the lease site.

- **\$30,000.00 EA Cash Bond:** This bond will serve as a default to be forfeited, all or in part, if the applicant fails to submit the survey, appraisal, or other documentation necessary for the issuance of the lease by the required due dates. The bond will be returned once survey, appraisal or other requirements of the EA are complete.
- **\$500,000.00 Performance Bond:** This bond will remain in place for the life of the proposed lease. The bond amount is based upon the level of development, amounts of hazardous material/substances on site, and the perceived liability to the State. This bond will be used to ensure the applicant's compliance with the terms and conditions of the lease issued for their project. This bond amount will be subject to periodic adjustments and may be adjusted upon approval of any amendments, assignments, reappraisals, changes in the DP, changes in the activities conducted, or changes in the performance of operations conducted on the authorized premises, and as a result of any violations to one or more of the authorizations associated with this project.
- **Reclamation Bond:** SCRO is reserving the right to require a reclamation bond due to noncompliance issues during the term of the lease or near the end of the life of the project.

Insurance:

In accordance with 11 AAC 96.065 Insurance, KEA will be required to submit proof of liability and worker's compensation insurance to SCRO, with the State of Alaska listed as a "NAMED" insured party. KEA will be responsible for maintaining such insurance throughout the term of the EA and the lease.

Survey:

KEA must complete an approved survey according to the requirements and standards of DMLW's Survey Section prior to lease issuance. The draft survey must be submitted for review to the Survey Section within **one year** of issuance of the survey instructions. If the submitted survey is accepted by DMLW, the measurements identified will be used to accurately calculate the total acreage. The survey must depict the leased boundaries, roads and any improvements within the lease boundaries.

Compensation/Appraisal:

In accordance with AS 38.05.840, State-owned land may only be leased if it has been appraised within two years before lease issuance. SCRO has coordinated with DMLW's Appraisal Unit, and KEA will be required to provide an appraisal of the site before the proposed lease will be issued. Once the appraisal has been approved by DMLW, the annual lease fee will be set at fair market value of the proposed leasehold. Furthermore, in accordance with AS 38.05.105, the proposed EA and lease will be subject to reappraisal at five-year intervals after the issuance of the proposed authorization.

Entry Authorization:

SCRO is proposing to authorize KEA entry onto State land through the issuance of an EA while they are completing the required construction, survey, and appraisal for the site. The proposed EA would be issued after the FFD goes into effect. The effective date of the EA will be the start of the lease term.

The estimated annual fee for the proposed EA is **\$1,000.00**. Should the appraisal indicate that the EA annual fee is less than estimated, those overages will be credited to the leasehold's account. Should the appraisal indicate that the value of the land is greater than estimated, the shortfall must be remedied before the lease will be issued.

Subleasing:

Subleasing is permissible through AS 38.05.095, if the proposed lease is approved. All potential subleases must first be approved in writing by SCRO. Depending on the activity of any potential subleases, SCRO is reserving the right to reevaluate the need for further agency review and/or public notice before making a determination on the appropriateness of the proposed sublease. Sublease compensation to the State will be determined by SCRO according to AS 38.05.073(m),

under the authority of AS 38.05.075(a) Leasing Procedures. In any case, the sublease fee for commercial activities will not be less than 25% of the annual fee paid to name by the sublessee.

Assignment of Lease:

The proposed lease, if issued, may be transferred or assigned to another individual or corporation only with written approval from the State of Alaska. A lease will not be assigned to an entity if that entity does not meet the statutory requirements of the lease, or if the lessee is considered not to be in "good standing" with this or any other agency authorization.

Reclamation:

In accordance with AS 38.05.090(b), all lessees must restore their leased sites to a "good and marketable condition" within 120 days after the termination of their leases. What level of reclamation constitutes as being "good and marketable" is at the discretion of SCRO.

Public Notice of the Preliminary Decision:

Pursuant to AS 38.05.945, this PD will be advertised for a 30-day public comment period, starting on **November 20, 2017**. Courtesy notices will also be mailed or emailed to neighboring property owners, permit/lease holders, and other interested parties on **November 17, 2017**.

In addition, the Kodiak, Homer, and Ouzinkie post offices will be requested to post the notice pursuant to AS 38.05.945(b)(3)(C). The notice will also be posted on the State of Alaska Online Public Notice website pursuant to AS 38.05.945(b)(3)(B) located at: https://aws.state.ak.us/OnlinePublicNotices/Default.aspx

<u>Comment(s)</u>:

This decision is subject to both public and agency comments, and all comments received by the comment deadline will be considered in the FFD. Only those who comment and the applicant have the right to appeal this decision.

Written comments about this project must be received in this office no later than 5:00 PM on December 19, 2017 to be considered.

