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

PRELIMINARY DECISION

Little Mount Susitna Wind, LLC
ADL 233892: Negotiated Lease - AS 38.05.070
ADL 234252: Public Access Easement - AS 38.05.850
ADL 234276: Public Utility Easement - AS 38.05.850

This Preliminary Decision (PD) is the initial determination on a proposed disposal of interest in state land and is subject to comments received during the public notice period. The public is invited to comment on this PD. The deadline for commenting is **11:59 p.m. July 8, 2024**. Please see the Comments section of this decision for details on how and where to send comments for consideration. Only the applicant and those who comment have the right to appeal the Final Finding and Decision (FFD).

Proposed Action:

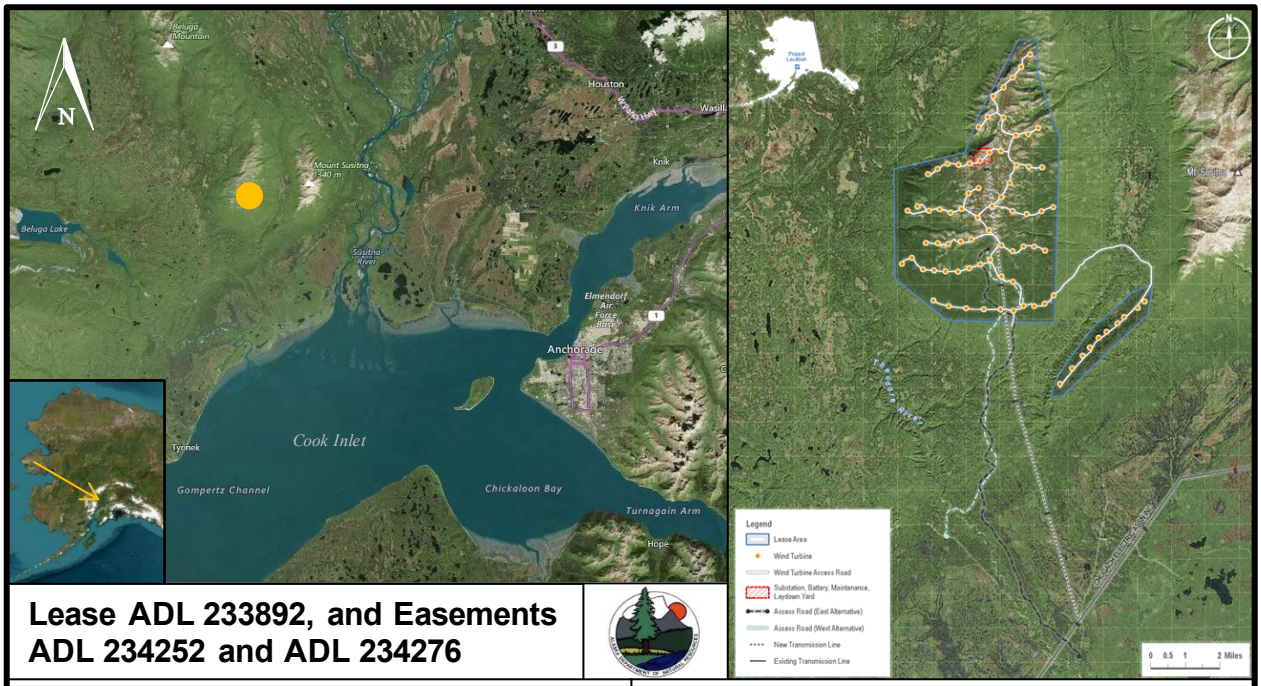
The Department of Natural Resources (DNR), Division of Mining, Land and Water (DMLW), Southcentral Regional Land Office (SCRO) has received a request from Little Mount Susitna Wind, LLC (LMSW, applicant) for a 40-year lease authorization to be located in the area of Little Mount Susitna, approximately 37 miles northwest of Anchorage, Alaska. LMSW has requested to lease up to 450 acres of land within an overall project area of approximately 19,000 acres. LMSW is proposing to use this site for the construction, operation, and maintenance of a long-term wind farm. The project proposes the following:

- Up to 80 wind turbines divided between individual lease parcels within the project area. Once constructed, individual lease parcels would be approximately 330 feet by 460 feet, occupying approximately 3.5 acres each. In no event will an individual turbine site exceed 5 acres;
- Four meteorological towers (METs) (currently authorized by the Land Use Permit serialized as LAS 34057);
- Yard, maintenance facility and substation on a parcel up to 50 acres;
- A public access easement 100 feet wide encompassing roads up to approximately 55 feet in width, and an as yet undetermined final length. The segment from the existing Beluga road system to the substation would be up to 16 miles long. The public access easement would connect each lease parcel to the substation; this length will depend on final layout and parcel configuration.

- A public utility easement between 30 and 300 feet wide, and an unknown final length. The segment from the Beluga intertie (ADL 201672) to the substation would be up to 15 miles long. The easement would connect each lease parcel to the substation; this length will depend on final layout and parcel configuration. This easement would authorize both the electrical transmission lines and communications cables. Those portions of the easement between the substation and the individual parcels will likely substantially overlap with the public access easement.

This application is in response to a request from Chugach Electric Association (CEA), which serves the greater Anchorage area, encouraging alternative energy development to reduce environmental impacts of its current operations and transition to a more affordable, reliable, and more environmentally friendly energy portfolio. LMSW proposes that the project's maximum electrical output could be up to 272 megawatts.

Figure 1: Overview Map of Project Area



Lease ADL 233892, and Easements ADL 234252 and ADL 234276

The application location for ADLs 233892, 234252, and 234276 is located on Little Mount Susitna, approximately 37 miles northwest of Anchorage, Alaska. The site encompasses 19,000 acres, more or less.

NOTE: The image above was provided by the applicant and can be found in the attached development plan. This map provides a graphical representation of the proposed authorizations and has only been provided as a general reference. The exact location of the lease and easements may be adjusted prior to authorization. This map is not intended for navigational purposes.

SCRO is considering the issuance of a 40-year lease under AS 38.05.070(c) and associated indefinite public access and public utility easements under AS 38.05.850 to LMSW for the construction, operation, and maintenance of the proposed wind farm as described in the attached

Development Plan (Attachment A). SCRO would issue an Entry Authorization (EA) for construction of the project prior to lease and easement issuance. The proposed term of the public utility easement and the public access easement is indefinite.

Scope of Decision:

The scope of this decision is to determine if it is in the State's best interest to issue a 40-year lease (ADL 233892) and associated indefinite public access and public utility easements (ADL 234252 and ADL 234276 respectively).

Authority:

These applications are being adjudicated pursuant to AS 38.05.035(b)(1) and AS 38.05.035(e) Powers and Duties of the Director; AS 38.05.070 Generally; AS 38.05.075 Leasing Procedures; AS 38.05.850 Permits; and AS 38.05.945 Notice.

The authority to execute the PD, FFD, the EA, easements, and the lease has been delegated to the Regional Managers of DMLW, and may be further redelegated.

The authority to determine if a water body is public or navigable has been delegated to the Public Access Assertions and Defense Section.

Administrative Record:

The administrative record for the proposed action consists of the Constitution of the State of Alaska, the Alaska Land Act as amended, applicable statutes and regulations referenced here-in, the 2011 Susitna Matanuska Area Plan and other classification references described herein, and the casefiles for the applications serialized by DNR as ADL 233892, ADL 234252, and ADL 234276.

Legal Description, Location, and Geographical Features:

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

- **Lease Legal Description:** A tract of land including all or portions of:
  - Sections 1-2, 4-12, 14-16, 21 and 22 Township 15 North, Range 9 West, Seward Meridian, Alaska;
  - Sections 1, 2 and 12, Township 15 North, Range 10 West, Seward Meridian, Alaska;
  - Sections 4-9, 16-21, and 28-33, Township 16 North, Range 9 West, Seward Meridian, Alaska;
  - Sections 13-15, 22-27, and 34-36, Township 16 North, Range 10 West, Seward Meridian, Alaska;
  - Sections 28, 32, and 33, Township 17 North, Range 9 West, Seward Meridian, Alaska;

- **Public Access Easement Legal Description:** A tract of land including all or portions of:
  - Sections 6-8, 17, 20-21, 27-28, Township 14 North, Range 9 West, Seward Meridian, Alaska;
  - Sections 1, 12, Township 14 North, Range 10 West, Seward Meridian, Alaska;
  - Sections 5-8, 17-19, 30-31, Township 15 North, Range 9 West, Seward Meridian, Alaska;
  - Sections 30, 32, Township 16 North, Range 9 West, Seward Meridian, Alaska;
- **Public Utility Easement Legal Description:** A tract of land including all or portions of:
  - Sections 4, 9, 15-16, 22, Township 14 North, Range 9 West, Seward Meridian, Alaska;
  - Sections 5, 8, 17, 20, 29, 32-33, Township 15 North, Range 9 West, Seward Meridian, Alaska;
  - Sections 18-19, 30-32, Township 16 North, Range 9 West, Seward Meridian, Alaska.
- **Geographical Location:** Little Mount Susitna
- **Approximate Lat/Long:** 61° 28' 42" N, 150° 56' 37" W
- **Area Geographical Features:** This project encompasses lands ranging from the lowlands surrounding Cook Inlet to the top of Little Mount Susitna with alpine tundra and shrubs.
- **Municipality/Borough:** Matanuska-Susitna Borough
- **Native Corporations/Federally Recognized Tribes:** Cook Inlet Region Inc.
- **Size:** Approximately 450 acres of land within an overall project area of approximately 19,000 acres, more or less

Title:

Multiple DNR Title Reports (RPTs 23155, 23156, 23157, 23158, 23160), issued on October 19, 2023, October 23, 2023 and October 24, 2023, from DMLW's Realty Services Section attest that the State of Alaska holds title to the lands associated with ADL 233892, ADL 234252, and ADL 234276 under a series of US Patents, specifically:

- Applicable portions of Sections 4-9,16-21, and 28-33, Township 16 North, Range 9 West, Seward Meridian, per US Patent 50-66-0311, dated February 24, 1966. The associated DNR selection casefile is GS 217.
- Applicable portions of Sections 1, 2 and 12, Township 15 North, Range 10 West, Seward Meridian, per US Patent 50-66-0310, dated February 4, 1966. The associated DNR selection casefile is GS 235.
- Applicable portions of Sections 1-12, 14-22, 28-33, Township 15 North, Range 9 West, Seward Meridian, per US Patent 50-66-0212, dated November 10, 1965. The associated DNR selection casefile is GS 215.
- Applicable portions of Sections 13-15, 22-27, and 34-36, Township 16 North, Range 10 West, Seward Meridian, per US Patent 50-66-0313, dated February 4, 1966. The associated DNR selection casefile is GS 308.

