

State of Alaska Department of Natural Resources  
Division of Mining, Land and Water  
Northern Regional Office

**Final Finding and Decision**

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**PUBLIC AND CHARITABLE LEASE OF STATE LAND TO GOLDEN VALLEY ELECTRIC ASSOCIATION**

AS 38.05.810(e)  
ADL 418853.

This Final Finding and Decision (FFD) is intended to update and complement the Preliminary Finding and Decision (PFD) dated July 15<sup>th</sup>, 2011 for this public & charitable lease application. The Preliminary and Final Decisions together constitute the final agency decision. In the event of any conflict, this decision supersedes the preliminary decision.

**Proposed Action**

Golden Valley Electric Association (GVEA) has applied to the Department of Natural Resources (DNR), Division of Mining, Land, & Water (DMLW) for a public and charitable lease under AS 38.05.810(e) to construct a 24 megawatt (MW) wind farm on the ridges above the Eva Creek valley, located east of the Nenana River approximately 15 miles northeast of Healy, Alaska. The proposed project includes a microwave communication site west of the Parks Highway that will provide communication back to Fairbanks. Power generated by the wind farm would feed into GVEA's 230 kilovolt (kV) Northern Intertie transmission line, which bisects the proposed project area. The power will then be available for distribution throughout GVEA's service area. GVEA has applied for a proposed lease term of 35 years.

DNR DMLW proposes to issue a public and charitable lease to GVEA for the purpose of constructing and operating the above-described wind farm for 25 years, subject to standard and special lease terms.

This document serves as the State's Final Finding & Decision regarding the lease of this property.

**Scope of Review and Proposed Finding**

The scope of this decision is to determine whether to issue a public and charitable lease under 38.05.810(e) to GVEA for the purpose of producing electricity via the construction and operation of a wind farm on State land, and what lease conditions should apply. The material sale and easements will be addressed in separate decisions.

**Authority**

The file is being adjudicated pursuant to AS 38.05.810(e), which allows DNR to negotiate at Fair Market Value (FMV), a public and charitable lease to licensed public utilities or licensed common carriers. Other applicable statutes and regulations include: AS 38.05.035(e), AS 38.05.285, AS 38.05.255, AS 38.05.945-946, and 11 AAC 58. The Director, Division of Mining, Land & Water (DMLW), is authorized by AS 38.05.035(a)(6) to act on behalf of the state in this matter.

The Director has subsequently delegated his authority under AS 38.05.035(b)(1) to the Northern Regional Manager, who has the authority to approve the best interest finding, and is delegated authority to impose stipulations and issue the lease.

**Administrative Record**

The administrative record for this project consists of ADL 418853- the lease casefile. Also referenced are ADL 419234, which consists of the casefile for the material sale contract; ADL 419216, which consists of the easement casefile for access roads and power lines between turbine sites and the road to Communication Site #2; ADL 419221, which is the administrative record for the Ferry Road realignment easement for the project; LAS 28218, the casefile for a land use permit to Brice Inc., and the Tanana Basin Area Plan.

## **Changes from the Preliminary Finding & Decision**

There have been no significant changes warranting additional public notice, only updates and refinements to the current development plan and information previously requested (title report) have been received.

DNR has received Title Reports for the areas proposed for lease.

The number of wind towers and tower sites have been changed and microsited. GVEA intends to erect 12 towers, not the 16 stated in the Preliminary Finding & Decision. The changes to the tower locations are reflected in the Location and Legal Description portion of this Final Finding & Decision.

The Avian Protection Plan is not available at the time of this Final Finding & Decision (FFD). The Fish and Wildlife Service has indicated that the plan needs to be in place prior to site operation. Details are discussed in the Public Comment section of this FFD. DNR is requiring the plan be in place prior to the operation of the windfarm.

A traffic plan has been submitted to and reviewed by DNR. The easement decisions will address traffic plan content. The lease stipulations will reference the requirement for a final approved traffic plan. See Stipulation #27 of Attachment A.

## **Location and Legal Description**

### **Geographic/Legal Description:**

The lease will encompass a total of approximately 33.68 acres within two primary geographical areas: 1) two subalpine ridge sites at the head of Moose and Eva creeks in the northern foothills of the Alaska Range; 2) and a communication site on the west side of the Parks Highway. The lease will have up to 17 individual footprints ranging in size from 50'x 50' (0.057 acres) to 360' x 500' (4.132 acres) for support buildings with the wind turbines each occupying a 300'x 300' (2.066 acres) footprint.

The legal description is as follows:

The wind turbines, support buildings, meteorological tower, microwave tower and transmission substation will be located with individual lease footprints in portions of the following:

Portions of Sections 3, 4, 10, 11 Township 10 South, Range 7 West, Fairbanks Meridian.

Comm Site #2, an off-site communication tower, legal description is as follows:

Within the SE ¼ of the SW ¼ of Section 17, Township 10 South, Range 8 West, Fairbanks Meridian. This site will occupy a 350'x 350' (2.87 acre) individual footprint. Access to this site is included in ADL 419216.

The locations for proposed facilities are shown on Attachment B of this document.

This legal description pertains only to the lease, administrative record ADL 418853. For locations of the material sites and easements, please see Final Finding and Decisions for ADL 419234 for material sites and ADLs 419216 and 419221 for easements.

**Borough/Municipality:** The subject lease parcels and entire project are within the Denali Borough.

**Regional/Village Corporation/Council:** Doyon Regional Corporation.

No regional or village corporation lands are within the proposed lease or project boundaries.

**U.S.G.S. Map:** Fairbanks A-4 and Fairbanks A-5 1:63,360 Quadrangle.

## **Title**

### **Acquisition:**

FM 10S 8W: GS 24 Patent# 50-84-0695

FM 10S 7W: GS 24 Patent# 50-87-0273, Patent# 50-96-0600

A title report has been prepared by the Division of Mining, Land, and Water- Title Section.

Title report RPT #2654, current as of 6/27/2011 includes Comm Site #2.

Title report RPT #2595-A, current as of 6/16/2011 includes the turbines, support buildings, meteorological tower, microwave tower and transmission substation lease footprints.

**Restrictions:** Standard, reservation of rights-of-way.

**Other Conflicts and Pending Interests:** Boot Hill Gold, Inc. (BHG) is the holder of several mining claims in the vicinity of the proposed project area

The following ADLs reference Boot Hill Gold mining claims: ADLs 607181, 607182, 607183, 607184, 607185, 607186, 607187, 607193, 607198, 607204, 607205, 612020, 612021, 612024, 612015, 612026, 612027, 612029, 612032, 613118, 613119, and 66192.

Usibelli Coal Mine has a gas exploration license under ADL 390606 in the area.

These authorizations are further considered in the Discussion and Alternatives portion of this Final Finding & Decision.

### **Background**

In 2010, Governor Sean Parnell's administration, along with the Legislature, pledged a new comprehensive energy strategy for Alaska's future. The stated goal is to achieve 50 percent of Alaska's energy consumption from renewable and alternative energy sources by 2025. Renewable energy is defined as energy derived from natural resources such as sunlight, wind, rain, tides, and geothermal heat which are naturally replenished.

Wind power is currently growing at a rate of 30% annually worldwide (iea.org). With growing strain on non-renewable resources such as oil and coal, a move towards renewable energy is consistent with a sustainable and affordable energy policy that will allow for economic growth.

In 1995, Alaska had a population of 604,000 residents. By 2025 that population is projected to expand to 885,000 (U.S. Census), adding more consumers to a statewide electrical system that currently is powered predominantly by diesel and coal. While diesel and coal are effective power sources, prices of these commodities are projected to rise. The International Energy Association (IEA), the leading autonomous organization that works to ensure reliable and affordable energy to its 28 global members and beyond, projects the price per barrel of oil to be as high as \$250 in 2025 (iea.org). The Governor's 50% renewable goal for 2025 should assist offsetting the rising prices and rising demand for energy in the State of Alaska.

GVEA has been conducting wind feasibility studies in the Eva Creek area since 2003. GVEA submitted a lease application in 2010, and DNR issued a Preliminary Decision to issue a lease on July 15<sup>th</sup>, 2011. Given the proposed project's close proximity to the GVEA Intertie and potential future mining sites that will require electricity, and the availability of energy generating wind, the project is consistent with efforts by the Governor's office to reach 50% renewable energy by 2025. This project will also allow GVEA to add an alternative energy source to their mix of fuels for electrical output, potentially lowering energy prices for members of their cooperative, thus potentially providing lower costs to residents of the State of Alaska. This will be further reviewed in the Discussion and Alternatives portion of this Final Finding & Decision.

### **Planning and Classification**

**Land Use Plan:** The area encompassing the proposed project area is addressed within the 1991 updated Tanana Basin Area Plan (TBAP) under Management Unit Subregion 4M *Rex Dome to Liberty Bell Mine*.

**Classification:** The Primary Surface Use of land within Subregion 4M is Minerals and Wildlife Habitat. The Management Plan states: "**General:** *State land in this unit is retained in public ownership for multiple use management. The emphasis is on subsurface resource development and maintaining fish and wildlife habitat. Land is above timberline and quite steep. All state land in this unit is open to mineral entry.*

**Fish and Wildlife:** *Fish and wildlife habitat is designated a primary use in Subunit 4M1. This area has very high values for most wildlife species. The several domes will be managed as important winter feeding areas for the Delta caribou herd. DNR and GVEA continue to work with the US Fish and Wildlife Service to develop an Avian Protection Plan which will be implemented prior to project operation to mitigate bird take resulting from the issuance of this lease and the subsequent construction and operation of wind towers. Fish and wildlife habitat and the operation of a wind farm can be compatible once the appropriate plans and stipulations of the lease are in place.*

**Minerals:** *Minerals is designated a primary use in Subunit 4M1. This subunit has high mineral potential and considerable exploration is currently taking place. The unit is open to mineral entry.*

*There are dense blocks of mining claims near the Liberty Bell Mine, near Eva Creek, and along California Creek. The Liberty Bell Mine is a stratiform gold-bismuth massive sulfide with over 100,000 tons of reserves blocked out. Gold and scheelite are known from Eva Creek.*

*California Creek has placer deposits of gold, platinum-group metals, and mercury. Lodes near California Creek consist of small quartz veins carrying precious and base metals, with one fissure assaying 259 ounces of silver per ton. Minerals, a sub-surface resource, is the designated primary use of this area, however, there is nothing in the planning and classification of this area to prohibit other uses of surface resources, such as this lease. As per AS 38.05.285, to the greatest extent consistent with public interest, DNR manages its lands for multiple uses, and the issuance of this lease as proposed allows for reasonable concurrent continued surface and subsurface resource use and development.*

*Recreation: Recreation is designated a secondary use in Subunit 4M1. The Rex Dome is a popular hiking area. Trails will be protected. The construction of a wind farm will affect the view-shed of the area. GVEA has conducted a view shed analysis to address this, and has factored minimizing visibility into the wind tower site selection and tower paint choice. GVEA's development plan limits site control and lease footprint to allow the greatest amount of continued use of the ridgeline lands by the public. Additionally, GVEA's traffic plan reflects their intent to ensure continued access to recreation areas via the Ferry Road.*

**Prohibited surface uses:** Land Disposals and Remote Cabins. Under Prohibited Surface Use addendum, the plan states *"Other uses such as material sales, land leases, or permits that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management-intent statement, the management guidelines of this unit, and the relevant management guidelines."* This lease is consistent with surface uses that are not prohibited. DNR desires to manage State land consistent with the mission statement *"To develop, conserve and enhance natural resources for present and future Alaskans."* The issuance of this lease follows through with the Department's stated goals of allowing responsible development while making every effort to mitigate potential impacts to the land, other development opportunities, and the stated classification priorities through interagency cooperation, the implementation of lease and site operation stipulations, and the adherence to those stipulations by the applicant.

**Borough Zoning:** This area is zoned unrestricted per Chapter 9.15.020 of the Denali Borough Code. There are no prohibitions on land zoned unrestricted (Ord. 96-04-2). The Denali Borough has issued resolution 11-03 supporting the Golden Valley Electric Association Eva Creek Wind Project and requesting State assistance in land rights and permitting.

### **Performance Guaranties and Insurance**

Per 11 AAC 96.060 GVEA will be required to submit a Performance Guaranty Bond for this project. As this project is constructed, developed and becomes operational over several phases, the amount of bonding required will be considered independently for each phase. The amount of the bond for each phase will be determined based upon the perceived risk involved and may be re-evaluated at specific stages in each phase depending upon the type of construction and operations taking place. The NRO will require 2 different bonds for this project: 1) Construction Bond, which will serve as a guarantee that GVEA will abide by the terms and conditions set forth by the Early Entry Authorization (EEA) issued for the construction phase of the project. The construction bond will be released upon final completion of the project; 2) Reclamation Bond, which will be available at the end of the project for removal of the improvements from the leased site and the site returned to/or near original condition.

#### **Construction Bond**

For the construction of Eva Creek Wind Project, a **Construction Bond in the amount of \$100,000** is required prior to issuance of the EEA. This bond will remain in place for the term of the construction phase of the project. This bond will be released at the end of the construction phase and when the entire project is operational. See Stipulation #5 of Attachment A.

#### **Reclamation Bond**

The cost of reclamation has not been determined at this time. Prior to issuance of the lease, DNR will determine the level of reclamation necessary and GVEA will determine the reclamation costs and submit a conceptual reclamation plan to DNR. The reclamation plan will describe the process by which GVEA will remove the wind turbines and related structures. This plan should outline how the site will be re-contoured and reseeded to prevent runoff and establish natural vegetative growth if determined necessary. The reclamation plan may be amended at any point prior to lease expiration to accommodate changes to the leased site.

GVEA will establish a savings account at an FDIC insured bank. The account will be in DNR's name in trust for GVEA. Equal annual payments will be made into the account such that the account will be fully funded in 20 years to fund reclamation of the project. DNR will be notified of the annual payment being made.

**Insurance:** GVEA will be required to maintain a general liability insurance policy with an individual occurrence of \$1,000,000 and an annual aggregate of \$2,000,000. In addition, GVEA will be required to maintain a Pollution Endorsement of \$5,000,000. See Stipulation #6 of Attachment A.