To submit comments, please choose one of the following methods:

Postal:	Department of Natural Resources
	Division of Mining, Land and Water
	Southcentral Region Office
	ATTN: April Parrish
	550 West 7th Avenue, Suite 900C
	Anchorage, AK 99501-3577
Email:	april.parrish@alaska.gov
Fax:	(907) 269- 8913

Questions about the lease portion of this project can be directed to April Parrish at (907) 269-8549. If public comments result in significant changes to the Preliminary Decision, additional public notice will be given. To be eligible to appeal the Final Finding and Decision, a person must provide written comments during the Preliminary Decision comment period per AS 38.05.035(i)-(m).

Signature page follows:

Recommendation:

DMLW has completed a review of the information provided by the applicant, examined the relevant land management documents, and has found that ADL 232556 is consistent with all applicable statutes and regulations. SCRO considered three criteria to determine if this project provided the greatest benefit to the State and the development and enjoyment of its natural resources. The criteria include direct economic benefit to the State, indirect economic benefit to the State, and encouragement of the development of the State's resources. Collection of the one-time filing fee and annual rent represents the direct economic benefit realized by the State. The proposed lease provides an indirect economic benefit to the State by allowing the public to utilize the State's natural resources for an individual economic benefit. The authorization of this lease is in the State's best interest as it encourages the development of the State's resources by providing energy infrastructure for the benefit of the communities on Kodiak Island. It is recommended that SCRO issue a 55-year lease for the UHBD project to KEA.

April Parrish, Natural Resource Specialist II

11/16/17

Preliminary Decision:

It is the determination of DMLW that it may be in the State's best interest to issue a land lease under AS 38.05.810(e) for 55 years to KEA, as described above. KEA will be required to submit a \$30,000.00 EA Cash Bond and a \$500,000.00 Performance Bond, and proof of insurance. The estimated annual EA fee is \$1,000.00. SCRO has coordinated with DMLW's Survey and Appraisal Unit, and KEA will be required to provide a survey and appraisal of the site before the proposed lease will be issued. Once the survey and appraisal have been approved by DMLW, the annual lease fee will be set at fair market value of the proposed leasehold. Furthermore, in accordance with AS 38.05.105, the proposed EA and lease fee will be subject to reappraisal at five-year intervals after the issuance of the proposed authorization. This application shall now proceed to public notice.

11-16-17

Clark Cox, Regional Manager Southcentral Regional Office, Division of Mining, Land and Water

<u>Attachments</u> Attachment A – Development Plan Attachment B – Location Map Date

Kodiak Electric Association, Inc. Terror Lake Hydroelectric Project, FERC License No. 2743

Upper Hidden Basin Diversion – Site Development Plan July 19, 2016

The scope of proposed activities to be conducted within the requested land lease area includes construction, operation and maintenance of a water conveyance system. The purpose of all activity and improvements within this land lease is for Kodiak Electric Association, Inc. (KEA) to supply renewably-generated electricity to the communities of Kodiak.

KEA is a rural electric cooperative that provides electricity to approximately 5,900 meters on Kodiak Island, Alaska in a service area that includes the region in and around the City of Kodiak, the US Coast Guard Base, Bells Flats, Chiniak, Pasagshak, and Port Lions. KEA is a not-for-profit 501(c)(12) cooperative organized under AS 10.25 for the purpose of supplying electric energy and power to its members, and qualifies for a non-competitive lease under AS 38.05.810(f).

Hydropower generated by the Terror Lake Hydroelectric Project is KEA's primary energy source. Enhancing water availability to Terror Lake with a new water diversion allows KEA's future electrical load growth to be continually powered with renewable energy. The proposed Upper Hidden Basin Diversion (UHBD) would supplement the available energy resources for the Terror Lake Hydroelectric Project by conveying water from the upper reaches of the Hidden Basin watershed to the existing Terror Lake reservoir. Once the supplementary water from the UHBD flows into the Terror Lake reservoir, more renewable hydropower can be generated from the existing Terror Lake Hydroelectric Project and fed directly into the KEA grid. KEA's existing powerhouse and electrical grid infrastructure is able to deliver the additional power to the Kodiak community without any modifications.

The existing Terror Lake reservoir is located in the remote north central area of Kodiak Island, approximately 30 miles southwest of the City of Kodiak. The proposed UHBD project area is located east of the Terror Lake reservoir on the other side of a mountain ridge. This mountain ridge between Terror Lake and the Upper Hidden Basin watershed serves as the boundary for Federal and State land. The Terror Lake reservoir is on Kodiak National Wildlife Refuge lands, and the proposed diversion project is on State lands. Public use of the area is extremely minimal.

Attached is a conceptual layout of the proposed UHBD. It is a basic, non-mechanical conveyance of water, with spur road accessibility. Site development would consists of 4 miles of a pioneer gravel road connecting the existing Terror Lake Hydroelectric Project access road to two small dam embankments. The eastern dam embankment (D-East) would convey water to the western dam embankment (D-West) through a buried 0.4 mile pipe. From the D-West location, the water would be conveyed to the existing Terror Lake reservoir through a 1.2 mile subterranean tunnel running underneath the mountain ridge.