- Applicable portions of Sections 28, 32, and 33, Township 17 North, Range 9 West, Seward Meridian, per US Patent 50-66-0120, dated February 24, 1966. The associated DNR selection casefile is GS 220.
- Applicable portions of Sections 3-10, 15-18, 20-22, 27-29, 33-34, Township 14 North, Range 9 West, Seward Meridian, per US patent 50-66-0319, dated February 7, 1966. The associated DNR selection casefile is GS 103. Sections 28, 33, and 34 were originally subject to the mining rights from valid mining claims serialized as AA-59857; these claims were terminated by BLM on April 27, 1993.
- Applicable portions of Sections 1-2, 11-14, Township 14 North, Range 10 West, Seward Meridian, Per US Patent 50-66-0293 dated January 19, 1966. The associated DNR selection casefile is GS 407.

All the above patents include the standard reservations for ditches, canals, railroads, and telegraph and telephone lines. There are no other reservations within the proposed leasehold and easement location.

Due to recent updates to the development plan, SCRO is requesting an additional title report from DMLW's Realty Services Section. Should the additional title report note any major changes, they will be addressed in the FFD.

Third Party Interests:

A portion of Donlin Gold, LLC's Pipeline Right-of-Way Lease, and private non-exclusive easement EA, serialized as ADL 231908 and ADL 232368, respectively, bisects a portion of the proposed leasehold.

In addition to these authorizations, the proposed public access and public utility easements cross or intersect with the following authorizations:

- ADL 421297, a conditional lease issued to the Alaska Gasline Development Corporation;
- ADL 216878, a lease for a gas pipeline issued to the Alaska Pipeline Company;
- ADL 28471 and ADL 201672, public utility easements issued to Chugach Electric Association;
- ADL 33939, a public access easement issued to Hilcorp Alaska, LLC;
- ADL 229279, an easement for a gas pipeline issued to Hilcorp Alaska, LLC;
- ADL 231908 a lease for a natural gas pipeline issued to Donlin Gold, LLC;
- ADL 232368, a private non-exclusive easement issued to Donlin Gold, LLC; and
- LAS 34011, a permit for two microwave repeater towers issued to Spurr Mountain, LLC.

Solicitation of Interest:

Per the requirements of AS 38.05.070, before a lease application under this statutory authority can begin a negotiated lease process, a solicitation of interest must be made by SCRO to determine if any competitive interest exists in a site. On May 25, 2022, a 30-day solicitation of interest was

posted to the State of Alaska Online Public Notice website as well as post offices in Houston, Wasilla, and Willow. During the 30-day solicitation, no competitive interest in the proposed lease site was received. Conducting the solicitation does not guarantee LMSW a lease, but simply the ability to proceed with a negotiated lease process per AS 38.05.070(d).

Classification and Planning:

The lease and easements project areas are within two Area Plans, the Susitna Matanuska Area Plan, and the Southeast Susitna Area Plan.

The proposed lease project area is located solely within the 2011 Susitna Matanuska Area Plan (SMAP), Mount Susitna Region, Management Units M-1, M-7, M-12 (map number 3-6).
M-1: This unit is dual designated for Habitat and Water Resources (Classified Wildlife Habitat and Water Resources). This unit is to be managed to protect habitat, hydrological values, and existing access resources. Chapter 2 notes that one of the primary objectives for Habitat lands is to "ensure access to public lands and waters and promote or enhance the responsible public use and enjoyment of fish and wildlife resources". Management intent for the designations of both Habitat and Water Resources both state that utilities and roads both may be appropriate if habitat and hydrologic functions respectively can be maintained.

This project will greatly enhance access to public lands, waters, and fish and wildlife resources in this area. Currently, access to the top of Little Mount Susitna is primarily through aircraft; this project will allow for vehicular access on constructed routes which will minimize impacts to the wetlands and anadromous and other fish bearing streams.

M-7: This unit is designated for Forestry (classified Forestry). The roads associated with this project will provide increased all season access to this resource base for future forestry activities.

M-12: This unit is designated for Recreation-Dispersed (classified Public Use Recreation). The management intent for the area is with a focus on managing for recreational uses and habitat values.

While each lease parcel will be subject to significant construction activity, the sites are dispersed within a large area. Once the initial construction is complete, we anticipate limited additional disturbance related to maintenance of the facilities. Further, dispersed recreation will be enhanced by the project as noted above; within the lease parcels, only a small border around each wind turbine will be fenced for safety reasons, leaving most of the leased area open to public access and wildlife migration.

Chapter 2 also notes that timber with commercial or personal use value should be salvaged from lands that are to be cleared for uses such as roads, transmission lines, and material sites.

Once the final route for the road and transmission line are determined, SCRO will work with the Division of Forestry to determine if there is sufficient commercial timber value to warrant a salvage sale. At this time, SCRO believes it is unlikely there will be sufficient commercial value from two approximately 100-foot-wide corridors to support a salvage sale: in this event, SCRO will require the applicant to deck timber greater than 6-inch diameter at breast height (dbh) to be made available for personal use firewood permits.

The lower portion of the public utility easement for the transmission line and the public access easement would be within the 2008 Southeast Susitna Area Plan (SSAP). This plan notes the area is to be managed by specific management plans, in this case the plan for the Susitna Flats State Game Refuge (SFSGR), and subject to the 1988 SFSGR plan and limitations contained within the enabling legislation AS 16.20.036. SFSGR was established to protect, preserve, and enhance fish and wildlife habitat and populations, as well as to protect, maintain, and enhance public use of these resources as well as general recreation of the area. In Section II under Objectives, the plan sets out the goal of maintaining, and where appropriate enhancing, public access in the refuge. In Section III under Multiple Use Activities, it requires proposals be evaluated on a case-by-case basis to determine compatibility with the goals and other objectives of the plan, and that compatible activities are to be allowed under terms and conditions consistent with the plan goals. The plan specifically requires encouraging the continued public use and maintenance of the Beluga road system, and also allows that new utilities may be authorized if there are no feasible alternatives and where consistent with the refuge goals and objectives.

The applicant is working with ADF&G to minimize impacts to the refuge and will be required to obtain a Special Area Permit from ADF&G for any construction work within the refuge boundary. There is no feasible alternative for the transmission lines to connect this wind project with the existing electrical grid. The roads for this project will connect to the Beluga road system, and will provide enhanced constructed access within the refuge, but also to lands outside the refuge. Given the challenges and expense of transporting motorized vehicles to the Beluga road system, it is unlikely that expanding the road network will significantly increase overall user numbers; rather, by providing access to a new area, it may reduce user concentration along the currently existing road system. For these reasons, SCRO believes this project is consistent with, and will further the objectives of, the SFSGR legislative intent and plan.

With all aspects of the management designation and intent taken into consideration and in accordance with 11 AAC 55.040(c), this project does not conflict with the existing plans and classifications.

Traditional Use Findings:

The proposed site is located within the Matanuska-Susitna Borough. Pursuant to AS 38.05.830 a traditional use finding is not required.

Access:
The proposed Public Access Easement, ADL 234252, in conjunction with the existing road system will provide legal and physical access to the proposed lease site.

Access Along Navigable and Public Waters:
AS 38.05.127 requires that when the Department is considering a disposal of interest in state land, that the Department determine what waterbodies are public, navigable, or neither. Additionally access easements must be reserved unless they are not necessary to ensure access to and along all public and navigable waterbodies.

The DMLW Public Access Assertion and Defense Section has determined the following waterbodies are pubic or navigable as noted, within the project corridor for ADL 234252 and ADL 234276:
Navigable Waters:

- The Theodore River, AWC Code 247-30-10080
- Lewis River, AWC Code 247-30-10070

Public Waters:

- Unnamed tributary, AWC Code 247-30-10080-2310
- Unnamed tributary, AWC Code 247-30-10080-2325
- Unnamed tributary, AWC Code 247-30-10080-2031
- Unnamed tributary, AWC Code 247-30-10080-2065
- Unnamed tributary, AWC Code 247-30-10080-2057
- Unnamed tributary, AWC Code 247-30-10080-2021
- Interconnected spawning grounds in the Theodore drainage
- Unnamed tributary, AWC Code 247-30-10070-2121
- Unnamed tributary, AWC Code 247-30-10070-2121-3101

There are no other Public or Navigable waters within the boundaries of the overall project, including within the lease project area.

Pursuant to AS 38.5.127, SCRO must consider whether an easement to or along public or navigable waters is required to ensure continued or future public access. There are no public or navigable waters within the lease boundaries. The proposed easements will not impair or restrict access to or along any of the public or navigable waters; therefore, an easement pursuant to AS 38.05.127 is not necessary and shall not be created or reserved pursuant to this decision.