### **Survey and Appraisal**

**Survey:** An Alaska State Land Survey (ASLS) will have to be completed to the standards of the DMLW prior to lease issuance. See Stipulation #7 of Attachment A.

**Appraisal:** An appraisal will be required for all lease sites prior to lease issuance. The appraisal will be factored into the lease fee structure. The annual fee structure is based on the appraised fair market value of the land plus \$3,000 per MW installed capacity. The flat rate of \$3,000 per MW installed capacity will be adjusted per the consumer price index (CPI) every 5 years from the date of the first operational turbine. See Stipulation #8 of Attachment A.

**Early Entry Authorization Fee:** There is also a one-time installation fee of \$1500/megawatt installed capacity plus an estimate of Fair Market Value during construction while under the Early Entry Authorization.

$\$1,500 \times 24 \text{ megawatts} = \$36,000$

GVEA will be afforded the ability to request a variance from the 5 year incremental increase in the event of unforeseen circumstances such as *force majeure* or significant drops in population or customer base. In the event the Governor declares an area serviced by GVEA an economic disaster area, per AS 44.33.285 and AS 44.33.310, a temporary variance will be considered until which time the economic disaster area declaration is lifted. If a temporary variance is granted the rent will be set at the fixed annual rental and no per megawatt flat fee will be assessed. The normal scheduled rental and per megawatt flat fee will resume upon the lifting of the disaster declaration. Annual rental payment will be prorated as necessary but will not be less than \$1,000 per 11 AAC 58.410(b).

### **Access**

The proposed wind farm site is accessed by road beginning on the east side of the Nenana River. The community of Ferry is located on both sides of the river. The Ferry Road begins at the Alaska Railroad Siding area and proceeds easterly into the project area and beyond. Automobiles can be parked on the highway side of the river (west) and pedestrian access to the Ferry Road is by walking along the footpath on the railroad's bridge. Automobile access is not directly available to the Ferry Road from the Parks Highway as there is no automobile bridge across the Nenana River. ATV access is available on the railroad bridge footpath depending on the size of the ATV. GVEA is currently working with the Alaska Railroad to facilitate loading & unloading of equipment and infrastructure at the Ferry siding. The Ferry Road extends from the east side of the bridge eastward into the northern foothills of the Alaska Range. Upgrades to the Ferry Road are addressed in the easement decision (ADL 419221). Access roads will extend northward from the east end of Ferry Road to access the proposed wind farm site, including the wind turbines, substation and operations and maintenance (O&M) building. Access to Comm Site #2 will be on the west side of the Parks Highway. These roads will be addressed in the easement decision, ADL 419216.

### **Water Bodies**

The Eva Creek Wind Project is located on alpine ridges, near the headwaters of Eva Creek, Cody Creek, Moose Creek, Little Moose Creek, and Walker Creek. There are no standing waterbodies.

### **Environmental Risk**

GVEA submitted an environmental risk questionnaire and development plan to accompany their lease application. Lubrication oil and transformer oil will be used for each wind turbine (12 total turbines). During construction, heavy equipment and utility trucks will be used in the area. Diesel and/or gasoline powered vehicles and equipment will be used on site. Hydraulic fluids are used in various construction equipment.

The construction contractor will produce a DEC required Hazardous Materials Control Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan to GVEA prior to commencing work on the project. Upon completion of construction, GVEA will develop its own SPCC plan for the lease site and will provide a copy of the plan to DNR. GVEA intends to have

a 3,000-gallon aboveground diesel tank adjacent to the Warm Storage Building and another 3,000-gallon above ground diesel tank adjacent to the O&M Building; each tank will provide fuel to a suspended diesel heater.

Solid waste will be collected and removed from the site. The O&M Building will have an on-site domestic wastewater disposal system which will be designed, permitted, and constructed by the construction contractor. It is expected to include a 1,000-gallon septic tank and drain field. The Warm Storage Building will have an incinerator toilet.

Secondary containment will be required as stipulated by standard lease stipulations. See Stipulation #22 of Attachment A. Additionally, GVEA will maintain an insurance policy which contains a pollution endorsement.

### **Agency Comments and Public Notice**

An agency review was conducted to ensure that disturbances are minimized and to allow mitigating stipulations to be built into the lease.

Agency comments were solicited from the Alaska Department of Environmental Conservation (DEC) Contaminated Sites Program; Alaska Department of Environmental Contamination Compliance Program; the US Fish & Wildlife Service; Alaska Department of Natural Resources (DNR) State Historic Preservation Office (SHPO); the US Army Corps of Engineers (ACOE); Alaska Department of Natural Resources Division of Oil & Gas; the US Bureau of Land Management (BLM); Alaska Department of Natural Resources State Pipeline Coordinators Office; Alaska Department of Fish & Game (ADF&G) Habitat Division; the Denali Borough; The Alaska Department of Transportation (DOT), The Alaska Railroad (ARR), and the Alaska Department of Natural Resources Division of Mining, Land, and Water Mining Section (DMLW).

No comments were received from the DEC Contaminated Sites Program; the US ACOE; the BLM; the DNR State Pipeline Coordinators Office; the Denali Borough; the ARR; or the DNR DMLW Mining Section. While DNR DMLW Mining Section did not comment formally, they have been deeply involved during project evaluation.

Comments were received from DEC Contamination Compliance Program-Drinking Water Protection, however these comments specifically dealt with material sites. These issues will be addressed in the material sale preliminary decision (ADL 419234).

Comments were received from DOT Northern Region:

*DOT Northern Region ROW has no objections to this action. We are already coordinating the road relocation issues with DNR and GVEA.*

**DNR Response: DNR will continue to work with DOT and GVEA regarding the road relocation issues.**

Comments were received from DNR DMLW Coal Program Manager, forwarded from the Division of Oil & Gas:

*At this time I don't see any conflict with coal projects.*

**DNR Response: Comment Noted.**

Comments were received from ADF&G Habitat Division:

*ADF&G has reviewed the subject requests for road right of way, material sites, wind tower sites, and communications site. Proposed right of way generally follows existing roads and trails which are heavily used by hunters in the fall - particularly during the September moose harvest season.*

*To minimize impacts on existing recreational hunters, we recommend that construction related activities associated with road construction not occur during the September harvest (September 1st to September 25th). Activities either before or after the September hunting season would have minor effect on existing use of the area. Post-construction use of the roads by GVEA for maintenance activities would likely be of insufficient magnitude to create future impacts on recreational uses.*

**DNR Response: This comment will also be addressed in the adjudication of ADL 419221, the Ferry Road easement.**

**The building and operation of the Eva Creek Wind Farm will require the applicant to use the Ferry Road during the September moose harvest season. GVEA has acknowledged the heavy recreational use and does not intend to close access on the road. GVEA is working out the schedule of construction and use in the area. Access will be minimally impacted during hunting season. A Traffic Safety Plan has been submitted and approved. See Stipulation #27 of Attachment A.**

Comments were received from the US Fish & Wildlife Service:

*The US Fish & Wildlife Service recommends the following guidelines to protect breeding birds in the area: clearing, excavation, and fill activities in potentially suitable nesting habitats should be conducted prior to May 1 or after July 15 to avoid impacts to breeding migratory birds. If this is not possible, other measures to avoid impacts to breeding migratory birds should be initiated.*

*The Service also requested that GVEA develop an Avian Protection Plan and an Eagle Conservation Plan. These plans will include Best Management Practices incorporated in the design, construction, and operation of the Project that avoid and minimize disturbance and collision risks to migratory birds; the implementation of a post-construction bird mortality study; and the formation of a Bird Technical Advisory Committee whose purpose is to gather and analyze the bird mortality studies and advise an adaptive management strategy to avoid further bird injuries and mortalities.*

**DNR Response:** DNR supports the guidelines and requests of the US Fish & Wildlife Service. The Service also submitted comments during the public comment period. Those comments and DNR's response to them are discussed in the Public Comment section of this Final Finding and Decision.

Comments were received from the State Historic Preservation Office.

*The following is what we recommend be stipulated in the lease that your office is issuing for the project:*

- *We note that although several cultural resource sites were located during the inventory of the area of potential effects (APE) and discussed in the inventory report, the sites within the vicinity of project-related construction activities are proposed to be appropriately buffered and avoided.*
- *Assuming that these sites will be buffered and avoided as prescribed within the inventory report:*
  - a. *buffered with a 170-meter diameter,*
  - b. *flagged by a qualified archaeologist, and*
  - c. *avoided by construction personnel as a "Restricted Area," we concur that a finding of no adverse effect is appropriate for the proposed undertaking.*
- *Should unidentified archaeological resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register of Historic Places eligibility criteria (36 CFR 60.4) or Alaska Landmarks Register in consultation with our office. Also, if the undertaking is modified in a manner that alters its potential effects on historic properties, additional consultation under with our office is required.*

**DNR Response: Noted.** DNR will include these recommendations in the stipulations. See Stipulation #9 of Attachment A.

### **Public Notice**

Pursuant to AS 38.05.945, public notice was conducted for this lease. Notice was published in the Fairbanks Daily News Miner, the Anchorage Daily News, and posted on the State of Alaska Public Notice Website. A notice was sent for posting to the Healy, Anderson, Cantwell, Clear, Fairbanks, Nenana and Denali Park postmasters. Pursuant to AS 38.05.946, a notice was sent to the Denali Borough. A courtesy notice was also sent to the Doyon Regional Corporation and nearby land/interest holders in the Ferry area. To ensure consideration and eligibility to appeal the Final Finding & Decision, comments must have been submitted in writing during the comment period which took place between 7/16/2011 and 8/15/2011. A notice of the Final Finding & Decision will be sent to those who commented.

### **Public Comment**

**Public comments were received from Alaska Environmental Power (AEP).**

In summary: AEP objects to DNR's recommendation of a Public & Charitable lease to GVEA for the Eva Creek project, and asserts that alternative private wind farm projects (Delta Wind and Fire Island) provide the same benefits with no negative impacts, and should have been considered by DNR as alternatives to Eva Creek. AEP believes that Eva Creek will have negative impacts and will not advance DNR's mission.

The following are selected excerpts from AEP's comments:

"DNR did not include in the preliminary decision descriptions and viability of the Delta Wind Farm or the Fire Island Wind projects. DNR states "the Eva Creek Wind Project is needed to ensure that GVEA and the State of Alaska meet their

renewable energy goals.” This statement is misleading at best. The Delta Wind farm is already producing power on private land, is fully permitted and ready to expand, and development of wind farms on private land insures minimum risk to the public. Integrating the Eva Creek project will be more difficult than integrating the Delta Wind project. DNR has withheld critical information about the two other projects capable of providing the same benefits as Eva Creek without using State land, limiting the public from making informed comments and recommendations.

Both the Delta Wind Farm and Fire Island Wind Farm have had all of their permitting finished for over a year. The permits include findings in which no negative impacts were found. The Eva Creek Wind Farm has multiple negative impacts. They include:

- Competing with established mining interests.
- Impacting recreational hunting and hiking.
- Impacting nesting habitats for both migratory and stationary birds.
- Invading established Golden Eagle territory.

An additional view shed issue, the Eva Creek project may affect further development within Denali National Park and the Interior’s tourism industry.

These negative impacts can be avoided by the development of Delta Wind Farm and Fire Island Wind Farm while leaving this State land available and protected in its pristine condition for future Alaskans.

Contrary to the preliminary finding, the Eva Creek Wind Farm does not advance DNR’s mission statement. Eva Creek is not the only land in the Interior, let alone the State of Alaska, capable of supporting the development of wind industry. In fact there are engineering issues associated with Eva Creek that are not found in other locations (i.e. Delta Wind, Fire Island). The development of the Eva Creek project is interfering with the growth of two separate private sector industries. The first is the mining industry. The second is the wind industry. Delta Wind Farm has been developed and producing power, and its expansion could have been completed, mitigating the Interior’s environmental concerns and furthering the State of Alaska’s renewable energy goals, by the end of 2011. The construction of Delta Wind Farm would develop a fledgling wind industry, enhance a small community, conserve Eva Creek’s natural wildlife and enhance both the wind resource in Delta and the mining resources at Eva Creek. Eva Creek can only claim to continue developing an industry that Alaska Environmental Power created in Alaska’s interior.

Alaska Environmental Power supports the development of wind industry throughout the State. This development must be done responsibly and not at the cost of public resources or private industry. Two privately owned companies have separately developed wind farms on private land capable of providing all the benefits without the negative effects of GVEA’s Eva Creek project. DNR is doing the public a disservice by not informing the public of these alternatives while claiming that Eva Creek is “necessary” for the State of Alaska. For all these reasons Alaska Environmental Power, and its Alaskan owners, vehemently oppose the issuance of this Public and Charitable Lease.”

#### **DNR Response:**

The Department of Natural Resources believes the Eva Creek Project is consistent with DNR’s stated mission “to develop, conserve, and enhance natural resources for present and future Alaskans”. To that end, DNR issued a favorable Preliminary Decision on the Eva Creek Project based on the application and supporting material submitted to DNR. DNR considered whether GVEA reasonably required the lease for the operation of its business and if environmental impacts can be reduced and mitigated to an acceptable level while allowing GVEA to construct and operate a wind farm. GVEA’s environmental impact studies of the lease area have been extensive, and GVEA has provided all relevant material requested by DNR to address mitigation of impacts. The scope of DNR’s jurisdiction is confined to determining whether GVEA reasonably requires the lease, and if impacts can be reasonably mitigated. The PFD determined the answer is yes to both questions.

AEP’s comments assert that DNR excluded from consideration other available and private wind farms from which GVEA might purchase power. This is beyond DNR’s jurisdiction and decision scope, which is limited to evaluating the State’s best interest for the proposed project on State land, not to compare all wind farms in the State and choose the best one. DNR is not suggesting that other wind farms in Alaska cannot occur or would not also contribute to statewide alternative energy goals. DNR cannot dictate the parties from whom GVEA can and cannot buy power. GVEA has represented to DNR that power purchased from third parties was considered, but that the Eva Creek project better met their public utility mission and goals, and is therefore reasonably necessary for the operation of their business. DNR is under no obligation to review an applicant’s business plan as it pertains to the applicant’s relations with other business and vendors.