Attachment A Development Plan ADL 232556 Page 12 of 23

The majority of the proposed UHBD area is located on lands owned by the State of Alaska, managed by the DNR. Approximately 140 acres would encompass a new access road that would connect the existing Project access road to the proposed UHBD site for construction, and subsequent inspection and maintenance. Approximately 15 acres would encompass the two diversion dam structures, and approximately five acres would encompass a subterranean tunnel that would connect the UHBD dams to the federal land boundary. The access road, conveyance pipe, and tunnel will be authorized under DNR easement ADL 232213, and the two diversion dam structures will be authorized under a separate DNR land lease. As requested by DNR staff, KEA herein files the land lease application accordingly.

The D-West site is located at 57° 35′ 48″ North, 153° 00′ 44″ West. The D-East site is located at 57° 35′ 36″ North, 152° 59′ 56″ West. The UHBD straddles the edges of USGS Quadrangle Maps Kodiak C-3 and C-4. A merged version of both USGS maps (scale of 1: 1:63,360) is provided to show the D-West and D-East sites. The exact size and location of the land lease parcels are approximate at this stage of project development.

Attached are photographs of the proposed land lease area. This mountainous terrain is typically inundated with snow from October to June. Ground cover ranges from bare bedrock and unconsolidated colluvium to palustrine emergent wetlands and scrub shrub. There are no trees in this upland, alpine area. Access to this remote site is currently provided by helicopter, or by backcountry hiking from the existing Terror Lake Hydroelectric Project access road. The existing Terror Lake Hydroelectric Project access road is a remote roadway used exclusively for KEA's official use for the operation and maintenance of the existing Terror Lake Hydroelectric Project, and it is accessible only by floatplane, boat, or helicopter. Attached is a photograph of the existing Terror Lake Hydroelectric Project access road and the area where the new diversion access road would be sited under requested easement ADL 232213.

This project is currently in the development phase. To assess the quantity of water available for diversion, KEA is collecting stream gauging data in this watershed as authorized by Land Use Permit LAS 29042, and is collecting geological information at the D-West and D-East sites as authorized by Land Use Permit LAS 30964. The temporary water use permit for the construction of UHBD under TWUA J2016-01 is secured. Water rights for the as-built operation of UHBD have been assigned water rights appropriation LAS 30459.

The final engineering design for the temporary and permanent structures, the exact construction methods, and defined inventory of construction equipment needed to build the road, diversion dams, conveyance pipe and tunnel are not yet determined. It is KEA's intent to finalize the engineering design in 2017, initiate construction of the diversion dams in 2018, and operate the new diversion by 2020. The as-built UHBD will not generate, use, store, transport, dispose of or otherwise come in contact with toxic and/or hazardous materials. The as-built diversion will not involve any storage tanks, either above or below ground. There would be no machinery left on site when construction activities are complete.

Attachment A Development Plan ADL 232556 Page 13 of 23

The Terror Lake Hydroelectric Project is a federally licensed hydropower facility as Federal Energy Regulatory Commission (FERC) Project No. 2743. Adding the UHBD to the Terror Lake Hydroelectric Project requires a FERC License Amendment, which is a formal process of coordinated multi-agency consultation and public scoping. Through this multi-year FERC License Amendment process, KEA has been working with stakeholders to develop project-specific plans and measures that minimize potential impacts. The final FERC License Amendment Application was filed on May 26, 2016.

Attachment A Development Plan ADL 232556 Page 14 of 23



Attachment A Development Plan ADL 232556 Page 15 of 23



Attachment A Development Plan ADL 232556 Page 16 of 23



Attachment A Development Plan ADL 232556 Page 17 of 23



Attachment A Development Plan ADL 232556 Page 18 of 23





Attachment B Location Map ADL 232556 Page 20 of 23

Kodiak Electric Association, Inc. Terror Lake Hydroelectric Project, FERC No. 2743 Upper Hidden Basin Diversion – Application for Land Lease



D-West Site in Winter



D-West Site in Summer

Attachment B Location Map ADL 232556 Page 21 of 23

Kodiak Electric Association, Inc. Terror Lake Hydroelectric Project, FERC No. 2743 Upper Hidden Basin Diversion – Application for Land Lease



D-East Site in Winter



D-East Site in Summer

Attachment B Location Map ADL 232556 Page 22 of 23

Kodiak Electric Association, Inc. Terror Lake Hydroelectric Project, FERC No. 2743 Upper Hidden Basin Diversion – Application for Land Lease



Terror Lake Hydroelectric Project, Exisiting Access Road



Site where New Access Road would spur off Existing Access Road

Attachment B Location Map ADL 232556 Page 23 of 23