Agency Review:
An agency review was conducted on August 25, 2022. The deadline for agency comments was September 26, 2022, and at the request of an agency, the deadline was extended 10 days to October 10, 2022.

The following agencies were included in the review:

- DNR DMLW Land Conveyance Section

- DNR DMLW Mining Section
- DNR DMLW Public Access Assertion and Defense Section
- DNR DMLW Realty Services Section
- DNR DMLW Survey Section
- DNR DMLW Water Resources Section
- DNR Natural Resource Conservation and Development Board
- DNR Oil and Gas
- DNR Oil and Gas – State Pipeline Coordinator's Section (SPCS)
- DNR Parks & Outdoor Recreation
- DNR Parks & Outdoor Recreation - Office of History and Archaeology/State Historic Preservation Office (SHPO)
- DNR Division of Forestry
- Department of Commerce, Community and Economic Development
- Department of Environmental Conservation
- Department of Fish and Game - Habitat
- Department of Fish and Game - Wildlife Conservation
- Department of Transportation and Public Facilities
- U.S. Army Corps of Engineers
- U.S. Bureau of Land Management
- U.S. Coast Guard
- U.S. Environmental Protection Agency
- U.S. Fish & Wildlife Service
- U.S. National Park Service
- U.S. National Oceanic and Atmospheric Administration - Habitat Conservation

Agency Review Summary:
During the agency review SCRO received the following comments:

DNR DMLW Land Conveyance Section Comment:
No objection.

Department of Transportation and Public Facilities:
"Little Mount Susitna Wind, LLC (LMSW) proposes to construct a portion of electric transmission line across the 400-foot-wide State highway corridor that exists between Point Mackenzie and the community of Tyonek. While no highway has been constructed to date within the corridor and routing may be subject to change following a pre-construction design process, the corridor represents both a best-fit alignment from the 1970s planning effort that led to its creation and the starting place for a future design effort due to the preservation of the 400-foot corridor in dual State-held easement and fee simple interests. The terms of the 1978 easement provide that DNR DMLW retains the authority to create third-party interests within the corridor until DOT&PF

initiates highway development. While DOT&PF permitting is therefore not applicable to LMSW's proposed utility crossing of the corridor, DOT&PF third-party non-objection is predicated on the following conditions:

- The proposed transmission line must cross the highway easement at or near to a right angle.
- Transmission line angle points must be located outside of the 400-foot-wide corridor.
- DOT&PF Central Region Utilities shall have an opportunity to review LMSW's project plans at the 35% and 95% stages.
- Any road development by LMSW that may occur in or near the 400-foot reserved corridor shall be coordinated in advance with DOT&PF.
- Vertical clearances above native ground level in the 400-foot corridor shall be maximized to the extent reasonably feasible. Standard DOT&PF clearances for new construction are 20 feet or greater above road surface.
- Towers shall be sited outside the 400-foot corridor. If it is reasonably infeasible to site towers entirely outside of the 400-foot corridor, tower placement will be made as close as practical to the outer edges of the 400-foot corridor."

SCRO Response:
This decision will serve as notification to LMSW of the above comments from DOT&PF. LMSW should contact DOT& PF at their earliest convenience to ensure compliance with any DOT&PF requirements.

DNR Division of Forestry Comment:
"Due to the remote nature of the area, I suggest that special attention be paid to minimizing the potential for introduction of invasive plants to this region during all phases of this project. I suggest including both prevention measures pre-construction, as well as monitoring and eradication requirements post construction."

SCRO Response:
This decision will serve as notification to LMSW of the above comments from the Division of Forestry. SCRO recommends LMSW coordinate with the Division of Forestry to facilitate the incorporation of prevention, monitoring, and eradication methods for potential invasive species.

DNR Parks & Outdoor Recreation - Office of History and Archaeology/SHPO Comment:
"State law requires all activities requiring licensing or permitting from the State of Alaska to comply with the Alaska Historic Preservation Act, which prohibits the removal or destruction of cultural resources (historic, prehistoric, and archaeological sites, locations, remains, or objects) on land owned or controlled by the State. This also includes reporting of historic and archaeological sites on lands covered under contract with or licensed by the State or governmental agency of the State.

Upon review of the Alaska Heritage Resources Survey (AHRS) database, there are several known cultural resource sites within or adjacent to the proposed project area that may be affected by proposed project activities. We recommend that the project area be archaeologically surveyed by a qualified cultural resource professional and investigated for other properties of significance to tribes. A list of contractors that can perform these services can be found on our website or provided upon request."

SCRO Response:
This decision will serve as notification to LMSW of the above comments from OHA. LMSW will be required to comply with all aspects of the Alaska Historic Preservation Act and any additional requirements from OHA.

SAIL Comment: Several topics were raised by this agency comment:

1. *Secondary Containment:* The development plan doesn't speak to the amount or size of batteries that will be on site. Will secondary containment be used for these batteries along with any fuels that will be brought out to the site during road and project construction?
2. *Wildland Fire Considerations:* The plan does not discuss wildland fire considerations. Will the project have any kind of alert system? Will there be regular inspections and brushing to reduce fuels (if needed)?
3. *Term and Reclamation:* How long will this lease be? The reclamation portion of the development plan doesn't explain if the road will be removed or not. Does the region have a preference? Additionally, it would be good to understand if by fully decommissioned, recycled and disposed of the applicant means disposed of-off site. Not creating a disposal site on state land.
4. *Access Restrictions:* Will there be any access restrictions to the new roads that are developed such as gates or fences?

SCRO Response:
This decision will serve as notification to LMSW of the above comments from SAIL.

1. Standard stipulations include stipulations addressing secondary containment of hazardous substances. LMSW will be required to adhere to all DEC requirements regarding hazardous substances.
2. Standard stipulations include stipulations addressing fire suppression and response. The applicant does intend to brush within their lease parcels annually to reduce fire risk. Additional stipulations may be included to address unusual fire hazards.
3. LMSW has requested a 40-year lease term. They have not requested any type of landfill or waste disposal site associated with this project. The proposed Public Access Easement would be issued indefinetly, and so reclaimation is not contemplated. If a vacation request was received, road reclaimation requirements would be contemplated at that time.

4. While not specifically requested, it is likely that the applicant will need to control access along the requested road easements during construction of the project. Post-construction, access restrictions along the easement are not anticipated.

DNR Oil and Gas – State Pipeline Coordinator's Section Comment:
The SPCS comments pointed out specific AS 38.35 pipeline right-of-way leases that may overlap with the LMSW proposed lease and easements. These include ADL 421297, Alaska LNG Mainline Pipeline (AKLNG Mainline), ADL 231908, and ADL 232368 for Donlin Gold. SPCS suggests that LMSW coordinate with other authorization holders prior to development.

SCRO Response:
DMLW will ask LMSW to coordinate with AKLNG Mainline and Donlin Gold on potential project overlap. However, based on the proposed development plan, it appears that only aspects of the proposed easements will overlap with the AKLNG Mainline and Donlin Gold projects. Only Donlin Gold authorizations/applications ADL 231908 and ADL 232368 pass through a portion of the project area and, based on the proposed development, will not overlap with any turbine locations. SCRO is not proposing to lease all lands within the project area boundary. Individual lease parcels will be located within the project area and connected by a public access easement.

USFWS Comment:
The USFWS comments noted that the project may affect:

- Eagles and other birds, including vulnerable species. These bird populations utilize the area year-round for foraging, breeding, nesting, migrating, and stopovers, and are likely impacted by the proximity to two Important Bird Areas (IBAs) / State Game Refuges, Susitna Flats IBA and Palmer Hay Flats IBA used as feeding areas during migration.
- The little brown bat which may utilize the subject area for migration, maternity roosts, and hibernacula.
- Andromous fish are also found in this area, including three species of salmon that utilize the Lewis River, Theodore River and tributaries, and Beluga Slough and tributaries for rearing and other habitat.
- Invasive plant species caused by construction activities impact biodiversity and species loss.
- Wildlife due to the potential impacts of wind turbines resulting in displacement (indirect habitat loss through avoidance), barrier effects (long-term changes to migratory paths to avoid turbines and other infrastructure), and collision risks and mortality.

The USFWS comments included three main categories of best management practices (BMPs) recommendations to mitigate potential effects on wildlife and habitat, briefly summarized below:

1. Habitat loss, fragmentation, and degradation: Recommendations include guidance on project area sizing, avoiding high-value habitat areas and bat roosts, providing alternatives for fish passage, erosion control, and minimizing the spread of invasive species.

2. Construction-related incidental take of migratory birds, eagles, and their nests: Recommendations include guidance on timing and duration of project activities to avoid impacting habitat, migration, and nesting. Short-term eagle take permits should be submitted at least 60 days in advance of any ground-breaking activities.
3. Displacement and barrier effects from wind turbine operations: Recommendations include utilizing USFWS and Avian Power Line Interaction Committee guidance documents, modifying siting and infrastructure layout, using bird diverters, consider plans for lighting, decommissioning deprecated infrastructure, research current methods of strike mitigation, adjust operating times during active wildlife periods, prepare a Bird and Bat Conservation Strategy along with comprehensive pre-construction surveys, and obtain Long-term Eagle Take Permits and an Eagle Conservation Plan.

SCRO Response:

The comments from USFWS have been forwarded to the applicant.