**DNR is only considering applications for use of State land that it receives and whether those applications have the appropriate impact-mitigating materials and if a potential lease is reasonably required. DNR does not have the authority to control projects that are not on State land, or to consider projects for which it has received no application. DNR has no ability to address what impact private operations may or may not have.**

**AEP's comments assert that the Eva Creek Project conflicts with established mining interests, impact hunting and hiking, impact nesting habitat for birds, and invades established Golden Eagle territory. As part of the adjudication of this application, DNR has taken these issues into account and worked to ensure that GVEA will mitigate these potential impacts. At this point in time, it is not known whether or not an economically viable ore body exists, and, if it exists, where, its areal extent, and depth. Any eventual mine design will depend on this information. An underground mine, for example, would have little likelihood of impacting surface activities occurring on a ridge top. An open pit mine may or may not conflict with all or a portion of the wind project.**

**The proximity of accessible power would, in any event, substantially reduce the cost to a mine for obtaining power. Decades often pass while exploration occurs and enough information is gathered to make informed decisions regarding the viability or non-viability of mining prospects and the concomitant need to retain all of the filed mining claims. In the interim, it is not in the State's best interest to segregate large areas from all surface uses. GVEA is working with the mining interests in the area to develop a mutually beneficial solution to any potential conflicts that may arise subsequent to the issuance of the lease. DNR also recognizes these potential conflicts, but continues to practice statutorily mandated (AS 38.05.285) multiple use management of State lands. AS 38.05.285 reads "Disposal and use of state land shall conform to the constitution of the State of Alaska and the principles of multiple purpose use consistent with the public interest." DNR believes that the needs of mining interests and GVEA are reasonably concurrent uses. DNR will continue to work with both GVEA and the mining interests to address any future conflicts.**

**GVEA has submitted avian studies of the lease area and is currently working with the US Fish & Wildlife Service to develop an Avian Impact Mitigation Plan to be implemented prior to the operation of the wind farm. This plan will take into account nesting habitat for all avian species in the area.**

**While there will be impacts to hunters and hikers in the project vicinity, they will be mainly temporary and minor. The primary impact will occur during construction and will be largely access related. DNR will require that access along the Ferry Road and ancillary trails be maintained with minimal delays to other users (See Stipulation #27 of Attachment A). At the completion of construction, users will have full access to the roads and trails as before except for the areas immediately surrounding the turbine towers, the substation, and maintenance buildings. The longer-term impact to hunters and other recreational users will be inconsequential.**

**GVEA has recognized the potential for viewshed effects and analyzed the impact. Based on the analysis, the turbines will be distantly visible from the Parks Highway from four locations. The nearest viewpoint will be 7.5 miles distant. At this viewing location, the turbines will be noticeable to careful observers, but will not materially affect the landscape view of the area.**

**The wind farm location is approximately 11 miles from the nearest corner of Denali National Park. As in the view from the Parks Highway, the wind farm may be visible, but less than that from the previously described view point. DNR considers this degree of visibility to be acceptable, given the benefits of the project.**

**In conclusion, DNR's Preliminary Finding & Decision did not misrepresent the facts of the application and lease adjudication. DNR is only reviewing this project as it has received no other applications for wind projects in the Eva Creek area and cannot evaluate projects on private lands. DNR has evaluated the potential impacts, and will continue to work with both the applicant, other users, and agencies to mitigate and reduce the impacts of this project and encourage multiple use of the resources. DNR believes the Eva Creek wind farm will contribute to Statewide alternative energy goals.**

**Public Comments were received from Mr. David W. Jacobs, who wrote:**

**"In response of request for public comments I am submitting the following comments. Although unopposed to GVEA's wind farm project; ADL 418853, 419216, 419221, 419234, I have the following concerns:**

**As an active miner with a substantial investment in the area it is my request that access to mining claims not be inconvenienced, also that no negative impacts be placed on current mining and exploration in the area. This will ensure that I and other active miners like myself may continue to make a livelihood in this area. This will also ensure continued exploration of the minerals in this area for the benefit of the state of Alaska.**

If restrictions/negative impacts were made to myself and others like myself the impact and disruption of the current active mining and mineral exploration in this area would be significant.

Thank you for your consideration in this matter.” [sic]

**DNR Response: If approved the DMLW NRO will be issuing a public access easement (ADL 419216) to GVEA for road construction/upgrade that would connect wind turbines and infrastructure to the Ferry Road system. This action will ensure access to all, whether it be miners, recreationists, trappers, and hunters. It is GVEA’s intention that all existing and newly constructed roads be kept open to public access.**

**While GVEA plans to keep road access open they acknowledge that short delays may be possible during the construction phase with upgrades to the Ferry Road system. The NRO will require GVEA to implement an approved traffic safety plan before early entry authorization. After construction is completed current access should be improved with upgrades to the existing Ferry Road system.**

**Current mining will not be significantly impacted as all present activity is placer mining which occurs in the lower drainages while the wind project will be on the high ridgelines. The surrounding area is open for mineral exploration and the wind project should not impede any exploratory activities with the present drill sampling technology. In addition, the ground surface footprints of the wind turbines and substation are relatively small and dispersed through the area.**

**Public Comments were received from the Ferry Community Corporation (FCC), who wrote:**

“The Ferry Community Corporation Board of Directors met on August 10, 2011 to consider matters relating to the Eva Creek Wind Farm and to consider proposed DNR project permitting.

The FC Corp is on record as supporting this project. We believe it to be environmentally sound, forward-thinking, and advantageous to the Railbelt electrical energy mix. We believe that, with careful planning, there will be minimal long term impact on our historic town and gold mining district. We wish to facilitate GVEA's efforts to get this project up and running. To this end, the Board has adopted the following positions with regard to proposed DNR permitting:

RE: Site Lease to GVEA ADL, 418853: We Approve.

RE: Public Easements for GVEA, ADL 419216 and ADOT, ADL 419221: We Approve.

RE: Material Sale to GVEA , ADL 419234: We approve with the following exception: We do *not* approve of the proposed site located in Sections 26 and 27, Township 10 South, Range 8 West, Fairbanks Meridian, for the following reasons:

1. The private Ferry Upper Ridge Road traverses this site, providing the only auto, pedestrian and bicycle access to several nearby residences, some with young children.
2. A community artesian spring is located in the mapped parcel (Sec. 27), providing year-round water for community residents, hunters, miners, and recreational users. It is feared that material removal will pollute and/or alter the flow of this artesian spring.
3. This site contains an important berry-picking area, a valuable and utilized community food resource.
4. Nearby residents would be negatively impacted by the noise and dust pollution associated with a gravel plant.
5. Acceptable alternative sites have been identified within a mile of this site, and it is thought that eliminating this site from consideration would not prove to be a major hindrance.

Thank you for your consideration.”

**DNR Response: In response to the FCC concerns and as a result of refinements to the mining & reclamation plan, DMLW NRO will not be issuing an authorization for Material Site A from the proposed material sites in ADL 419234. Brice Inc., a subcontractor on the Eva Creek Project, recently applied to the DMLW NRO for a land use permit (LAS 28218) to establish an equipment/supplies staging area, up to 14 acres, in support of construction of the Eva Creek Wind Farm Project. The pad will be located in Section 26, adjacent to the Ferry Road. FCC did not object to this proposed project when informed during a courtesy public notice.**

**Public Comments were received from the U.S. Fish & Wildlife Service.**

In correspondence with the US Fish & Wildlife Service dated 8/15/2011, the Service states "Our letter also made the recommendation that a Service-approved Avian Protection Plan and Eagle Conservation Plan be a condition of the state lease and easements. However, the timing of the completion of the avian plans is now clearly out of sync with the final finding. The Service would like to clarify that it was not necessarily the Service's intent to link the issuance of the DNR lease or easement permits to the avian plans. The actual intent is that the plans be in place prior to the project becoming operational. The Service does not have a concern with the leases and easements being permitted with the avian protection plans still under development with the Service. As mentioned before, the new avian hazard is associated primarily with an operational wind energy facility, and the plans are addressing those issues."

**DNR Response: DNR supports the guidelines and requests of the US Fish & Wildlife Service. DNR will continue to work with the Service and GVEA and will stipulate that a final plan be in place prior to operation.**

**Public Comments were received from Renewable Energy Alaska Project (REAP), who wrote:**

"Renewable Energy Alaska Project (REAP) is writing to urge the Alaska Department of Natural Resources to approve the state lease, public access easements and material sale for Golden Valley Electric Association's Eva Creek wind project.

Renewable Energy Alaska Project (REAP) is an Alaska-based nonprofit whose membership includes a diverse coalition of large and small Alaska utilities, businesses, conservation and consumer groups, Alaska Native organizations, and municipal, state and federal entities. Our group works to facilitate the development of renewable energy in Alaska through collaboration, education, training, and advocacy.

REAP supports the development of the Eva Creek wind project as a small, but significant step toward diversifying the Railbelt's energy sources and stabilizing energy costs. The Railbelt currently relies heavily on natural gas for electrical generation and heating. Projects like Eva Creek provide a hedge against the inherent uncertainty in the cost of natural gas and help reduce costs over the long term, which will benefit local business and residential customers. REAP urges DNR approval for the lease, access easements and material sale."

**DNR Response: Comment Noted.**

**Public Comments were received from Boot Hill Gold, Inc. who wrote:**

"About ten days ago Boot Hill Gold reached a verbal agreement with GVEA on those claims affected by their physical plant. When the final copy of the agreement for signature arrived, the requested map detailed ten claims containing Towers, Buildings, Equipment, etc. However the agreement also included an additional twelve claims upon which there was no prior discussions or agreements. All twenty two of these claims were listed in the beginning as "mining claims in the vicinity of the proposed Eva Creek Wind Farm."

It is my understanding the final tower and support locations were reached just this past week, so the final agreement should have reflected only those claims involved.

Therefore this letter is to reaffirm our communication of March 30, 2011.

We still object to GVEA being given a permit over our claims. Boot Hill Gold will protect its claim rights against any utility or government agency that tries to violate them, including legal action if necessary.

We will continue to discuss this matter with GVEA, but the Boards trust in them has taken a serious HIT.

I would be more than happy to discuss this matter with you or your representative." [sic]

**DNR Response: Objection Noted. Subsurface issues are further discussed in the Discussion section of this FFD.**

**DNR has communicated with BHG subsequent to receiving their written comment and they indicate that they are continuing to work with GVEA and that their main goal is to finalize a written agreement with GVEA. Golden Valley Electric Association submitted a letter to DNR outlining that GVEA continues to negotiate with Boot Hill Gold(BHG). GVEA states "construction of the Eva Creek Wind project is a reasonable concurrent use of the land owned by the State with underlying mining claims. The road work proposed for Eva Creek provides improved access to mining claims. These improvements will increase the economic viability of the subsurface claims as it becomes easier to get equipment into the area for potential exploration. The proposed electric substation associated with the wind project represents a multi-million dollar infrastructure investment that improves the economics of a future mine.**

**GVEA believes a provision in the permit requiring reasonable accommodation to the concurrent mining use may be a logical assurance to Boot Hill Gold that their rights will be protected. The State's interest would be well served by receiving rents and royalties for both the surface and subsurface rights." GVEA further acknowledged that if irreconcilable conflicts between the wind farm project and mining arise in the future, wind farm structure changes or removal may be required at GVEA's expense.**

**Public Comments were received from Golden Valley Electric Association.**

In summary: GVEA reaffirms its support for the project and provided further information explaining how they believe Eva Creek will meet GVEA's business goals and contribute to the State's renewable energy goals. The following is select excerpts from GVEA's comments:

"Golden Valley Electric Association (GVEA), as applicant for the authorization to install and operate a 24 Megawatt wind farm above the Eva Creek valley, offer the following comments in support of ADL 418853, ADL 419216, ADL 419221, and ADL 419234 proposed by the Department of Natural Resources, Division of Mining, Land, & Water (DNR). GVEA's proposal to build the Eva Creek Wind project will achieve several noteworthy objectives including:

- 1) Achieves GVEA's renewable energy goal,
- 2) Displaces expensive and volatile oil-fired fuel with clean renewable energy,
- 3) Lowers the cost of power to GVEA's members,
- 4) Supports the State Alaska's energy goals, and
- 5) Creates economic development in local jobs.

**Specifically:**

**ADL 418853:** GVEA supports ADL 418853 in which DNR proposes to issue a public and charitable lease under AS 38.05.810(e) to GVEA for a 25 year period. Per the Certificate of Public Convenience and Necessity, No. 13, granted by the Regulatory Commission of Alaska, GVEA was found fit, willing, and able to provide utility services for the convenience and necessity of the public. As a certificated public utility, GVEA is required to furnish and maintain adequate, efficient, and safe service and facilities. 42.05.291(a).

Alaska State Statute 38.05.810(e) permits the Department of Natural Resource Commissioner to lease state land if the utility reasonably requires the land for the conduct of its business under its license. GVEA's Certificate of Public Convenience and Necessity allows GVEA to own, operate, manage, or control any plant or system for furnishing generation, transmission, or distribution of electrical service to the public for compensation. The Eva Creek Wind project will furnish both generation and transmission in the production of electrical energy from wind. In addition, Eva Creek Wind is required for the conduct of GVEA's business because the project:

- 1) meets GVEA's renewable energy goal; In 2006, the GVEA Board adopted a goal of adding renewable energy equaling 20% of the annual peak load by 2014. At 24 MW, Eva Creek Wind will meet this goal.
- 2) displaces a portion of GVEA's expensive and volatile fossil fuel with clean renewable wind energy; In 2010, nearly 40% of the power GVEA generated was with fossil fuel fired generation. Eva Creek will displace nearly 76,000 megawatt-hours of fossil fuel generation each year.
- 3) lowers the cost of power for GVEA members;
  - a. At 7.8 cents per kilowatt-hour, Eva Creek Wind is the lowest cost solution for GVEA.
  - b. Based upon a price of \$90 per barrel of oil, GVEA will pass on savings of nearly \$2 million per year to its members. That represents a 1% savings in fuel and purchased power costs for GVEA's members.
- 4) meets a portion of the Railbelt Integrated Resource Plan (RIRP) alternative resource options; The Alaska Energy Authority's 2010 RIRP identified and promoted building approximately 70 MW of wind generation in 2011 to 2016 timeframe. The two recommended projects were Fire Island at 54 MW and Nikiski at 15 MW. However, today the Fire Island Wind project has been downsized to 18 MW and the Nikiski project has been abandoned. GVEA's Eva Creek Wind project will contribute to alternative resource options recommended in the AEA RIRP.
- 5) complies with GVEA's Integrated Resource Plans (IRP); In a 2001 IRP, R.W. Beck suggested wind power may provide favorable economic value to GVEA during the second ten-year portion of the study. Then in 2005, a Black & Veatch IRP recommended wind generation as a cost-effective displacement of GVEA-produced energy (fossil fuel). Eva Creek Wind provides the economic benefits suggested in GVEA's IRP studies and therefore is warranted.
- 6) supports the State's renewable and alternative energy goal and policy; In 2010, the Alaska State Legislature enacted statutory provisions establishing a goal that the State obtain 50 percent of its electric generation from renewable and

alternative energy sources by 2025 and that the state land leasing law be applied in a manner that reduced the cost of alternative and renewable power produced by licensed electric public utilities.”