1. SCRO will require the applicant to work with USFWS to develop site-specific BMP's on developing strategies to avoid habitat loss or degradation and the spread of invasive species.
2. SCRO will require the applicant to work with the USFWS on mitigating construction-related impacts on birds and other wildlife, with particular consideration of eagles and their nests according to the Eagle Act.
3. SCRO will require the applicant to work with the USFWS to develop appropriate bird (and bat) strike mitigation strategies to ensure compliance with the Migratory Bird Treaty Act. SCRO approval of this plan will be required prior to turbine pad construction.

The applicant must meet all applicable USFWS requirements and obtain any applicable permits as necessary. In addition, SCRO is requiring the coordination of this project with USFWS to minimize impacts on wildlife and habitat and may incorporate additional stipulations to any issued authorizations.

Alaska Department of Fish and Game (ADF&G) Comments:

ADF&G has concerns with how this project may impact some wildlife species or habitats. Of concern are impacts to wildlife and habitat for Chinook salmon, beluga whales, Tule greater white-fronted geese, trumpeter swans, bats, ptarmigan, and other avian species including raptors, passerines, and shorebirds. The project area is primarily above moose habitat, and is unlikely to significantly impact moose, Dall sheep, caribou, and small game / furbearers. ADF&G provided advisories, suggested research, and requested lease stipulations in their comments, which are summarized below:

- Co-locate utility and road corridors with the Donlin Mine gas line easement to minimize wildlife and fish habitat impacts.
- Obtain a required permit for areas of the project that fall within the Susitna Flats State Game Refuge.

- Be aware of local subsistence harvest of birds, mammals, and fish occurring during the spring-summer and fall-winter regulatory seasons, as well as the potential for bear conflicts. Bear denning locations should be included in the pre-construction site survey.
- Utilize BMP tiered guidance from USFWS and the Avian Power Line Committee
- Develop a research plan between the applicant, state and federal agencies, and other non-governmental organizations to reduce or mitigate impacts to wildlife. Include pre- and post- development survey and assessment of wildlife populations, habitats, and mortalities.
- Limit operation activities during high migration periods and when visibility is poor. Modify turbine lighting to reduce disorientation and impacts during breeding and migration seasons.
- Paint turbine blades black and adjust turbine speed triggers to >6m/s between late July and early October.

In addition, ADF&G noted that salmon stocks of concern have been identified under 5 AAC 39.222 in the following areas:

- Lewis River (under consideration for removal from area of concern)
- Theodore River

SCRO Response:
This decision will serve as notification to LMSW of the above comments from ADF&G. In addition, SCRO will require the applicant work with ADF&G to incorporate site-specific advisories, research, and guidance to reduce and prevent impacts on wildlife and habitat as much as possible. and may incorporate additional stipulations to any issued authorizations.

SCRO will require the coordination of this project with ADF&G to minimize impacts on wildlife and habitat. The applicant must meet all applicable ADF&G requirements and obtain any applicable permits as necessary.

While SCRO recognizes that there may be potential benefits of co-locating the proposed public access easement and public utility easement with the existing rights-of-way and easements granted to Donlin Gold, LLC, SCRO has evaluated the project as applied for and the contemplation of alternative routes is outside of the scope of this decision. SCRO would support the coordination between the applicant and Donlin Gold, LLC, and would consider any alternative routes proposed should the applicant choose to explore such alternative routes.

Discussion:
Lease: LMSW has applied for a 40-year lease authorization to be located in the area of Little Mount Susitna, approximately 37 miles northwest of Anchorage, Alaska. LMSW has requested to lease up to 450 acres of land within an overall project area of approximately 19,000 acres. LMSW is proposing to use this site for construction, operation, and maintenance of a long-term wind farm.

The project would consist of between 10 and 80 wind turbines, each with their own lease footprint of up to five acres. The project area would be accessed by the proposed Public Access Easement, ADL 234252 and each individual lease is to be connected by the same easement. LMSW is in the process of installing MET towers to determine specific turbine numbers and locations.

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

Easements: LMSW has applied for a public access easement (ADL 234252) and a public utility easement (ADL 234276). ADL 234252 would serve both as access to the project area from the existing Beluga road system, as well as access from the substation to the individual lease parcels. The public access easement will be 100 feet wide encompassing roads 30 feet wide up to approximately 55 feet as necessary in specific locations. The segment from the existing Beluga road system to the substation would be up to 16 miles long, although the final length is undetermined at this time. The construction authorization would be issued to LMSW, but the easement would be issued to the Division.

LMSW has applied for a public utility easement (ADL 234276) for a transmission line connecting the wind farm to the existing electrical grid. We are expanding the scope of this easement to also include the communications and power collection systems between the substation and the individual lease parcels. It is anticipated that this portion of ADL 234276 will be substantially co-located with the turbine access roads proposed under ADL 234252 and will be a width of approximately 30 feet in this location.

Between the Beluga intertie and project substation, the applicant is proposing 2-3 parallel transmission lines within a single corridor. This configuration will provide adequate interconnection redundancy between the project and the existing grid, while minimizing the environmental impacts by limiting disturbance to a single corridor. However, two or three separate lines are highly desirable to allow for continued operation due to the risk from a combination of wind and icing or scheduled maintenance. Each line requires a 100-foot width, thus two parallel lines would require 200 feet, while three lines would require 300 feet.

SCRO proposes to issue a 40-year negotiated lease, public access easement, and public utility easement to Little Mount Susitna Wind, LLC for the construction, operation, and maintenance of a wind farm which will provide the following benefits:
1. This project will diversify the CEA power generation portfolio and will contribute to meeting the State's benchmarks for renewable energy generation;
2. This project will increase locally produced power, lowering costs to the community and improving electrical grid stability in the region;
3. The project contemplates associated infrastructure such as roads which will enhance access to public lands, waters, and fish and wildlife resources in this area and allow for vehicular access on

constructed routes which will minimize impacts to the wetlands and anadromous and other fish bearing streams;
4. Project construction and operations will provide jobs and economic opportunities in the State; and
5. Leasing fees from the commercial use of this state land will provide an ongoing revenue stream.

The proposed lease and easements will include stipulations for access and wildlife considerations and will require the applicant to comply with all laws and regulations that exist for the protection of wildlife.

For the reasons stated above, it is in the best interest of the State to issue a 40-year non-competitive negotiated lease and public easement to Little Mount Susitna Wind, LLC. The term of the lease will reasonably align with the lifespan of the proposed infrastructure. The proposed lease will be subject to the terms of SCRO's standard lease and easement documents effective at the time of signature. The lease and easement may also be subject to additional stipulations based on site specific considerations that are identified in the adjudication process and referenced in this document.

Under AS 38.05.035, DMLW is obligated to lease land at no less than fair market value (FMV). Given the current goals set by the State to facilitate renewable energy, compensation under the lease shall be set at fair market value of the lands to be leased. Compensation is discussed further below.

Development Plan:

The Development Plan (DP) attached to this decision (Attachment A) and dated January 26, 2022, is under consideration by SCRO. Should the proposed lease be granted, it is anticipated that the DP will need to be updated throughout the life of the lease as activities and/or infrastructure are added or subtracted. All updates must be approved, in writing, by SCRO before any construction, deconstruction, replacement of infrastructure, or change in activity. SCRO reserves the right to require additional agency review and/or public notice for changes that are deemed by SCRO to be beyond the scope of this decision.

Specific location and plans have not been finalized for the access and public utility easements. Between the existing Beluga infrastructure and the project substation, the applicant is considering two routes for both the transmission lines and roads; specific route selection, and location within the route, will be developed in consultation with ADF&G as co-manager of the Susitna Flats State Game Refuge, as well as the U.S. Army Corps of Engineers from whom a wetlands fill permit will likely be required. Final plans, including construction plans, must be approved by SCRO, to ensure compliance with stipulations and objectives outlined in this decision. To allow for location flexibility within each route based on final design considerations, the "project area" for each route is defined as 0.5 miles each side of the application centerline.

Hazardous Materials and Potential Contaminants:

Hazardous materials, including lubricant oil and lithium batteries, will be stored within the proposed leasehold. Stipulations will be included in the Entry Authorization and lease to ensure proper handling and storage.

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

Lease Performance Guaranty (bonding):

In accordance with AS 38.05.035 and AS 38.05.860, LMSW will be required to submit a performance guaranty for the lease site.

- **Performance Bond:** Once the final design is completed, LMSW will be required to provide an estimate of the cost to safely remove all infrastructure. A performance guarantee in this amount strikes the appropriate balance of ensuring public safety while incentivizing overall compliance with all terms and conditions of the authorizations. The bond will remain in place for the life of the proposed lease. The bond amount is based upon the level of development, amounts of hazardous material and/or substances on site, and the perceived liability to the State. Additionally, this bond will be used to ensure the applicant's compliance with the terms and conditions of the lease issued for the project. This bond amount will be subject to periodic adjustments and may be adjusted upon approval of any amendments, assignments, reappraisals, changes in the DP, changes in the activities conducted, or changes in the performance of operations conducted on the authorized premises, and as a result of any violations to one or more of the authorizations associated with this project. The performance guaranty must be provided prior to beginning construction.

- **Reclamation Bond:** SCRO is reserving the right to require a reclamation bond due to noncompliance issues during the term of the lease or near the end of the life of the project.

Insurance:

Consistent with AS 38.05.035(a) in order to protect the State from liability associated with the use of the site, the applicant shall provide and maintain a comprehensive general liability insurance policy with the State of Alaska named as an additional insured party per the stipulations of the authorization. The applicant shall secure or purchase at its own expense and maintain in force at all times during the term of this lease, liability coverage and limits consistent with what is professionally recommended as adequate to protect the applicant and the State, its officers, agents

and employees from the liability exposures of ALL the insured's operations on state land. The insurance requirement may be adjusted periodically.