**DNR Response: Comment noted.**

**Comments were received from the US Fish & Wildlife Service.**

To paraphrase: As indicated, draft plans will be available in the near future, but the plans are taking considerably longer than anticipated, due to circumstances largely beyond GVEA’s control. GVEA has provided all the information required by the Service and we are using that information in a risk assessment to determine if any eagle permits would be appropriate. Also, in order to complete the eagle conservation plan, any potential compensatory mitigation for eagles must be identified *a priori*, and we are currently seeking a variance in the Service’s national policy that the mitigation exclusively be power pole retrofits.

Therefore, both plans are still being prepared cooperatively with the Service. The Service will require the plans be approved ahead of the project becoming operational, which will satisfy the Service requirements under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Our letter also made the recommendation that a Service-approved Avian Protection Plan and Eagle Conservation Plan be a condition of the state lease and easements. However, the timing of the completion of the avian plans is now clearly out of sync with your needs for your final finding. I’d like to clarify that it was not necessarily the Service’s intent to link the issuance of the Alaska DNR lease or easement permits to the avian plans. The actual intent is that the plans be in place prior to the project becoming operational. The Service does not have a concern with the leases and easements being permitted with the avian protection plans still under development with the Service. As mentioned before, the new avian hazard is associated primarily with an operational wind energy facility, and the plans are addressing those issues.

**DNR Response: Noted. DNR will issue the Final Finding and Decision and Early Entry Authorizations without the Avian Protection Plans per the Service’s recommendation. DNR will require the Avian Protection Plan be in place prior to operation of the Eva Creek Project. See Stipulation #30 of Attachment A.**

**Comments were received from Cook Inlet Region, Inc. (CIRI) outside of the Public Comment period and prior to the Preliminary Decision.**

In summary, CIRI questioned whether issuance of a surface lease is legal, given the pre-existing mining claims; CIRI objected to issuance of a non-competitive lease to GVEA and believes it must be offered competitively. The following are excerpts from the CIRI comment:

“Assuming there are no incompatible uses to a wind farm on the land at issue, any lease must be made by competitive bid under Alaska Statute 38.05.075, so that CIRI and other interested parties have a fair opportunity to bid for the site.

In November 2009, GVEA applied for a public and charitable lease from DNR. GVEA’s lease application was assigned file number ADL No. 418853. Subsequently, GVEA sought and received firm offers for commercial quantities of wind power from two separate offerors, including CIRI, acting through its wholly owned subsidiary, Fire Island Wind, LLC, that were both presented at a meeting of the GVEA Board of Directors in Fairbanks on February 28, 2011. Our understanding is that the GVEA application is now under consideration by DNR, and that DNR has asked for input from other agencies. According to the amended application, GVEA’s “Eva Creek Wind Project” would require 42.869 acres of state land (“the Eva Creek Site”) that would be occupied by 16 wind turbine pads located on two ridges, an operations and maintenance building, a permanent meteorological tower, three communications towers, and an electrical substation.

Is the Eva Creek Site available for a wind project? This is a threshold legal issue. Like GVEA, CIRI would be interested in developing a wind project at the Eva Creek site, but is concerned that this acreage by law cannot be made available for lease for a wind project. The land that GVEA has applied to lease is subject to at least 22 active, preexisting, and valid mining claims. At least one of the mining claim holders, Boot Hill Gold, Inc (BHG), has formally declined to support the Eva Creek Wind Project in a letter, dated March 30, 2011, from Gerald A. Blair, president of BHG, to Cheryl A. Laudert, GVEA Land Management Supervisor. We note that the subsurface is the dominant estate under Alaska law.

While CIRI is interested in the land for a wind farm, it appears that use of the land for a wind project is incompatible with use of the same land for mining. The 16 wind turbine pads may appear to have a minimal footprint and impact, but each of the turbine locations would be connected by transmission lines. The transmission lines and other infrastructure necessary for a wind project would necessarily cross through the mining claims and divide the properties with linear infrastructure. Before CIRI invests the time and resources required to pursue the Eva Creek wind farm in earnest, we would appreciate

the Division issuing an advisory opinion on this incompatible use question. We note that encouraging and rewarding wind energy developers to "top file" applications for wind energy leases on DNR tracts that have preexisting and valid mining claims would tend to unnecessarily confuse and complicate matters.

**Competitive Bid.** Assuming that the Division determines that the land is available for a wind project, it must be offered via a competitive bidding process, and CIRI would like to bid. We also believe that Alaska Environmental Power and other renewable energy developers may be interested in bidding.

Generally, leases for state land are granted "at public auction to the highest qualified bidder." AS 38.05.075(a). The statute explains that this lease competition method is "designed to maximize the return on the lease to the state," in a manner consistent with the State Constitution's requirement to maximize the value of public resources committed to private development and use. Although the director, with the approval of the Commissioner, may negotiate with a licensed public utility if the utility reasonable requires the land for the conduct of its business under its license, AS 38.05.810(e), the State may not do so in this instance. First, GVEA's proposed project does not qualify for a public lease under this statute, and second it is contrary to DNR's policy for wind projects.

GVEA's project also does not qualify for a non-competitive lease under AS 38.05.810(e). That statute provides in full:

The lease, sale, or other disposal of state land at appraised fair market value may be negotiated with a licensed public utility or a licensed common carrier by the director with the approval of the commissioner if the utility or carrier reasonably requires the land for the conduct of its business under its license. A lease with licensed public utility that is an electric utility entered into under this subsection may not include, as part of the rent or other fee that is negotiated or charged, an amount that is based on or determined by a percentage of gross revenue for renewable energy produced by the electric utility. (Emphasis added).

GVEA leasing of the Eva Creek Site is not reasonably required for the conduct of GVEA's business under its license. While wind and other alternative energy projects are important, they are not necessary for the conduct of the business of a public utility. GVEA is fully capable of meeting its entire electrical load obligations to its customers by way of fuel-fired generation. Thus, while wind power may be beneficial and desirable, it is not required to fulfill GVEA's business purpose as a public utility. Instead, this statute contemplates instances where a utility may need land for infrastructure such as transmission lines to provide power to its customers. A wind energy project is simply not a necessary use for a public utility as contemplated by AS 38.05.810(e).

More importantly for the case at hand, the Eva Creek site is not reasonably required for GVEA's business purpose because GVEA has other, more cost-effective options to purchase wind power. More particularly, GVEA has other wind energy options because it solicited and was presented with two other viable, cost-effective options for adding wind power to its grid that would deliver energy sooner and at a lower cost per kilowatt than GVEA's proposed Eva Creek project. In other words, for GVEA's planned use of the land, GVEA is acting as a direct competitor in the market, a market it created by its own competitive solicitation to third parties. GVEA's direct participation in the market of wind energy is fundamentally incompatible with, and precludes its eligibility for, a charitable exemption from competitive leasing under AS 38.05.810(e).

Moreover, DNR's Windpower Authorization Guidelines provide that if there are other viable interests in the property, DNR may elect to award land leases to public utilities by competition. Obviously, this is the case for this property. By way of this letter, CIRI expresses its commercial interest in this property for this purpose. As stated above, we believe other wind energy developers are also interested in this property. If conflict with the mining claims is resolved, the State must put the Eva Creek Site up for competitive bid consistent with DNR's Guidelines.

**Fair Market Value.** If the State were to allow a non-competitive lease to GVEA, CIRI would object to any lease that is less than an annual lease rate that reflects the fair market value of the Eva Creek site evaluated for its purpose as a commercial wind project site. Under AS 38.05.810(e), the rent for leasing state land by a public utility is negotiated based upon an appraisal to establish the property's fair market value. Given that there is other interest in this land, including CIRI's interest, any fair market value must be based on the use of the site for commercial wind power.

**Conclusion.** Finally, we note that GVEA previously has made statements to the public, including statements to the State legislature, suggesting that GVEA already has secured a lease of the Eva Creek Site from the State. On its web site, GVEA states that in June 2011, "State of Alaska, DNR, begins public and agency review process for land lease." Unlike any private developer, which would have sought site control at the beginning of the project, GVEA failed to do this and it has not recognized this fact in promoting its project and seeking State funds. In its cost projection for the project, GVEA also appears to have failed to account for any cost to obtain and hold a lease of State land for a commercial endeavor. GVEA's project is flawed in numerous ways, and we ask that you look closely at this project before choosing to support it with a non-competitive lease that is inconsistent with AS 38.05.075(a) and 38.05.810(e).

CIRI asks that DNR reject GVEA's lease application. If it is decided that this particular site is available for a State lease, CIRI requests that the lease be put out for competitive bid. In any event, CIRI objects to a non-competitive bid of the Eva Creek Site to GVEA."

**DNR Response.** These comments were received prior to the comment period. These issues were discussed in detail in the Discussion portion of the Preliminary Finding & Decision. It continues to be DNR's position that the surface use is a reasonable concurrent use with the subsurface mining claims and that DNR has the authority to authorize this activity under AS 38.05.810(e). Because CIRI commented prior to the public notice period and did not comment during the comment period, CIRI does not have standing to appeal this decision, however the issues raised by CIRI are again addressed in the discussion section of this Final Finding & Decision.

### **Discussion and Alternatives**

In adjudicating this Public & Charitable Lease, the Department of Natural Resources seeks to facilitate development, conservation, and enhancement of state lands for present and future Alaskans, while minimizing disturbance to vegetative, hydrologic, and topographic characteristics of the area that may impair soil stability and water quality.

In 2010, the Legislature enacted House Bill 306 declaring its intent that the State obtain 50% of its electric generation from renewable and alternative energy sources by 2025. GVEA would like to construct a wind farm that will add a renewable energy resource (wind) to their electricity generating fuel mix. 12 wind towers will be erected in the lease site, and multiple buildings will be constructed to support the turbines. DNR recognizes that this is a reasonable request, and that this project is consistent with House Bill 306's stated goal of achieving 50% of Alaska's energy from renewable resources by 2025. The Eva Creek Wind Project is needed to ensure that GVEA and the State of Alaska meet their renewable energy goals. GVEA's 2001 Integrated Resource Plan (IRP) suggested wind power may provide favorable economic value to GVEA during the second ten-year portion of the study. In 2006, the GVEA Board adopted a goal of adding renewable energy equaling 20% of the annual peak load by 2014. At 24 MW, Eva Creek will meet this goal. This project also meets a portion of the Railbelt Integrated Resource Plan (RIRP) for alternative resource options. The Alaska Energy Authority's 2010 RIRP identified and promoted building approximately 70 MW of wind generation in the 2011-2016 timeframe. The Eva Creek Project will contribute to alternative resource options recommended in the RIRP. The project will also benefit residents of the State by reducing GVEA's carbon footprint through integration of renewable energy sources into its system and the benefit of potentially lower rates to GVEA's members. DNR does not evaluate the business decisions of GVEA, thus DNR assumes GVEA is making the best decision to meet its business and mission goals, and that this location is reasonably required for GVEA to meet those goals. This land is reasonably required for the conduct of GVEA's business, as it represents GVEA's best option to meet the cooperative's goals of adding renewable energy sources to their electricity generation mix at or below the current cost of power and potentially lowering rates for its members.

If approved, DNR will issue an Early Entry Authorization (EEA) to GVEA to begin construction of the wind project. The EEA will be issued after the approval of this Final Finding & Decision. The EEA will include stipulations that require GVEA to adhere to its development timeline. GVEA's construction contractor may wish to acquire other authorizations.

The GVEA Eva Creek Wind Energy project is one of the first large-scale, renewable energy projects in interior Alaska. In 2003 GVEA obtained a Land Use Permit (LUP) from DNR to determine feasibility on several sites east of Ferry, including Rex Ridge, Walker Dome, and Eva Creek. By 2006, a new LUP was issued to erect meteorological data collection towers and begin conducting wind feasibility studies. In 2010 GVEA had determined that winds were consistent and strong enough to warrant a wind farm and submitted an application to lease State land for the Eva Creek Wind Farm. In January of 2011, the Denali Borough passed resolution 11-03, a resolution supporting the GVEA Eva Creek Wind Project and requesting State assistance in land rights and permitting. GVEA has also conducted avian studies, geotech/soil resistivity studies, wetlands determination, and cultural resource/archaeology surveys. They have also held public meetings in the Healy and Tri-Valley area. The Ferry Community Corporation has also issued a letter supporting the Eva Creek Wind Project.

DNR reviews all applications with multiple use management in mind. DNR aims to allow as many different activities on public land as possible without unreasonably limiting or precluding other users or causing damage to the environment. To this end the Eva Creek Wind Project is proposed in an area that already has a variety of uses. Hunting, mining, recreation, and coal exploration have all taken place in this area for years. A professionally designed wind farm that will produce renewable energy is an activity compatible with these other uses, and should be managed as a constructive and positive addition to a diverse and healthy array of activities on public land.

The Eva Creek area has been home to hunting, trapping, outdoor recreation, aviation uses and mining for decades. Through the process of agency review, lease stipulations, and working with GVEA to mitigate potential conflicts, this lease should have a minimal impact on these other long term uses of the area.