Survey:

Lease: In accordance with AS 38.04.045, the applicant must complete an approved survey according to the requirements and standards of DMLW's Survey Section prior to lease issuance. If the submitted survey is accepted by DMLW, the measurements identified will be used to accurately calculate the total acreage. The survey must be performed by an Alaskan registered Land Surveyor under survey instructions issued by the DMLW Land Survey Section. The applicant is responsible for the cost of the survey. The applicant shall submit an initial draft of the survey at least one year prior to the expiration of the EA.

Easement: A DMLW-approved as-built survey is required to determine the proper location and acreage of installed improvements and the associated easement on State-owned, DMLW-managed lands. The survey must be produced in accordance with survey instructions provided by the DMLW Survey Section and stamped by a Professional Land Surveyor registered in the State of Alaska. A final easement will not be issued until the as-built survey has been approved by DMLW. The applicant is required to submit a preliminary draft as-built survey a minimum of one year prior to the expiration of the entry authorization to allow adequate time for DMLW's review and approval of a final as-built survey.

Entry Authorization:

SCRO is proposing to authorize LMSW entry onto state land through the issuance of an EA while they are completing the required surveys, and, for the lease site, the appraisal. The term of this EA will be 5 years. The proposed EA cannot be issued until after the FFD goes into effect. The effective date of the EA will be the start of the total lease term length. Substantial construction under this EA cannot commence until final design plans have been reviewed by SCRO for compliance with terms and conditions outlined in this decision and the EA.

Compensation and Appraisal:

Lease Compensation (ADL 233892)

A Minimum Rent Determination for the proposed leasehold, issued on September 14, 2022, determined that an appraisal is needed for this lease. In accordance with AS 38.05.840, state-owned land may only be leased if it has been appraised within two years before lease issuance. The applicant will be required to provide an appraisal of the proposed leasehold before the lease is issued. Once the appraisal has been approved by DMLW, the annual lease fee will be set at the Fair Market Value (FMV) of the proposed leasehold. Furthermore, in accordance with AS 38.05.105, the proposed EA and Lease will be subject to reappraisal at five-year intervals after the issuance of the proposed authorization.

Coordination with the DMLW Appraisals Section indicates FMV rental likely exceeds the minimum rent of $1,000 per lease, and thus an appraisal will be required. During the term of the EA, the applicant will pay an interim amount of $1,000 for each of the maximum 81 parcels requested by the applicant. After appraisal, any overages will be credited to the applicant's account, and any shortfalls must be paid prior to lease issuance.

Easement Compensation

Public Access Easement (ADL 234252)

Prior to issuance of the easement, the applicant shall pay a one-time Public Access Easement fee of $120.00 per acre or fraction thereof, as calculated on the approved as-built survey, set by 11 AAC 05.070(d)(2)(B) and Director's Fee Order No. 3. These fees may be adjusted if regulations pertaining to the fees change during the term of the entry authorization and/or easement and will be subject to non-sufficient fund and late payment penalty fees. Additionally, the applicant shall pay applicable document recording fees prior to DMLW's execution and recordation of the easement document.

During the EA term, there is an annual fee. This fee is $120.00 per acre or fraction thereof, with a $240.00 minimum, set by 11 AAC 05.070(d)(2)(I) and Director's Fee Order No. 3. The EA fee for this easement will be determined based on the final design plans, which must depict/calculate both estimated length and width of the easement and will begin accruing on the date the EA is executed, not the date the final plans are provided. Accrued fees must be paid prior to commencement of construction, and on the annual anniversary of EA issuance thereafter.

Public Utility Easement (ADL 234276)

Prior to issuance of the easement, the applicant shall pay a one-time Public Utility Easement fee of $0.56 per lineal foot, as calculated on the approved as-built survey, set by 11 AAC 05.070(d)(2)(C) and Director's Fee Order No. 3. These fees may be adjusted if regulations pertaining to the fees change during the term of the entry authorization and/or easement and will be subject to non-sufficient fund and late payment penalty fees. Additionally, the applicant shall pay applicable document recording fees prior to DMLW's execution and recordation of the easement document.

During the EA term, there is an annual fee. This fee is $120.00 per acre or fraction thereof, with a $240.00 minimum, set by 11 AAC 05.070(d)(2)(I) and Director's Fee Order No. 3. The EA fee for this easement will be determined based on the final design plans, which must depict/calculate both estimated length and width of the easement and will begin accruing on the date the EA is executed, not the date the final plans are provided. Accrued fees must be paid prior to commencement of construction, and on the annual anniversary of EA issuance thereafter.

These fees are charged concurrently with the lease fee as well as any other land use fees that may be described herein.

Subleasing:
Subleasing is permissible through AS 38.05.095, if the proposed lease is approved. A sublease is defined as improvements not owned by the lessee that are located within the leasehold on the land or located on structures owned by the lessee. A sublease pertaining to the proposed lease includes but is not limited to, user agreements, license agreements, communication site agreements, or any contracts between the lessee and other commercial entities. All potential subleases must first be approved in writing by SCRO. Depending on the activity of any potential subleases, SCRO is reserving the right to reevaluate the need for further agency review and/or public notice before making a determination on the appropriateness of the proposed sublease. Sublease compensation to the State will be determined by SCRO according to AS 38.05.073(m), under the authority of AS 38.05.075(a) Leasing Procedures. In any case, the sublease fee for commercial activities will not be less than 25% of the annual fee paid to leaseholder by the sublessee.

Assignments:
The proposed authorizations, if issued, may be transferred or assigned to another individual or corporation only with written approval from the DMLW. An authorization will not be assigned to an entity if that entity does not meet the statutory requirements of the authorization, or if the authorization is considered not to be in "good standing" with DMLW or any other agency authorization. DMLW reserves the right to amend the terms of authorizations prior to assignment.

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

Public Notice of the Preliminary Decision:
Pursuant to AS 38.05.945, this PD will be advertised for a 45-day public comment period. Notice will be posted on the Alaska Online Public Notice System at http://aws.state.ak.us/OnlinePublicNotices/Default.aspx and the post offices located in Anchorage, Chugiak, Big Lake, Eagle River, Elmendorf, Fort Richardson, Hope, Houston, Kenai, Nikiski, Palmer, Skwentna, Talkeetna, Tyonek, Wasilla, and Willow. Courtesy notices will also be mailed or emailed to neighboring property owners, permit/lease holders, and other interested parties on May 22, 2024, for a 45-day public comment period.

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

Written comments about this project must be received in this office no later than

11:59 p.m. on July 8, 2024 to be considered.

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

Postal: Department of Natural Resources
Division of Mining, Land and Water
Southcentral Regional Land Office
ATTN: ADL 233892 Public Notice
550 West 7th Avenue, Suite 900C
Anchorage, AK 99501-3577
Email: comments.scro.leasing@alaska.gov
Fax: (907) 269-8913

Questions about the lease portion of this project can be directed to Todd Derks at (907) 269-8549.

If public comments result in significant changes to the Preliminary Decision, additional public notice will be given. To be eligible to appeal the Final Finding and Decision, a person must provide written comments during the Preliminary Decision comment period per AS 38.05.035(i)-(m).

Signature page follows

Recommendation:

SCRO has completed a review of the information provided by the applicant, examined the relevant land management documents, and has found that this project is consistent with all applicable statutes and regulations. SCRO considered three criteria to determine if this project provided the best interest to the State and the development and use of its natural resources. The criteria include direct economic benefit to the State, indirect economic benefit to the State, and encouragement of the development of the State's resources. This authorization provides a direct economic benefit to the State with the collection of fees and an indirect economic benefit through the encouragement and development of the State's renewable resources. The proposed project has the potential to help contribute to Railbelt Utilities' renewable energy production. As there are no competing projects which are incompatible with the proposed lease, and in consideration of the benefits described above, SCRO finds granting the proposed authorizations provides the greatest benefit to the State. The proposed action may be in the State's best interest and SCRO recommends proceeding with public notice of the proposed 40-year lease, an indefinite public access easement, and an indefinite public utility easement to LMSW.

5/22/2024

Todd Derks, Natural Resource Specialist 3 Date
Division of Mining, Land and Water, Southcentral Regional Land Office

Preliminary Decision:

It is the determination of the Division of Mining, Land and Water that it may be in the State's best interest to issue a 40-year non-competitive negotiated land lease, public access easement, and public utility easement to Little Mount Susitna Wind, LLC, as described above. The issuance of this lease and easements support the production of local energy which provides a benefit to the local community and the State. This Preliminary Decision shall now proceed to public notice.

5/22/2024

Joni Sweetman, Leasing Unit Manager Date
Division of Mining, Land and Water, Southcentral Regional Land Office

Attachments

Attachment A – Development Plan
Attachment B – Location Map

Little Mount Susitna Wind Energy Project
Development Plan

Little Mount Susitna Wind LLC
Submitted to Alaska Department of Natural Resources

Background

In late 2021, Chugach Electric Association (CEA) released a Request for Proposals encouraging energy development teams to propose low-cost, reliable, and sustainable energy generation projects as part of its commitment to reduce the environmental impact of its current operations. Fairbanks-based Alaska Renewables LLC (AKR) submitted the Little Mount Susitna Wind proposal for a wind energy facility with an optional battery energy storage system in response to this call and other future renewable energy development opportunities. The Project aims to meet the needs and goals of the Railbelt Utilities, their member-owners, and by extension the greater Alaska community. This proposed project is designed to enable a transition to a more affordable, reliable, and more environmentally friendly energy mix.

Little Mount Susitna Wind LLC (LMSW) is a project under development by AKR. Although AKR has conducted a preliminary evaluation of the feasibility for a wind project at this site, the project remains early on in its development, and significant work remains to fully evaluate its benefits, impacts, design, sizing, and community acceptance, as well as any mitigation measures that may be necessary to minimize impacts and maximize the benefits for all stakeholders. AKR and its partners are committed to engaging with all interested stakeholders and putting together a renewable energy project that maximizes the benefits for the entire community.