There are two airstrips in the vicinity of this project. One, the Eva Creek Airstrip (2Z3) is an officially recognized landing strip that appears on the FAA charts and in the Alaska Supplement. A Form 7460-1 was filed with the FAA to determine if the turbines constituted a hazard to air navigation. As a result of this review, the FAA issued a "Determination- No Hazard to Air Navigation" on July 22<sup>nd</sup>, 2011 with the following conditions: "These ten (10) structures shall be marked with white paint and lighted as outlined in chapters 4, 12, & 143 ("turbines) of Advisory Circular (AC) 70/7460-1K." A Form 7480-1 was also filed to establish a non-standard approach pattern at 2Z3 that would keep all traffic south of the airport and away from the turbines. The Form 7460-1 Basis for Decision notes that "there are no IFR effects and the 2Z3 traffic pattern is being modified to keep all aircraft south of the runway". As a consequence of these actions on the part of the FAA, the Eva Creek Airport will remain open and usable. The second strip is a rudimentary landing area in the vicinity that is apparently used infrequently, if at all. There is decaying evidence that a wind sock and tie down were present in the distant past. This strip is currently unusable due to the presence of a met tower and will be unusable in the future due to its proximity to the wind farm infrastructure. Its unavailability does not constitute a hardship as evidenced by the lack of use and the relative proximity of 2Z3.

Boot Hill Gold (BHG), the owner of the mining claims under the proposed lease sites, had initially issued a letter of objection to GVEA concerning the building of wind towers over their mining claims. BHG's original letter noted that they had a lack of adequate mineral data, and that since a great deal of money had already been spent exploring the claims and gold had been located over many square miles, the source of the gold had not been found and the proposed tower locations may be within the vicinity of such a discovery and prevent operation of a mine. DNR issued a letter to both parties dated 5/3/2011 stating that the Governor's office supports co-development of both renewable energy and mineral projects as viable economic and public-benefit opportunities. DNR requested both sides come to a mutually accepted resolution so that both projects may proceed in a timely manner. BHG and GVEA have since been in negotiations to work out a compromise which is mutually beneficial to development of both resources. As evidenced by the public comments submitted to DNR by both GVEA and BHG, a final written agreement has not yet been reached between the parties. While negotiations are ongoing between GVEA and BHG, GVEA has acknowledged BHG's subsurface rights in a letter to DNR dated August 25<sup>th</sup>, 2011 and recognize their own responsibilities as the applicant and potential lessor. DNR recognizes that the mineral estate is dominant over the surface estate under Alaska law, however that does not mean that the surface is unavailable for any development. To the contrary, AS 38.05.255 specifically requires that the surface use of land within a mining property shall be subject to reasonable concurrent uses. AS 38.05.285 allows for multiple use management, thus allowing a surface use of state land where there is a subsurface interest. If irreconcilable conflicts arise, GVEA acknowledges that if at some point in the future the development of a commercially viable mine conflicts with facilities installed as part of the Eva Creek Wind Project which cannot be mitigated by reasonable accommodation by either party, then GVEA acknowledges that those conflicting facilities may have to be relocated at GVEA expense, per their August 25<sup>th</sup>, 2011 letter to DNR. The lease will reflect this, per Stipulation #32 of Attachment A.

The Alaska Supreme Court has discussed the concurrent use of land for mining and power in *Alaska Power Authority v. Parker*, 913 P.2d 1089 (Alaska 1996). In that case, the court concluded that the use of the surface for transmission towers was a reasonable concurrent use, and that it didn't require the payment of just compensation in eminent domain at that time. To the extent that GVEA is aware of the mining claims and is willing to take whatever risk there is in developing the surface, DNR may receive and adjudicate a lease application for the Eva Creek area. AS 38.05.255 and AS 38.05.285, along with past Alaska Supreme Court precedent, allow for the issuance of a surface lease to GVEA in an area where BHG has a subsurface interest.

Alternatives to this proposed lease include changes in tower configuration, reduction or addition in how many towers are erected, individual lease footprints vs. a large lease area, considering roads and powerlines within the lease area as part of the lease or Rights-of-Way, not issuing the lease, type of lease, and term of the lease. These are discussed below. Although some public comments felt that private wind farms at Fire Island and Delta Junction should have been included as alternatives, evaluations of these projects is beyond the scope of this decision.

**Tower configuration:** GVEA currently proposes 12 wind towers in positions listed in maps attached as part of the lease application. These are the final locations of the towers. The project map is attached as Attachment B.

**Reduction or Addition of Towers:** GVEA will not erect 16 towers. The Preliminary Decision stated GVEA was planning on erecting 16, but is currently proposing up to 12 towers for the issuance of the Final Finding and Decision. With the issuance of this FFD, and the final development plan attached as part of this FFD, GVEA will only be erecting 12 wind towers.

**Tower positions:** GVEA has submitted final tower position maps. The towers have been moved closer to the other apparatus, and the position of the development has been tightened to reflect the reduction in the number of towers. DNR will issue the lease as individual footprints for the wind towers and outbuildings, instead of a large lease area. Having



individual footprints will reduce the overall size of the lease, thus allowing greater public access to the area and reducing the amount of acreage that could potentially be disturbed due to lease activities. Having individual footprint leases allows DNR a more comprehensive measure of control over a large scale project such as this.

**Rights-of-Way:** DNR has determined that the roads and powerlines within the lease area will be adjudicated as easements instead of part of the lease. DNR will adjudicate the roads as easements to allow continued public access within the area that will support the wind towers. GVEA is unsure if it will fence off the individual footprints (i.e. the wind tower base, the operations and maintenance building, etc), but DNR will maintain public access around the individual footprints by adjudicating the interconnecting roads as public easements. The transmission lines between the towers and buildings will be located below ground, therefore the lease footprint will not include the powerlines, they will be adjudicated as easements as well.

**Type of Lease:** This lease could potentially be leased competitively under AS 38.05.075(a). However, GVEA qualifies for a public and charitable lease under AS 38.05.810(e) as they are a licensed public utility. There have been other expressions of interest in developing the area for wind power, but DNR has received no lease applications or supporting documents and data to consider. GVEA's application further qualifies for a non-competitive lease under 38.05.810(e), as GVEA has demonstrated that the Eva Creek project is reasonably required for the operation of their business. GVEA has reasonably shown that they have evaluated many sites and options, and that Eva Creek best meets their goals.

**Term of Lease:** GVEA has applied for the public and charitable lease for 35 years. DNR DMLW Windpower Authorizations Guidelines dated May 10, 2010 clearly indicates a maximum lease of 25 years. A new lease must be adjudicated for continued use beyond this term. DNR proposes to issue the lease for a term of 25 years, not the 35 years GVEA applied for. GVEA will also be subject to a required development timeline. As part of the final approval authorization for this lease, a development timeline will be stipulated to avoid any potential speculation and encourage timely development of the project. The lease is also subject to lease/permit stipulations as described in this Final Finding & Decision. See Stipulation #31 of Attachment A.

**Non-Issuance:** Non-issuance is not the preferred alternative as this project is being designed to mitigate impacts to surrounding land uses, and may lower electricity costs for interior Alaska.

**Preferred Alternative:** DNR proposes to issue the lease as applied for, with the exception of changing the 35 year term applied for to 25 years and subject to special stipulations, including a development requirement schedule.

GVEA and DNR have been working to refine the development plan as these issues have come to the forefront to allow for the most comprehensive multiple use management. GVEA has met DNR's requests to make changes to their development plan to reflect a judicious approach to this project. GVEA complied with this request, and has moved the planned location of the tower. DNR has addressed other agency concerns with GVEA such as bird habitat and construction during the moose harvest to allow for the most positive possible use of the area by all parties. DNR has revisited the plan based on comments received during the public notice process to identify additional issues and evaluate whether the wind farm design and plan will sufficiently mitigate environmental damage and user conflict. Changes have been made to the development plan after the issuance of the Preliminary Decision, but only to lessen the impacts of the project, help to resolve multiple user conflicts, or allow DNR to add stipulations to ensure the best possible multiple use management of the land and resource. See Stipulation #32 of Attachment A.

Given the nature of the project in regards to construction of the wind turbines, buildings, road upgrades, and ongoing maintenance and operation of the site, it is important that DNR proceed with the Public & Charitable Negotiated Lease subject to lease stipulations to ensure compliance with DNR's stated mission: *"To develop, conserve, and enhance natural resources for present and future Alaskans."*

**Recommendation**

DNR has completed the Final Finding and Decision process for casefile ADL 418853. DNR proposes to lease this site under the previously described lease fee structure and special project stipulations for a term of 25 years to Golden Valley Electric Association pursuant to AS 38.05.810(e). This Final Finding and Decision from the Department of Natural Resources should proceed to an early entry authorization and lease. The request is in the State's best interest as it will assist in achieving the Governor's goal of 50% renewable energy by 2025 and will move Alaska towards securing alternative forms of energy while maintaining economic viability. Compliance with appropriate lease stipulations are expected to mitigate potential impacts to an acceptable level.



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Owen Coskey  
Natural Resource Specialist

9-23-2011

Date: 9-23-2011

**Final Finding and Decision**

The findings presented above have been reviewed, considered, and accepted. Public Notice has been accomplished in accordance with AS 38.05.945. The case files have been found to be complete and the requirements of all applicable statutes have been satisfied. I find that it is in the best interest of the State to proceed as recommended above with this lease under the authority of AS 38.05.070(b) and 11 AAC 58 subject to the attached stipulations.



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Chris Milles,  
Northern Regional Manager

9-23-2011

Date: 9-23-2011

**Appeal**

A person affected by this decision who provided timely written comment or public hearing testimony on this decision may appeal it, in accordance with 11 AAC 02. Any appeal must be received by October 13<sup>th</sup>, 2011 and may be mailed or delivered to Dan Sullivan, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918, or sent by electronic mail to [dnr.appeals@alaska.gov](mailto:dnr.appeals@alaska.gov). If no appeal is filed by that date, this decision goes into effect as a final order and decision on October 24<sup>th</sup>, 2011. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.

## **Attachment A Special Stipulations**

### **1. Authorized Officer.**

a. The Authorized Officer for the Department of Natural Resources is the Northern Regional Manager, or designee. The Authorized Officer may be contacted at 3700 Airport Way, Fairbanks, Alaska 99709 or 907-451-2740.

a. The Authorized Officer reserves the right to modify these stipulations or use additional stipulations as deemed necessary.

**2. Indemnification.** Lessee shall indemnify, defend, and hold Lessor harmless from and against all claims, demands, judgments, damages, liabilities, penalties, and costs, including attorney's fees, for loss or damage, including but not limited to property damage, personal injury, wrongful death, and wage, employment, or worker's compensation claims, arising out of or in connection with the use or occupancy of the leasehold by Lessee or by any other person holding under Lessee, or at Lessee's sufferance or invitation; and from any accident or fire on the leasehold; and from any nuisance made or suffered on the leasehold; and from any failure by Lessee to keep the leasehold in a safe and lawful condition consistent with applicable laws, regulation, ordinances, or orders; and from any assignment, sublease, or conveyance, attempted or successful, by Lessee of all or any portion of the leasehold or interest therein contrary to the covenants and conditions of this lease. Lessee holds all goods, materials, furniture, fixtures, equipment, machinery, and other property whatsoever on the parcel at the sole risk of Lessee, and shall defend, indemnify and hold Lessor harmless from any claim or loss or damage by any cause whatsoever, including claims by third parties.

**3. Valid Existing Rights.** This authorization is subject to all valid existing rights in and to the land under this authorization. The State of Alaska makes no representations or warranties whatsoever, either expressed or implied, as to the existence, number, or nature of such valid existing rights.

### **4. Reservation of Rights.**

a. The Division reserves the right to grant additional authorizations to third parties for compatible uses on or adjacent to the land under this authorization.

b. The Division may require authorized concurrent users of state land to enter into an equitable operation or maintenance agreement.

c. Authorized concurrent users of state land, their agents, employees, contractors, subcontractors, and licensees, shall not interfere with the operation or maintenance activities of each user.

**5. Performance Guaranty.** For the construction of the Eva Creek Wind Project, a **Construction Bond in the amount of \$100,000.00** is required prior to issuance of the EEA, made payable to the State of Alaska. This bond will be released at the end of the construction phase and when the entire project is operational.

GVEA will set up an asset retirement obligation (ARO) to cover the reclamation costs to remove the Eva Creek Wind Generation Plant when the life of the asset ends to meet the land reclamation requirements of the State of Alaska, Department of Natural Resources. AROs are technical accounting measures used to determine the liability on assets that occur during the life of assets. The Financial Accounting Standards Board (FASB) issues the standards regarding the recognition and accounting of these obligations. Companies must pay close attention to the accounting periods for an ARO recognition and measurement.

Without going into the technical aspects of the accounting for the Eva Creek ARO, GVEA is proposing to account for the cost of removing the Eva Creek wind farm equipment and restoring the land to a condition acceptable to the Department of Natural Resources by amortizing the projected costs over the life of the plant.

As costs are expensed on an annual basis, funds will be set aside in a restricted account that will require the State's permission to use. The amount to be expensed and accumulated over the life of the project will be calculated to build a fund that equals the cost of the equipment removal and land remediation at the end of the project's life.

6. **Insurance.** During the period of early entry authorization for construction/survey will be required to retain Commercial General Liability Insurance. This policy must have minimum coverage limits of **\$1,000,000.00** combined single limit per occurrence, and **\$2,000,000.00** annual aggregate with an Excess Liability Limit that is acceptable to the State of Alaska. The policy will be written on an "occurrence" form and will not be written as a "claims-made" form unless specifically reviewed and agreed to by the Division of Risk Management, Department of Administration. In addition, GVEA must maintain Pollution Liability Insurance with a minimum limit of \$5,000,000 per occurrence, \$5,000,000 aggregate. The State must be named as an additional named insured on the policy with respect to the operations of the permittee on or in conjunction with the permitted premises, referred to as *ADL 418853*.
7. **Survey.** The permittee shall submit an approved Alaska State Land Survey acceptable to the standards of the Division of Mining, Land, and Water prior to the expiration of this early entry authorization.
8. **Appraisal.** The permittee agrees to provide an acceptable appraisal establishing the fair annual rental of the parcel prior to the expiration of this early entry authorization. The Division reserves the right to attach the performance guarantee to ensure compliance with this stipulation.
9. **Alaska Historic Preservation Act.** The permittee shall consult the Alaska Heritage Resources Survey (907) 269-8721 so that known historic, archaeological and paleontological sites may be avoided.