Project Summary

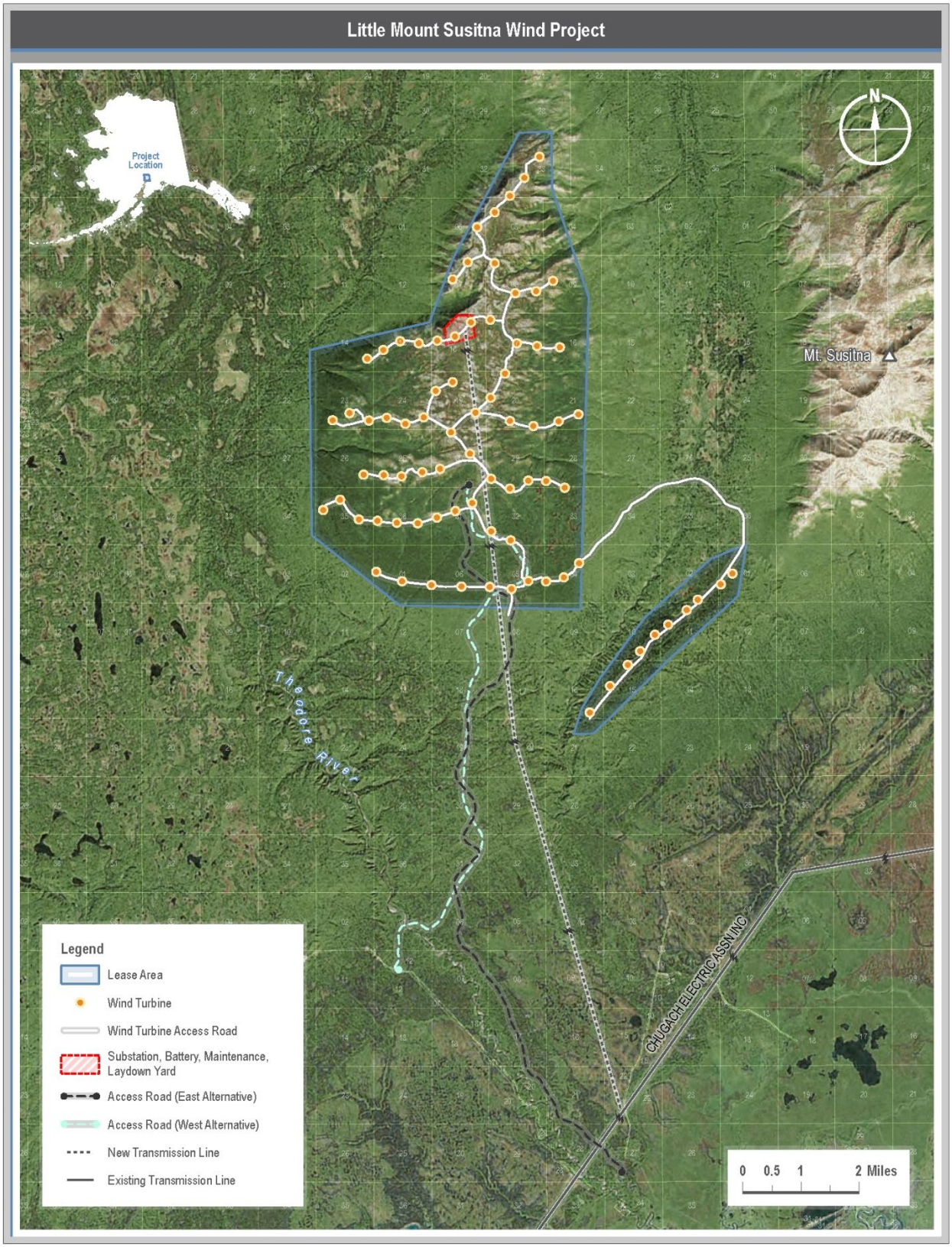
Site Description, Terrain, and Ground Cover

The proposed Little Mount Susitna Wind Energy Project would be located approximately 37 miles NW of Anchorage, Alaska. The project would be sited atop a broad elevated plateau of Little Mount Susitna (*Henq'edishla)* at elevations of approximately 2,000 to 3,100 feet above sea level. Much of the project is at higher elevations characterized by low shrubs, alpine vegetation and bare ground. The surface geology is characterized primarily by granitic rock and glacial deposits. No specific wildlife populations of concern or critical habitat have been identified in the proposed lease area.

The land is owned and managed by the State of Alaska and the Department of Natural Resources (DNR), and located within MTRS parcel IDs listed in Appendix A. The proposed

Figure 1. Aerial photographs of the proposed project site looking E (top), SE (middle), and NW (bottom).

Attachment A
Development Plan



lease areas encompass approximately 19,196 acres, of which up to approximately 450 acres would be developed and leased for wind turbine pads, maintenance buildings and yards, meteorological towers, communications facilities, an electrical substation, and a battery energy storage facility. Additional land use would include easements for access roads and electrical transmission lines, collector lines, and communications cables.

There are presently no major roads or trails in the area. The nearest road is located in the lowlands approximately 7 miles south of the proposed project site, and these roads are for oil and gas development and not connected to the State's main road system.
The project site was selected in large part because of its consistent and strong winds that can support cost-effective and reliable renewable energy generation. Site access would require a new road to the existing oil and gas roads to the south, which in turn would be accessed by barge from Cook Inlet or by air. The project would be connected to an existing and robust electrical transmission corridor that passes approximately 10 miles south of the project, connecting the Beluga power plant with the population centers to the east. Both the road and new electrical connections would require easements.

If developed, the proposed lease area would contain a network of access roads, electrical collector cables, communication cables and towers, meteorological towers, turbine pads, and wind turbine generators across the broad apex of the Little Mount Susitna highlands.

Figure 3. View of the existing Eva Creek Wind Farm (est. 2011) operated by Golden Valley Electric Association outside of Healy, AK. The proposed Little Mount Susitna Wind development would have many attributes in common with this existing, albeit smaller project.

Attachment A
Development Plan

Project Scope

The exact extent and scale of the proposed project would depend on the energy offtake agreement(s) that might ultimately be reached between the Project and CEA and/or any other potential offtaker(s) of the produced energy. The proposed Little Mount Susitna Wind Project would consist of up to 80 wind turbines, corresponding to a total electrical output ranging up to 272 MW. We have sized the development plan to allow for multiple potential phases to take advantage of the economy of scale in order to further reduce the cost of wind energy and the carbon dioxide emissions of the broader grid. The footprint also allows for additional flexibility in the site design, layout, and engineering stages of the project as the project moves through the different phases of study, design, and permitting.

Meteorological Towers

Meteorological observations lasting at least two years will be required in order to determine the feasibility, economics, and financeability of the proposed project. The Project has installed and will continue to maintain/add 50 to 80 m tall meteorological towers and ground-based LIDAR systems to monitor the wind and other meteorological variables. Located within the proposed lease area, this provides detailed information on the spatial variability of the wind resource throughout the project area. Several permanent hub height meteorological towers may also be installed on the project site for use throughout the operational phase of the project, each occupying approximately 2 acres each.

Turbines, Turbine Pads, and Foundations

Once the project is constructed, each turbine pad would be approximately 5 acres, with sufficient space for a crane to enable the delivery, staging, and installation of all turbine and tower components. Within that pad area, a foundation would be built for the turbine towers according to the manufacturer's requirements. Turbines would be spaced apart in a layout optimized to best capture the prevailing winds from the north and southeast. The potential turbine locations, size, and number, as well as all other project elements are only preliminary, as the layout will be optimized based on further wind resource characterization, terrain, geotechnical attributes, environmental considerations, utility interest in wind energy procurement, as well as stakeholder input.

The specification and supplier of the turbines themselves are subject to change; however preliminary planning involves consideration of wind turbine generators ranging from 3-7 megawatts each with hub heights between 80 and 120m and rotor diameters between 117 and 170m. The turbines would be outfitted with cold weather modifications to ensure reliable performance in Interior Alaska's climate.

Yard: Laydown, Collector System, Substation, and Buildings

The yard (or multiple smaller yards) would serve as the site for the laydown of turbine components during construction, as a site for an enclosed main maintenance and control building, and the electrical equipment to collect power from the wind farm and interconnect it with the transmission grid. A potential battery energy storage system may also be sited here next to the substation. The yard would be an area of up to about 50 acres. While the yard would likely be situated somewhere near the center of the project as built, there may also be multiple smaller yards, and the exact siting is only preliminary and would be dependent on further engineering, design, and land use considerations.

Access

The project would be accessed by a new road built extending and climbing northward from the existing oil and gas development roads along the northern rim of Cook Inlet. This new site access road will be approximately 9 miles long, and the turbine access roads within the lease area would be up to an additional 26 miles long, depending on the project capacity.

Public access and use of the area would be maintained and improved with this development, much in the way that it is at the Eva Creek Wind site located on State of Alaska land near Healy, Alaska. These new access roads have the potential to enhance access to the surrounding State lands and the diverse resources they hold.

The turbine access road surfaces would be approximately 52 feet wide to accommodate the erection crane traveling between turbine pads, with minor widening anticipated on the curves. The goal is to find a route with design grades and a horizontal alignment that can safely accommodate access and maintenance for the wind energy project construction and operation. Temporary parking will be provided for workers; long-term limited parking will be established for the small maintenance staff at key locations along the access roads.

Electrical Interconnection

The project would be connected to the existing transmission grid with new high voltage transmission lines along a new easement to the south. Within the project and adjacent to the turbine access roads, there would be buried electrical lines to collect power from the turbines and deliver it to the project substation.

Special Site Considerations

AKR has reviewed this proposed project with the Alaska Department of Natural Resources. AKR's goal is to design and refine the project in a manner that attempts to maximize the project benefits while minimizing potential impacts. Further, AKR is sensitive to the diverse public

values and potential mitigations required to ensure the project results in the greatest good for the community's health, economy, jobs, recreation, subsistence, and sustainability. Several key site considerations that were identified in our preliminary review of the site are listed below, as well as possible mitigations and approaches. This is not an exhaustive list, and we continue to learn more about other uses and site considerations through the ongoing public engagement phase, and design in ways to address the identified issues. AKR intends to make any reasonable and cost-effective adjustments as necessary to respond to these considerations and improve the overall project outcomes.

- First and foremost, we acknowledge that the project would be located on the traditional lands of the Dena'ina people and adjacent to the native village of Tyonek. Alaska's indigenous peoples have stewarded these lands since time immemorial and maintain deep cultural, subsistence, and substantive connections with their lands. In deference to this history and stewardship, AKR is committed to taking a transparent, collaborative, and consultative approach by engaging with Native communities and organizations to ensure the project benefits indigenous communities and is consistent with indigenous values and land use practices. We embrace the practice of Free, Prior and Informed Consent (FPIC) and aim to implement this practice throughout the development of this project.

- The lease area is designated for Public Recreation-Dispersed in the 2011 Susitna Matanuska Area Plan adopted by DNR. However, owing to its remote and generally inaccessible location, the area is seldom accessed for this or any purpose. During the pre-application discussions, DNR did not identify any active recreational uses. Generally the entire area is open to oil, gas, and coal development, though none of those resources are known to be held in the proposed project area. It appears the area's wind resources were not considered in the potential uses of the land when the Area Plan was developed. The Public Recreation-Dispersed designation does indicate that "utilities and roads may be appropriate with appropriate design if recreation functions can be maintained." The vast majority of the project area would remain accessible to the public. In many cases, access opportunities would be improved for the benefit of the public. Access to the space immediately beneath and adjacent to the wind turbines and associated electrical equipment will be restricted and/or signed to minimize risk to the public, but this represents only a few percent of the total proposed lease area.

- Local aviators utilize parts of the proposed project area as unimproved landing areas.

- No privately owned lands are within or immediately adjacent to the proposed lease area. There are 4 nearby private lots to the East and Northeast of the project lease area along Wolverine Creek at distances of more than 1.7 miles. Other remote private lots in the

broader area that may incur visual impacts from the proposed project include the remote properties along Trail Lake (8 miles NE), Sucker Lake (8.5 miles to the N), and the Super Cub Subdivision (4.8 miles to the W).

- Once constructed, portions of the project may be visible from the surrounding landscape. Most of the impacted developments are 8-40 miles away from the project. A full visual impact study will be completed as the project proceeds.
- There are no known mining interests in this area.
- There are no known oil, gas, coal or mineral resources at the project site. Ongoing oil and gas production and development takes place in the Cook Inlet basin approximately 10 miles to the south of the project, but no conflicting uses are anticipated.
- There is presently a microwave repeater tower (permitted under LAS 31531) located in the southern portion of the proposed lease area which is used as a communications link between Anchorage and a remote wilderness lodge located near Judd Lake, 21 miles to the WNW of the repeater. The project owner will collaborate with the owners of that equipment to ensure their communication needs are maintained or enhanced as a result of this project.
- The gas line easement (ADL 232152) for the proposed Donlin Gold project follows a similar alignment to the proposed site access road and crosses through the SE corner of the main lease area for the proposed wind energy project. In addition, the Alaska Gasline Development Corporation has a lease (ADL 421297) for a proposed gas line with an alignment that runs along the southern flank of the project near the start of the proposed Little Mount Susitna site access road. Little Mount Susitna Wind infrastructure would be sited in a way that is compatible with the operation and maintenance of that prospective infrastructure.

Other Environmental Considerations

Wind farms generate negligible waste (e.g. used lubricating oil, which is changed periodically and will be disposed of properly). Water use will be required and sourced on site for construction and operations. End-of-life disposal, recycling, and reuse best practices will be followed to ensure that the environmental values of the project consider material and waste life cycles. The project owner will work with the Department of Environmental Conservation and other relevant agencies to obtain the necessary permits for these activities.

Wind Project Development Stages

Attachment A
Development Plan

The following is a discussion of the critical stages in the grid-scale wind project development process. Each project, site, and community are unique, so there is no "one size fits all" template or blueprint for successful development.

The following segments represent the critical steps to develop a successful, grid-scale wind project.

Site Identification and Wind Resource Assessment

Successful development of a grid-scale wind power project is founded on identifying a site suitable for hosting a wind project, often called a wind farm. Key characteristics of an attractive wind site include:

- Above average but consistent wind resource, minimizing gusts and shear
- Access roads that can be graded to 8% grade or less
- Access to electricity grid infrastructure (transmission lines and/or substations)
- No impingement on protected, sensitive or conservation areas
- Minimal to no wetland or floodplain impacts
- Minimal to no impact on protected ecosystems and organisms
- Minimal to no impact on cultural or archaeological resources
- Ability to secure land access and long-term rights from the landowner
- A location where wind development provides net gains to the local community and grid

In an initial review, AKR has investigated each key characteristic identified above and made a preliminary determination that this site meets all requirements for a successful wind farm. Further study and stakeholder engagement is still required to verify this preliminary determination and implement all reasonable and cost-effective measures for mitigating impacts and maximizing the net benefits of the project.

Local Outreach

One of the most challenging aspects of the grid-scale wind development process is securing the required approvals. Additionally, being a good neighbor is essential to developing a quality wind project and requires working closely with nearby residents, businesses and industries, indigenous communities, government authorities, and the community at large to ensure all questions and concerns are addressed. The success of a grid-scale wind project often hinges on a developer's ability to build strong relationships with all stakeholders throughout the development process and the project's lifetime. At this early stage in the project development process, AKR has initiated many of these relationships and looks forward to expanding the engagement over the coming years before the project is finalized.

Site Environmental Review and Cultural Assessment

Grid-scale wind projects require additional highly-detailed studies to ensure the project has limited to no negative impacts on existing ecosystems, threatened or endangered species, or cultural and archaeological resources. Soil conditions and topography ("geotechnical conditions") are also evaluated to ensure the project can be constructed efficiently.

While no rezoning is required and there are no threatened or endangered species identified within the project area, extensive environmental assessment and permitting is required. This process, which can take around 2 to 4 years, involves significant investment of time and resources from the developer. During this period, professional teams have been and will continue to be on site for the required field studies and observations.

Grid Access and Interconnection Management

The next step in the wind project development process involves securing rights for a connection to the electric grid through either high voltage or medium voltage. Proper connection with the electric grid is crucial to a successful wind project, especially given the unique dynamics of power flow and load balancing for CEA and other Railbelt utilities. AKR's team of interconnection engineers will work with the offtaker to assess connection prospects at the project site, assemble the Interconnect Application and other necessary applications, and complete the appropriate studies. Due to the advances in reliability and cost with wind turbine technology, energy storage (battery) technologies, and other modern software, this project can increase the reliability for the Railbelt and reduce system cost over its 30 to 40 year operating lifetime. Chugach Electric has completed this step.

Energy Sales/Offtake Agreement

Arranging in advance for the sale of electricity generated by a wind project is essential to a project's success. By securing a long-term contract in advance for the purchase of the energy from a wind facility, a project developer can guarantee the levelized cost of energy that reduces the cost of energy to consumers. AKR has been awarded a PPA by Chugach Electric.

Project Financing

Grid-scale wind energy projects require significant upfront investment. This investment takes the form of both equity and project debt, supported by predictable revenues generated under a PPA or other energy offtake arrangement. The more predictable the project's revenue stream, the lower the risk and cost of capital required to build the facility. There is a robust global market for wind project equity and debt investments, which reduces the cost of ownership and capital, thereby reducing the cost of carbon-free, renewable electricity to consumers. This will bring

low-cost capital into the region and ensure that utilities and their members only pay for the project if it delivers according to contract terms, as opposed to other financial structures where the debt is owed regardless of power plant performance.

Engineering, Design, and Procurement

Early in the project development process, preliminary engineering layout and design work was done to appropriately size and tailor the proposed project layout for the particular site and circumstances. As the project moves forward and the development team finalizes the energy offtake arrangement, the engineering efforts become more detailed to produce a viable plan that can be financed and built. Simultaneously, procurement efforts are undertaken to evaluate and negotiate equipment supply agreements (wind turbine generators, energy storage equipment, substation equipment, collector and transmission cabling, transport logistics, etc.) and construction agreements.

Construction

The development process is complete when:

- The site is secured
- Permits are granted
- Full permission to connect to the grid is granted
- Final engineering and procurement plans are complete
- Offtake provisions for the power or the project are negotiated
- Financing is arranged

At this point, often called "Notice to Proceed" (NTP), the project is "shovel ready" and construction can begin. From design to final delivery of the completed and operational energy generation facility, a wind project developer must select and deploy a capable construction management crew to direct skilled tradespeople for safe, efficient, and precise plant construction. Depending on the size of the project, construction should be completed within 18 to 36 months. During this period, project construction generates a significant number of local jobs across many trades (civil works, electrical, mechanical, labor, etc.), at times employing over 300 workers.