The Alaska Historic Preservation Act (AS 41.35.200) prohibits the appropriation, excavation, removal, injury, or destruction of any state-owned historic, prehistoric (paleontological) or archaeological site without a permit from the commissioner. Should any sites be discovered during the course of field operations, activities that may damage the site will cease and the Office of History and Archaeology in the Division of Parks and Outdoor Recreation (907) 269-8721 and shall be notified immediately.

In addition, established archaeological and paleontological sites will:

- be buffered with a 170-meter diameter.
- flagged by a qualified archaeologist.
- avoided by construction personnel as a "Restricted Area".
- Should unidentified archaeological resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register of Historic Places eligibility criteria (36 CFR 60.4) or Alaska Landmarks Register in consultation with our office. Also, if the undertaking is modified in a manner that alters its potential effects on historic properties, additional consultation under with the Office of History and Archaeology is required.

#### 10. Assignment.

- a. This authorization may be transferred or assigned with prior written approval from the Authorized Officer.

#### 11. Site Restoration.

- a. Upon expiration, completion, or termination of this authorization, the site shall be vacated and all improvements, personal property, and other chattels shall be removed or they will become the property of the state.
- b. The site shall be left in a clean, safe condition acceptable to the Authorized Officer. All solid waste debris and any hazardous wastes that are used and stored on the site shall be removed and backhauled to an ADEC approved solid waste facility.
- c. The site shall be restored to a condition acceptable to the Authorized Officer.
- d. A Restoration Plan must be approved by the Authorized Officer at least 12 months prior to expiration, completion, or termination of this authorization, whichever is sooner.

- e. Land returned to the Department of Natural Resources for any reason shall be returned in an environmental, physical, and marketable condition acceptable to the Authorized Officer.

**12. Inspection.**

- a. Authorized representatives of the State of Alaska shall have reasonable access to the subject parcel for purposes of inspection.
- b. The lessee may be charged fees under 11 AAC 05.010(a)(7)(M) for routine inspections of the subject parcel, inspections concerning non-compliance, and a final close-out inspection.

**13. Compliance with Governmental Requirements; Recovery of Costs.** Permittee shall, at its expense, comply with all applicable laws, regulations, rules and orders, and the requirements and stipulations included in this authorization. Permittee shall ensure compliance by its employees, agents, contractors, subcontractors, licensees, or invitees.

**14. Other Authorizations.** The issuance of this authorization does not alleviate the necessity of the permittee to obtain authorizations required by other agencies for this activity.

**15. Use Fee.**

- a. The permittee shall pay to the Division an annual use fee of \$72,000 plus the appraised fair market value of the land. This fee is based on DNR Windpower Authorizations Guidelines- May 10, 2010.
- b. The use fee is due on or before the anniversary of the effective date of this permit without the necessity of any billing by the Division.

**16. Late Payment Penalty Charges.** The permittee shall pay a fee for any late payment. The amount is the greater of either the fee specified in 11 AAC 05.010 or interest at the rate set by AS 45.45.010(a) and will be assessed on a past-due account until payment is received by the state.

**17. Returned Check Penalty.** A returned check fee as provided in 11 AAC 05.010 will be assessed for any check on which the bank refuses payment. Late payment penalties shall continue to accumulate.

**18. Change of Address.** Any change of address must be submitted in writing to the Authorized Officer.

**19. Destruction of Markers.** All survey monuments, witness corners, reference monuments, mining claim posts, bearing trees, and unsurveyed lease corner posts shall be protected against damage, destruction, or obliteration. The lessee shall notify the lessor of any damaged, destroyed, or obliterated markers and shall reestablish the markers at the lessee's expense in accordance with accepted survey practices of the Division of Land.

**20. Site Maintenance.** The area subject to this authorization shall be maintained in a neat, clean and safe condition, free of any solid waste, debris or litter.

**21. Development Plan.** The development of the site authorized by this permit shall be limited to the area and improvements specified in the development plan. The permittee is responsible for accurately siting development and operations within this area. Any proposed revisions to the [development plan/plan of operations] must be approved in writing by the Authorized Officer before the change in use or development occurs.

**22. Fuel and Hazardous Substances.** Secondary containment shall be provided for fuel or hazardous substances.

- a. **Container marking.** All independent fuel and hazardous substance containers shall be marked with the contents and the permittee's or contractor's name using paint or a permanent label.
- b. **Fuel or hazardous substance transfers.** Secondary containment or a surface liner must be placed under all container or vehicle fuel tank inlet and outlet points, hose connections, and hose ends during fuel or hazardous substance transfers. Appropriate spill response equipment must be on hand during any transfer or handling of fuel or hazardous substances to respond to a spill of up to five

gallons. Trained personnel shall attend transfer operations at all times. Vehicle refueling shall not occur within the annual floodplain or tidelands.

- c. **Storing containers within 100 feet of waterbodies.** Containers with a total capacity larger than 55 gallons, which contain fuel or hazardous substances, shall **NOT** be stored within 100 feet of a waterbody.
- d. **Exceptions.** The Authorized Officer may under unique or special circumstances grant exceptions to this stipulation on a case-by-case basis. Requests for exceptions should be made to the Authorized Officer.
- e. **Definitions.**

**"Containers"** means any item that is used to hold fuel or hazardous substances. This includes tanks, drums, double-walled tanks, portable testing facilities, fuel tanks on small equipment such as light plants and generators, flow test holding tanks, slop oil tanks, bladders, and bags. Manifolder tanks or any tanks in a series must be considered as single independent containers. Vehicles, including mobile seismic tanks, are not intended to be included under this definition.

**"Hazardous substances"** are defined under AS 46.03.826(5) as (a) an element or compound which, when it enters the atmosphere, water, or land, presents an imminent and substantial danger to the public health or welfare, including fish, animals, or vegetation; (b) oil; or (c) a substance defined as a hazardous substance under 42 U.S.C. 9601(14).

**"Secondary containment"** means an impermeable diked area or portable impermeable containment structure capable of containing 110 percent of the volume of the largest independent container. Double-walled tanks do not qualify as secondary containment unless an exception is granted for a particular tank.

**"Surface liner"** means any safe, non-permeable container (e.g., drips pans, fold-a-tanks, etc.) designed to catch and hold fluids for the purpose of preventing spills. Surface liners should be of adequate size and volume based on worst-case spill risk.

### **23. Environmental Compliance.**

(a) **Audits.** At all reasonable times, without notice, the lessor may perform inspections of the parcel, the improvements, and activities conducted thereon. The lessor may obtain samples of soil, water, gravel, or other solids or liquids on the parcel, including from within buildings, as long as the taking of such samples does not unreasonably disrupt the activities of lessee on the parcel. If the inspection reveals hazardous substances in excess of that permitted by applicable law, the lessee, at its expense, shall promptly commence and diligently prosecute the appropriate assessment and remedial action, including, without limitation, the preparation of sampling and cleanup plans and implementing and completing cleanup, if any. The assessment and remedial action plans shall be provided to and approved by the lessor.

**Disclosure.** At any time upon lessor's written request, lessee shall promptly make all documents and other information available to lessor for copying and inspection as reasonably needed by lessor to determine lessee's compliance with applicable state and federal environmental laws.

(b) The lessee shall, at the lessee's own expense, comply with all existing and hereafter enacted environmental responsibility laws ("Environmental Laws"). The lessee shall, at the lessee's own expense, make all submissions to, provide all information to, and comply with all requirements of the appropriate governmental authority (the "Authority") under the Environmental Laws.

(c) Should the Authority require that a remedial action plan be prepared and that a remedial action be undertaken because of the presence of, or any disposal, release, spill, or discharge, or threatened disposal, release, spill, or discharge of or contamination by hazardous materials at the leasehold that occurs during the term of this lease or arises out of or in connection with the lessee's use or occupancy of the land described in section 1 of this lease, then the lessee shall, at the lessee's own expense, prepare and submit the required plans and financial assurances and carry out the approved plans. The lessee's obligations under this section shall arise if there is any event or occurrence at the leasehold during the term of this lease, or arising out of or in connection with the lessee's use or occupancy of the land described in section 1 of this lease, that requires compliance with the Environmental Laws.

(d) At no expense to the lessor, the lessee shall promptly provide all information requested by the lessor for preparation of affidavits or other documents required by the lessor to determine the applicability of the Environmental Laws to the leasehold, and shall sign the affidavits promptly when requested to do so by the lessor.

(e) The lessee shall indemnify, defend, and hold harmless the lessor from all fines, penalties, suits, judgments, procedures, claims, demands, liabilities, settlements, and actions of any kind arising out of or in any way connected with the presence of or any disposal, release, spill, or discharge or any threatened disposal, release, spill, or discharge of or contamination by hazardous materials at the leasehold that occurs during the term of the lease or arises out of or in connection with the lessee's use or occupancy of the land described in section 1 of this lease; and from all fines, penalties, suits, judgments, procedures, claims, demands, liabilities, settlements, and actions of any kind arising out of the lessee's failure to provide all information, make all submissions, and take all steps required by the Authority under the Environmental Laws or any other law concerning any spill, discharge, or contamination that occurs during the term of this lease or arises out of or in connection with the lessee's use or occupancy of the land described in section 1 of this lease.

(f) The lessee agrees that it will not discharge or dispose of or suffer the discharge or disposal of any petroleum products, gasoline, hazardous chemicals, or hazardous materials into the atmosphere, ground, wastewater disposal system, sewer system, or any body of water.

(g) In any court action or administrative proceeding, in addition to all other applicable presumptions, it shall be rebuttably presumed that any environmental contamination of the leasehold (i) has been released on the leasehold; (ii) has resulted from acts or omissions of the lessee or its agents; and (iii) has occurred during the term of this lease. The lessee has the burden of rebutting the presumptions by clear and convincing evidence.

(h) This section of this lease does not in any way alter the State of Alaska's powers and rights or the lessee's duties and liabilities under Title 46 (or its successor) of the Alaska Statutes or other state, federal, or municipal statutes, regulations, or ordinances. For example, notwithstanding the provisions of this lease, the State of Alaska shall not be precluded from claiming under AS 46.03.822 that the lessee is strictly liable, jointly and severally, for damages and costs incurred by the state for clean up of contamination on the leasehold. The obligations and provisions of this section 26 shall survive the termination of this lease.

(i) As used in this lease, the term "hazardous materials" means any hazardous or toxic substance, material, or waste that is or becomes regulated by any municipal governmental authority, the State of Alaska, or the United States government.

**24. Notification.** The permittee shall immediately notify DNR and DEC by phone of any unauthorized discharge of oil to water, any discharge of hazardous substances (other than oil), and any discharge of oil greater than 55 gallons on land. All fires and explosions must also be reported.

The DNR 24 hour spill report number is (907) 451-2678; the Fax number is (907) 451-2751. The DEC spill report number is (800) 478-9300. DNR and DEC shall be supplied with all follow-up incident reports.

**25. Corrective Work Actions and Violations.**

- a. **Directives.** Directives may be issued for corrective actions that are required to correct a deviation from design criteria, project specifications, stipulations, state statutes, or state regulations. Work at the area subject to the Directive may continue while implementing the corrective action. Corrective action may include halting or avoiding specific conduct, implementing alternative measures, repairing any damage to state resources that may have resulted from the conduct, or other action as determined by DNR.
- b. **Stop Work Orders.** Stop Work Orders may be issued if there is a deviation from design criteria, project specifications, stipulations, state statutes, or state regulations and that deviation is causing or is likely to cause significant damage to state resources. Under a Stop Work Order, work at the area subject to the Stop Work Order may not resume until the deviation is cured and corrective action is taken. Corrective action may include halting or avoiding specific conduct, implementing alternative measures, repairing any damage to state resources that may have resulted from the conduct, or other action as determined by DNR.
- c. **Revocation.** This authorization may be revoked upon violation of any of its terms, conditions, stipulations, nonpayment of fees, or upon failure to comply with any other applicable laws, statutes

and regulations (federal and state). A revocation may not become effective until 60 days after the Permittee has been notified in writing of the violation during which time the Permittee has an opportunity to cure any such violation.

## 26. Fire Prevention, Protection, and Liability.

- a. **Liability.** The permittee shall take all reasonable precautions to prevent, control, and suppress forest, brush, and grass fires and shall assume full liability for fire suppression costs and any damages to state land resulting from escaped fire.
- b. **Instruction.** Prior to construction, all personnel shall be instructed on fire protection measures, including these stipulations and the provisions of AS 41.15.010-.950 (Public Resources, Protection of Forested Lands) and 11 AAC 95.400-.490 (Forest Resources and Practices, Forest Fire Protection).
- c. **Burning permit year-round.** The permittee shall obtain a burning permit before engaging in any burning under this authorization. GVEA shall notify, in accordance with the permit, the Fairbanks Area Forestry Office before engaging in any large-scale burning (i.e., larger than a 10' by 10' pile) on a year-round basis, and before any burning, regardless of the size of the burn, from May 1<sup>st</sup> to September 31<sup>st</sup>. Burning permits may be obtained from the Fairbanks Area Forestry Office. Any burning requiring notification to Fairbanks Area Forestry shall be attended at all times.
- d. **Fire danger level check.** From May 1<sup>st</sup> to September 31<sup>st</sup>, fire danger levels (Low, Moderate, High, Very High, and Extreme) shall be checked on a daily basis with the Fairbanks Area Forestry Office at 451-2623.
- e. **Cooking and warming fires.** From May 1<sup>st</sup> to September 31<sup>st</sup>, cooking and warming fires are prohibited except at the center of fire safe areas (such as mineral soil or gravel areas with a minimum size of 15' by 15') or with approved (by the Division of Forestry) cooking appliances/incinerators, which would prevent the escape of flying embers. Fires should be attended at all times and extinguished immediately after use. If the fire danger level reported by the Fairbanks Area Forestry Office for this area is at High, Very High or Extreme, open flames, including debris burning, cooking and warming fires (including fires in fire-safe areas or with approved cooking appliances/incinerators), are prohibited under this authorization.
- f. **Right-of-Way Clearing.** During Extreme conditions, right-of-way clearing shall be suspended.
- g. **Equipment precautions.** All power saws, chain saws, brush cutters, vehicles, aircraft, and any other equipment with exhaust particles that might be exposed to forested land (land on which grass, brush, timber, and other natural vegetative material grows) shall be equipped with a spark-arresting device that complies with 11 AAC 95.480. Vehicles and aircraft used in forested land must have their exhaust manifolds far enough from forested ground to avoid igniting combustible material.
- h. **Smoking materials.** Cigarettes, cigars, and other smoking materials are prohibited except for inside vehicles or at the center of areas that are fire safe. Fire safe areas are areas down to the mineral soil (whether cleared or naturally occurring) with a minimum size of 15' x 15'. Cigarette butts, cigar butts, and other smoking materials must be extinguished and dropped into the smoker's hand and felt for embers before being discarded into a suitable receptacle for the disposition or reception of burning material.
- i. **Fire suppression tools and water on site.** From May 1<sup>st</sup> to September 31<sup>st</sup>, tools and water should be kept onsite to control any fire that may start on forested land. There should be 2 full backpack pumps (fedcos) for each work party, and each crewmember should have a hand tool (e.g., Pulaski, shovel, ax, etc.) and personal protective gear (at a minimum, gloves and a hardhat). Each crewmember operating a chainsaw or similar equipment should be equipped with a personal fire extinguisher.
- j. **Communications.** Work crews shall have radios and/or cell phones capable of communicating with each work party and/or the Division of Forestry's Fairbanks Area Dispatch. Uncontrolled fires shall be reported immediately to the Division of Forestry's Fairbanks Area Dispatch at (907) 451-2623 (fire line).



k. **Flares or fusees.** From May 1<sup>st</sup> to September 31<sup>st</sup>, flares or fusees are prohibited except for use as an emergency signaling device and then, only over fire safe areas (15' x 15' mineral soil).

**27. Traffic Safety Plan.** The DNR-approved traffic safety plan will be followed. The Permittee must comply with the filed Traffic Safety Plan. Any changes or alterations to the plan must be approved by DNR prior to implementation.

**28. Point of Contact.** The Permittee shall supply the name and telephone number of a person(s) familiar with the daily location of the permit activities and who can be easily contacted by the Northern Regional Office of the Division of Mining, Land and Water. Construction schedules shall be provided to DNR on a weekly basis for the two-week period following the submittal.

**29. Route clean up.** At the conclusion of the season, the entire route will be surveyed to pick up any debris attributable to the Permittee's use of the trail.

**30. Avian Protection Plan.** The permittee shall comply with the U.S. Fish & Wildlife Service (USFWS) issued Avian Protection Eagle Conservation Plan. If a discrepancy exists between this stipulation and the Avian Protection & Eagle Conservation Plan, defer to the USFWS issued plan. To protect nesting migratory birds:

- a. No work (i.e. clearing, grading, excavation, stockpiling, replacing of fill) would occur on the site between May 1 and July 15 each year, except at sites that have been sufficiently disturbed by May 1 to eliminate suitable nesting habitat, and on which continuous construction activity would occur through July 15.
- b. Construction contractors will be required to maintain a 500 meter buffer around all golden eagle nests (1000 meter if the nest is visible). The contractor will be responsible for having a qualified person on site to monitor the nest if work is to take place within the buffer zone.
- c. Construction contractors will be required to appropriately store and remove all solid and putrescible wastes from the site to avoid attracting birds or animals.

**31. Development Schedule.** GVEA will adhere to the development schedule proposed in the project development plan. Construction is to begin Fall 2011, with operation of the wind towers scheduled for September of 2012. Reasonable extensions will be evaluated as necessary.

**32. Concurrent Use.** Lessee acknowledges the existence of State mining claims that affect or may affect the land associated with this lease. Lessee further acknowledges that this lease is issued as a reasonable concurrent use of the surface estate, but that events subsequent to issuance of this lease may result in an irreconcilable conflict between the uses allowed by the lease and the development of the dominant mineral estate. In the event that happens, Lessee may be required to move, change or completely remove its improvements, at its sole expense, and this lease may be terminated in whole or part.

## **ATTACHMENT B**

- **Project Development Plan**
- **Maps**



April 18, 2011

Frank Maxwell  
Natural Resources Manager  
Alaska Department of Natural Resources  
3700 Airport Way  
Fairbanks, AK 99709

RE: Eva Creek Wind Energy Project - Land Lease Application, ADL No. 418853

Dear Mr. Maxwell:

Golden Valley Electric Association (GVEA) submitted an application for lease of state land to the Alaska Department of Natural Resources (ADNR) Division of Mining, Land and Water in November 2009, and was assigned **ADL No. 418853**. The project has undergone a few changes in the interim years and we would like to amend our lease application to include the attached updated Development Plan, associated figures, and Environmental Risk Questionnaire. Changes in the project affecting our land lease application include the following:

**1. Turbine Locations**

Our original 2009 project description stated that 16 turbines would be erected on two ridges. There will still be turbines on two ridges, but one of the ridges has changed. Our original plan called for a string of eight (8) turbines along a ridge located within Sections 21, 22 and 23 of Township 10 South, Range 7 West in Fairbanks Meridian. This ridge is no longer being considered part of this project. Instead, seven (7) turbines will be located within Sections 3, 4, and 9 of T. 10S, R. 7W. The second string of eight (8) turbines described in the 2009 project will remain along the original ridge within Sections 9, 10, and 11 of T. 10S, R. 7W, with a ninth turbine added to the western end of the string, located in portions of Sections 9 and 16. See Figures 1 and 2 for project overview and current turbine locations.

**2. Building Locations**

The 2009 project description did not include locations of the project buildings. We have now determined that the substation will have a footprint of 360ft by 500ft and will be located in Section 10, in the middle of the southern turbine string. The operations and maintenance (O&M) building will measure 40ft by 80ft with a gravel pad measuring approximately 200ft by 200ft. It will be located adjacent to the south side of the substation.

**3. Permanent Meteorological Tower**

The project will require a permanent meteorological tower tentatively sited approximately 300ft south of Turbine T7. This "met" tower will have a footprint of approximately 12ft by 12ft; GVEA is requesting a 50ft by 50ft lease area for the tower.

**4. Communication Towers**

The project will require the construction of three microwave communication towers; two of them will be located near the turbine strings and the third will be offsite near the Parks Highway. Microwave Tower SS will be located on the south side of the substation. Microwave Tower T2, a repeater tower, will be located near turbine T2. Comm Site #2 (remote from the project) will be located on the west side of the

Parks Highway at 64° 02' 26.4"N, 149° 09' 54.3"W. Each ridge-site communication tower will require an area measuring approximately 200ft by 200ft and will have its own backup generator. Comm Site #2 will require an area approximately 350ft by 350ft (Figure 3). Comm Site #2 is required to provide line of site communications between the Eva Creek Communications site and GVEA's existing communication systems.

GVEA is requesting a lease from ADNR for the land occupied by the turbine pads, the O&M Building, the substation, the communication towers, and the permanent meteorological tower. The Warm Storage Building will be constructed on private land and therefore will not require a lease from ADNR.

Attached you will find an updated project description with corresponding figures. Should you have any questions regarding the applications, please call me at (907) 451-5629 or our agent Brian Kovol, Environmental Manager at Restoration Science and Engineering, at (907) 278-1023. Thank you for your time reviewing this project.

Sincerely,

*Greg Wyman*  
*by Cheryl Laudert*

Greg Wyman P.E., P.L.S  
Manager of Construction Services  
Golden Valley Electric Association  
PO Box 71249  
Fairbanks, AK 99707  
[GEWyman@gvea.com](mailto:GEWyman@gvea.com)

Attachments:

1. Development Plan
2. Figures
3. Environmental Risk Questionnaire

**Eva Creek Wind Energy Project  
Development Plan  
April 2011**

**Introduction**

Golden Valley Electric Association (GVEA) is proposing to construct a 24 megawatt (MW) wind farm on the ridges above the Eva Creek valley, located east of the Nenana River approximately 15 miles northeast of Healy, Alaska. Power generated by the wind farm would feed into GVEA's 230 kilovolt (kV) Northern Intertie transmission line, which bisects the proposed project area. The power will then be available for distribution throughout GVEA's service area.

The project would encompass a total of approximately 170 acres within three primary geographical areas: 1) two subalpine ridge sites at the head of Moose and Eva creeks in the Northern foothills of the Alaska range; 2) Ferry-Eva-Moose Creek Road (or "Ferry Road") extending from the ridges to Ferry, Alaska; and 3) sites in Ferry, Alaska. The project will also require up to eight Gravel Extraction Sites to obtain necessary materials for construction. The gravel sites currently under consideration total approximately 658 acres.

The wind farm would be located on state-owned land. There are a number of mining claims in the proposed project area. See Table 1 for mining claims that may be affected by this project. GVEA is applying for a Land Lease as well as easement permits and material sales permits from Alaska Department of Natural Resources (ADNR) for this project.

**DEVELOPMENT PLAN**

1. **Legal description:** Portion of Sections 3, 4, 9, 10, 11, 14, 15, 22, 23, 27, 28, 29, 30 Township 10 South, Range 7 West, F.M, and portion of Sections 17, 25, 26, 27, 28, 34, 35, Township 10 South, Range 8 West, F.M..
2. **Terrain/ground cover:** The wind turbines will be erected on subalpine ridges dominated by gravelly, exposed land with tundra scrub and meadows occupying concave low-lying bowls. The ridges have a maximum elevation of approximately 3,500ft. The terrain at lower elevations to the west of the ridge sites contain low forested slopes and lowland floodplains dominated by well-drained soils supporting mixed forests and riverine corridors.
3. **Access:** The proposed wind farm site is accessed by road from the town of Ferry, Alaska. Ferry is directly accessed by railroad. The Parks Highway is located on the opposite side of the Nenana River from Ferry. Automobiles can be parked on the highway side of the river (west) and pedestrians can access Ferry by walking along the footpath on the railroad's bridge. Ferry Road extends from the town of Ferry eastward into the northern foothills of the Alaska Range. Access roads will extend northward from the east end of Ferry Road to access the proposed wind

farm site, including the wind turbines, substation and operations and maintenance (O&M) Building.

**4. Buildings and other structures:** (See Table 2 for coordinates of proposed project structures.) A transmission substation will be constructed in an area approximately 360ft by 500ft and surrounded with fencing. The substation will include a control building measuring approximately 20ft by 30ft for housing equipment and electronics. GVEA will construct an approximately 40ft by 80ft O&M warehouse-type building on a gravel pad measuring approximately 200ft by 200ft. This O&M Building will be adjacent to the substation and will house computer equipment, a small living area for employees, and a garage area for storing equipment such as a crane and spare turbine parts. There will be parking lot adjacent to the building. The perimeter of the building may be fenced for security reasons.

Up to 16 wind turbines will be assembled into two strings. The turbine tower height will be approximately 263ft, and the radius of the turbine rotors will be between 135ft and 152ft. These turbines will be constructed on 54ft diameter buried concrete reinforced foundations. Each turbine pad will be a 300ft by 300ft area.

The project will require three microwave communication towers, all to be located on state land. One tower, Microwave Tower SS, will be located on the south side of the substation. A repeater tower, Microwave Tower T2, will be located near turbine T2. A third communication tower, Comm Site #2, will be located near the Parks Highway. Each ridge-site communication tower will require an area measuring approximately 200ft by 200ft and will have its own backup generator. Comm Site #2 will require an area approximately 350ft by 350ft.

A permanent meteorological tower will be constructed approximately 300 feet south of turbine T7. The base of the tower will measure approximately 12ft by 12ft; GVEA is requesting a 50ft by 50ft lease area for the tower.

A temporary man camp and laydown area may be constructed on the ridge site for use during project construction activities and would be removed upon completion. The construction contractor would be responsible for design, permitting, and constructing the man camp.

**5. Power source:** GVEA's Northern Intertie transmission line will provide power in times when the wind turbines are not turning. When the turbines are turning they will provide any power required.

**6. Waste types, waste sources, and disposal methods:** Solid waste will be collected and removed from the site. The O&M Building will have an on-site domestic wastewater disposal

system which will be designed, permitted, and constructed by the construction contractor. It is expected to include a 1,000-gallon septic tank and drainfield. The Warm Storage Building will have an incinerator toilet.

**7. Hazardous substances:** The construction contractor will be required to produce a Hazardous Materials Control Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan to GVEA prior to commencing work on the project. Upon completion of construction, GVEA will develop its own SPCC plan for the site and will provide a copy of the plan to ADNR. GVEA intends to have a 3,000-gallon aboveground diesel tank adjacent to the Warm Storage Building and another 3,000-gallon aboveground diesel tank adjacent to the O&M Building; each tank will provide fuel to a suspended diesel heater.

**8. Water Supply:** A Class B Potable water well will be established near the Warm Storage Building. The well will serve a 300-gallon storage tank in the Warm Storage Building and, through that tank system, serve as the potable water supply for both the Warm Storage and the O&M buildings. During operation, potable water will be hauled from the watering point at the Warm Storage Building to the O&M Building on an as-needed basis.

During construction, water supply for the concrete plant is expected to be provided by a pump drawing water from the Nenana River and carried to the batch plant via temporary water lines laid on the surface of the ground. These installations would be removed after construction is completed. These permits will be obtained by the EPC Contractor.

**9. Parking and storage areas:** There will be parking outside the O&M Building. Minimal parking area will be required after construction is complete.

It is likely that there will be a need to store a crane outside of the O&M Building in a fenced area. This is necessary due to the challenging logistics of getting equipment to the site on short notice. Once a crane is located there, it will remain there for maintenance of the towers.

Spare turbine parts will be stored inside the O&M Building.

**10. Number of people using the site:** There will be approximately 50 people employed during the construction phase of the project. Once construction is complete, it is anticipated that two to four employees will be present at the site seven days a week.

**11. Maintenance & Operations:** In addition to the employees noted in item 10, periodically contractors and/or vendors will be on site to perform work as required.

**12. Closure/Reclamation plan:** It is not anticipated that a reclamation plan will be required for the Land Lease for the wind farm.