Ongoing Operations & Maintenance

Once a grid-scale wind project is tested, approved, and accepted by the electric utility or other offtaker, it is placed in service and begins delivering electricity to the grid. During its operational lifetime of up to 40 years, the project requires very little in terms of operations and maintenance ("O&M") to efficiently deliver renewable energy to consumers through the grid. Significant technical advances have occurred in the reliability of these platforms over the past decade,

especially for established major vendors like GE, Siemens, and others. Moreover, remote monitoring and predictive maintenance software is now mainstream, significantly decreasing the uncertainty in O&M planning, cost, and burden.

In many cases, a separate O&M provider will be engaged who will hire local employees to perform ongoing maintenance, monitor and optimize production, and maintain the grounds. If the land is leased, the project will generate a recurring lease or royalty payment to the landowner. Compared to other generation sources, the total cost and time invested in a wind farm is very low, making the wind farm a good neighbor, quietly producing affordable, carbon-free, renewable energy and delivering benefits to the landowner, local community, and the environment.

Closure Plan

Wind farms operate for a minimum of 20 years, but now have extension plans available for purchase from the manufacturer to extend life up to 40 years. Following that, projects are often "repowered" with new, higher efficiency equipment installed on the original tower, which can last indefinitely. Much of the installed infrastructure including roads, electrical lines and substations, buildings, and even wind turbine foundations and towers are durable if well maintained. As the long-term fuel cost for this project is free wind resource, it is expected the project would be extended multiple times. However, the project will have cash reserves as part of the overall financing to be fully and appropriately decommissioned, recycled and disposed of at the end of its operational life. The road infrastructure as well as underground foundations and buried electrical and communications infrastructure will be left in place to minimize disturbance and maximize the site's utility for future uses.

Attachment A
Development Plan

Appendix A. MRTS parcel ID's involved in the proposed project

mtrs
S017N009W28
S017N009W33
S015N009W27
S014N009W11
S014N009W03
S014N009W10
S015N009W34
S016N009W20
S016N009W28
S015N009W21
S015N009W03
S015N010W12
S015N009W11
S016N009W04
S016N010W25
S016N009W32
S016N009W34
S015N009W01
S015N009W08
S016N010W27
S016N009W16
S016N010W36
S015N009W12
S016N010W35
S015N010W02
S016N010W14
S015N009W09
S015N009W10
S015N010W01
S016N009W29

S016N010W24
S016N009W33
S015N009W22
S015N009W16
S015N009W15
S015N009W28
S014N009W02
S015N009W04
S015N009W33
S015N009W05
S015N009W14
S015N009W02
S016N010W34
S016N010W23
S016N010W13
S016N009W09
S016N009W17
S017N009W32
S016N010W26
S016N010W15
S016N009W21
S016N010W22
S016N009W05
S016N009W08
S016N009W30
S015N009W07
S015N009W06
S016N009W18
S016N009W31
S016N009W19
S016N009W06
S016N009W07

Attachment A
Development Plan

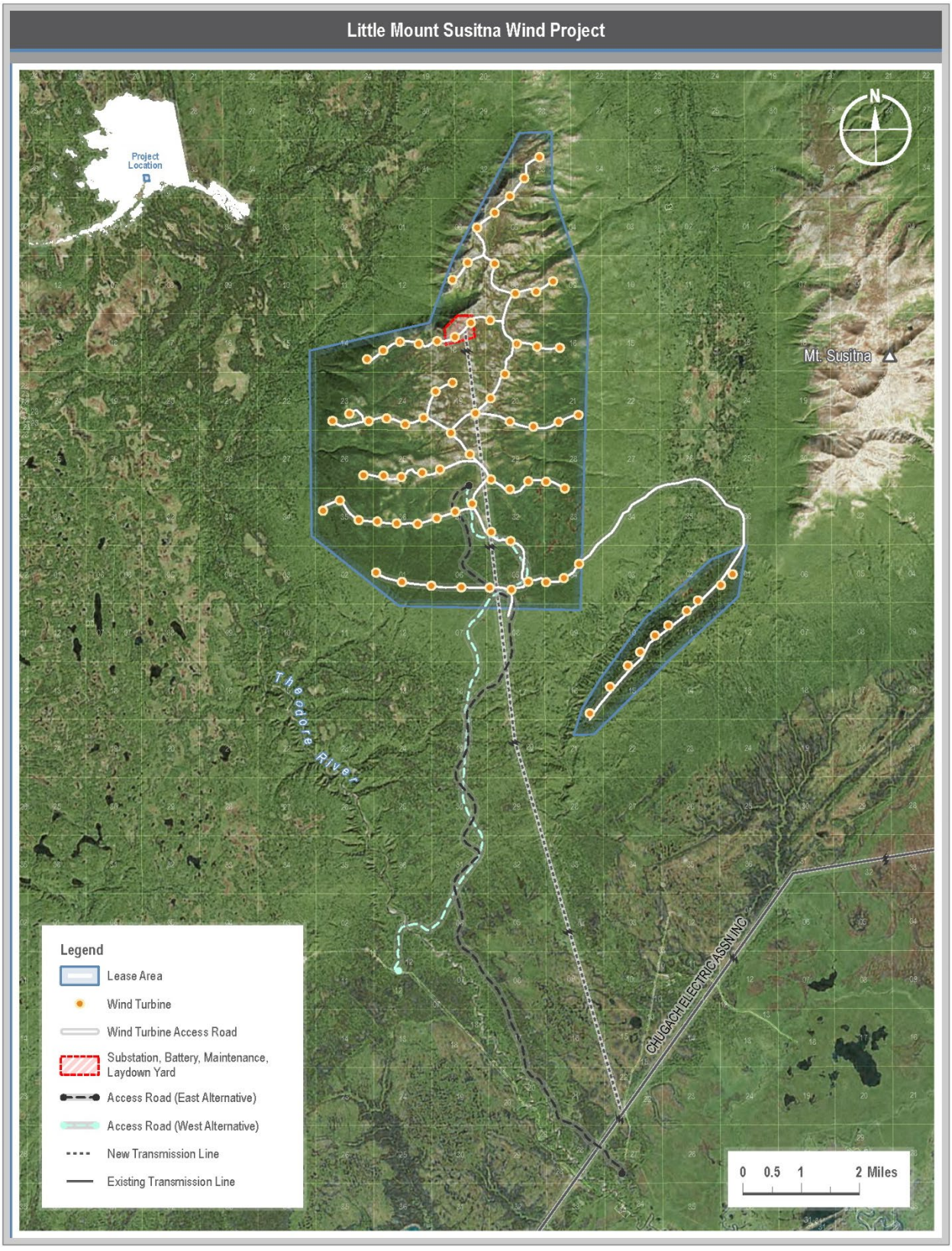
Appendix B. Preliminary locations of the proposed Little Mount Susitna Wind Energy Project turbine towers (based on an anticipated maximum project sizing).

Site	Longitude	Latitude
1	-151.0019248	61.43366847
2	-150.9438022	61.43384164
3	-150.9935725	61.43391511
4	-150.9836746	61.43416485
5	-150.9754248	61.43404331
6	-150.9681076	61.43401378
7	-150.9618605	61.43399153
8	-150.9527681	61.43399728
9	-151.0020918	61.44765077
10	-150.9940996	61.44772219
11	-150.9855567	61.44756827
12	-150.977546	61.44771317
13	-150.9696643	61.44777473
14	-150.9618249	61.4477703
15	-150.9543472	61.44770511
16	-150.9465503	61.44764119
17	-150.9387235	61.44764087
18	-150.9308855	61.4471272
19	-150.9094308	61.48876986
20	-150.9487697	61.48782222
21	-151.0181802	61.46155051
22	-151.0101716	61.46139664
23	-151.002567	61.46146099
24	-150.9951897	61.4615867
25	-150.9874291	61.46149635
26	-150.9800256	61.46151756
27	-150.9725558	61.46158754
28	-150.9650286	61.4615542
29	-150.9574411	61.46155303

30	-150.9499609	61.46146829
31	-150.9425051	61.4614979
32	-150.9352747	61.46145738
33	-150.9282429	61.46142511
34	-150.9212314	61.46140104
35	-150.9142968	61.46139517
36	-151.0081271	61.47470186
37	-151.0011245	61.47462275
38	-150.9910263	61.47465514
39	-150.9825268	61.47465414
40	-150.9740378	61.47470038
41	-150.9654233	61.4747233
42	-150.9570302	61.47467413
43	-150.9486032	61.47463732
44	-150.9402632	61.47466515
45	-150.9315127	61.47466317
46	-150.9230031	61.47463764
47	-150.9145137	61.4746422
48	-150.9058489	61.47459978
49	-150.8969719	61.4745794
50	-150.9402165	61.48746456
51	-150.9325486	61.48849157
52	-150.9253534	61.48853853
53	-150.9173485	61.48860576
54	-150.8996813	61.48772323
55	-150.954849	61.50197981
56	-150.9457984	61.50154232
57	-150.9338159	61.50130385
58	-150.9254101	61.50208855
59	-150.9185909	61.50207699
60	-150.935483	61.5157742
61	-150.9276659	61.51590914
62	-150.9204791	61.51586688
63	-150.9942742	61.42185268

64	-150.9874204	61.42192891
65	-150.978654	61.42192889
66	-150.9718002	61.42200512
67	-150.9644683	61.42192886
68	-150.9572957	61.4218526
69	-150.9486887	61.42185259
70	-150.9391253	61.42177632
71	-150.8304609	61.41432201
72	-150.8223719	61.41752495
73	-150.8373546	61.4113857
74	-150.8520982	61.40476848
75	-150.8600677	61.40108738
76	-150.8664831	61.39776832
77	-150.8734166	61.39360945
78	-150.8800313	61.38939279
79	-150.844089	61.40827739
80	-150.8876422	61.38464119

Attachment B
Location Map



Attachment B
Location Map