13. Sketch: See attached figures.

**Table 1: Mining Claims in the  
Vicinity of the Proposed Eva Creek Wind Energy Project**

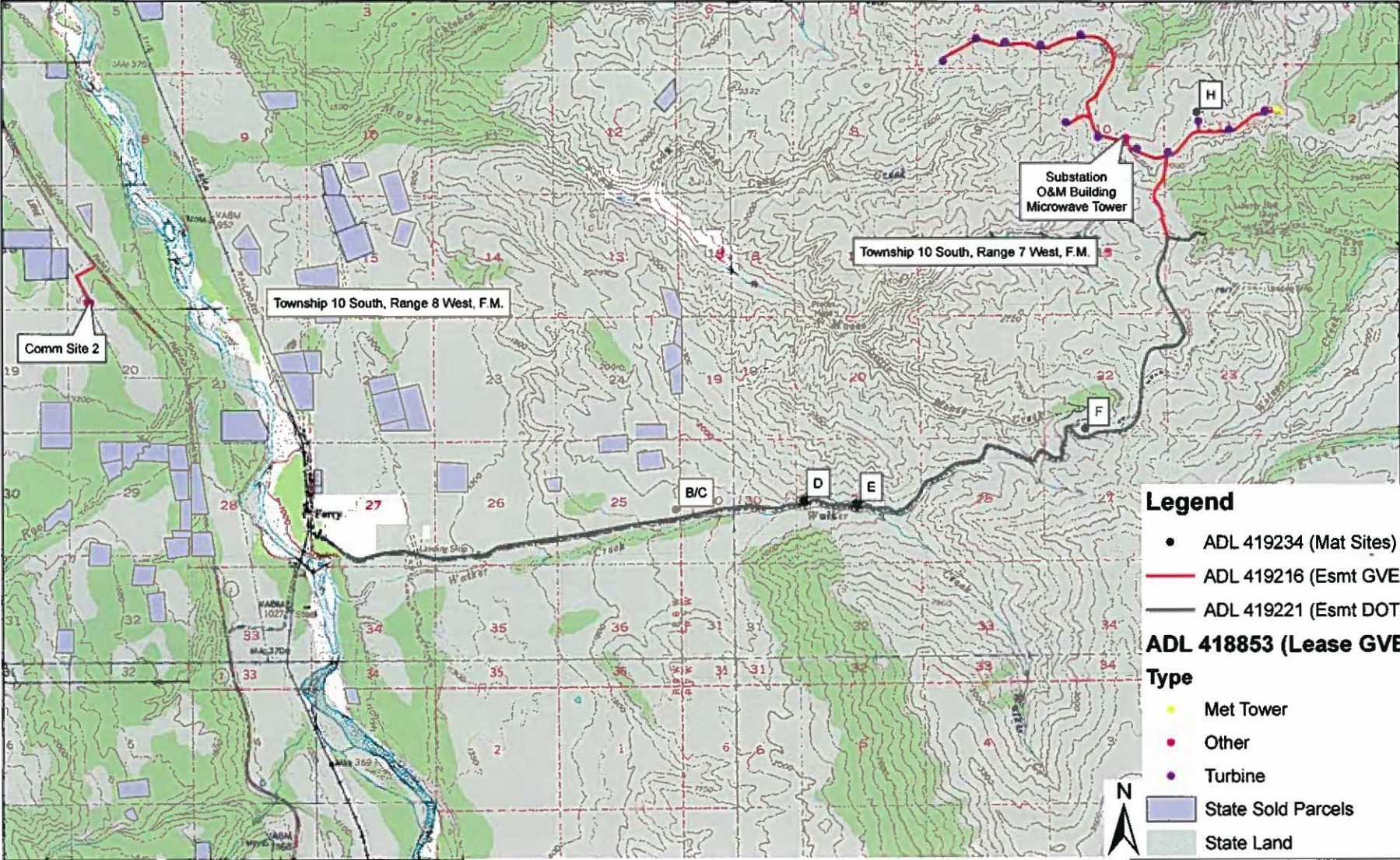
<b>Mining Claim ADL #</b>
607181
607182
607183
607184
607185
607186
607187
607193
607198
607204
607205
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613119
66192

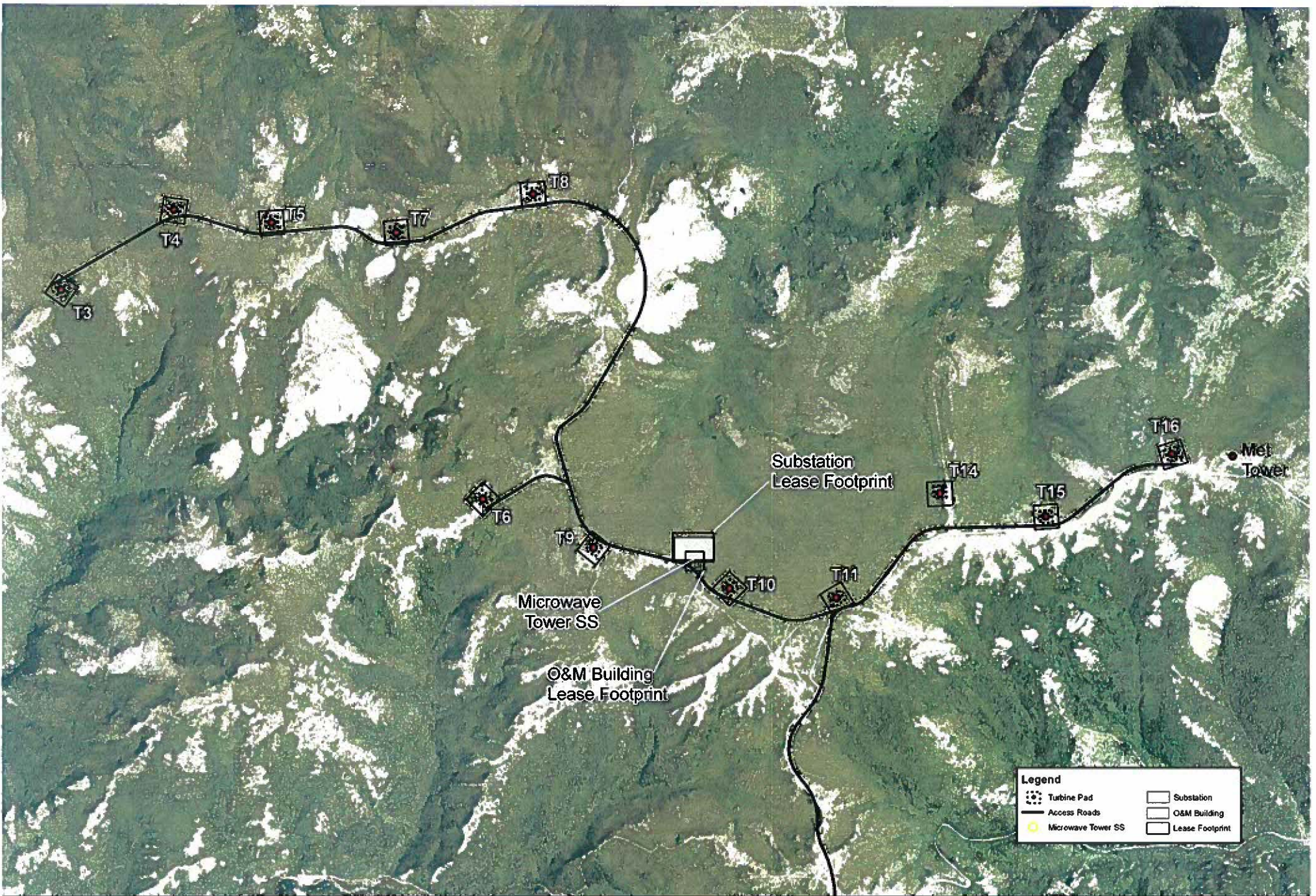


**Table 2. Locations and Requested Leases Areas for Proposed Project Structures**

<b>Structure</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Footprint</b>	<b>Lease Area (acres)</b>
Turbine T-3	N64° 04' 08.40"	W148° 56' 41.34"	300' x 300'	2.066
Turbine T-4	N64° 04' 17.88"	W148° 56' 09.36"	300' x 300'	2.066
Turbine T-5	N64° 04' 16.20"	W148° 55' 42.06"	300' x 300'	2.066
Turbine T-6	N64° 03' 42.12"	W148° 54' 44.46"	300' x 300'	2.066
Turbine T-7	N64° 04' 14.82"	W148° 55' 07.32"	300' x 300'	2.066
Turbine T-8	N64° 04' 19.21"	W148° 54' 28.83"	300' x 300'	2.066
Turbine T-9	N64° 03' 35.90"	W148° 54' 13.70"	300' x 300'	2.066
Turbine T-10	N64° 03' 30.72"	W148° 53' 36.00"	300' x 300'	2.066
Turbine T-11	N64° 03' 29.28"	W148° 53' 06.18"	300' x 300'	2.066
Turbine T-14	N64° 03' 41.88"	W148° 52' 36.78"	300' x 300'	2.066
Turbine T-15	N64° 03' 38.82"	W148° 52' 07.32"	300' x 300'	2.066
Turbine T-16	N64° 03' 46.14"	W148° 51' 31.74"	300' x 300'	2.066
Permanent Met Tower	N64° 03' 45.78"	W148° 51' 14.94"	50' x 50'	0.057
O&M Building	N64° 03' 33.73"	W148° 53' 45.88"	200' x 200'	0.918
Substation	N64° 03' 35.62"	W148° 53' 45.89"	360' x 500'	4.132
Microwave Tower SS	N64° 03' 33.90"	W148° 53' 47.77"	200' x 200'	0.918
Comm Site #2	N64° 02' 26.42"	W149° 09' 54.29"	350' x 350'	2.87
			<b>Total:</b>	<b>33.687</b>

# Attachment B





**Legend**

Turbine Pad	Substation
Access Roads	O&M Building
Microwave Tower SS	Lease Footprint

N

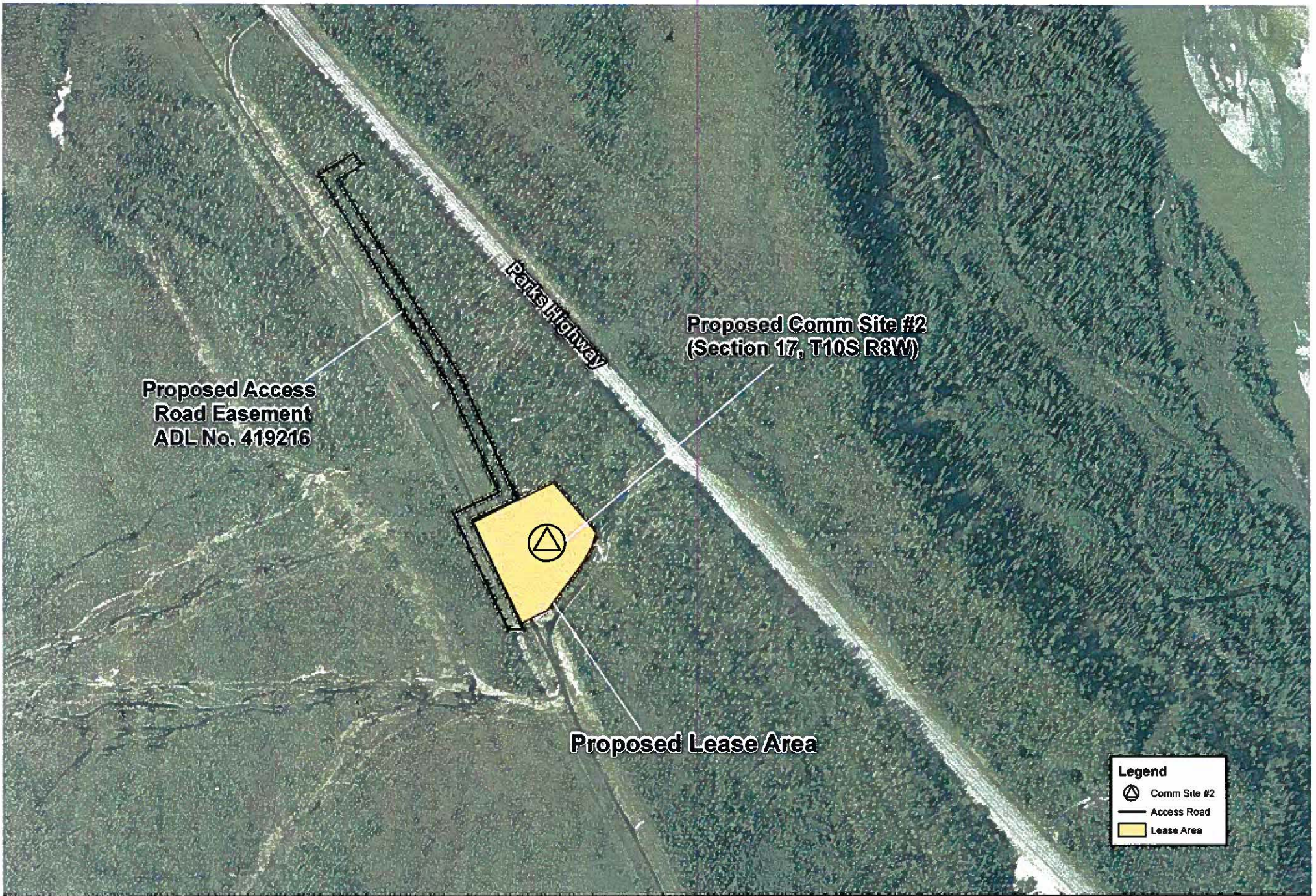
0 750 1,500 Feet

Coordinate System: NAD 83 StatePlane Zone 4  
 Imagery: ESRI Aerial Image, 2010  
 Produced: September 2011

## GVEA | Eva Creek Wind Energy Project Lease Footprint

Restoration Science & Engineering, LLC

911 West 8th Avenue, Suite 100  
 Anchorage, Alaska 99501  
 www.restsci.com  
 Fax: 907.277.5718 Phone: 907.278.1023






Proposed Access  
Road Easement  
ADL No. 419216

Proposed Comm Site #2  
(Section 17, T10S R8W)

Proposed Lease Area

**Legend**

-  Comm Site #2
-  Access Road
-  Lease Area

N

0 275 550 Feet

Coordinate System: NAD 83 StatePlane Zone 4  
Imagery: ESRI Aerial Image, 2010  
Produced: September 2011

**GVEA | Eva Creek Wind Energy Project Lease Footprint**  
**Comm Site #2 Location**

**Restoration  
Science &  
Engineering, LLC**

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