


# **Commercial Wind Energy Development In Wyoming: A Guide For Landowners**



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Prepared for  
Laramie Rivers Conservation District  
Medicine Bow Conservation District  
Saratoga-Encampment-Rawlins Conservation District

By  
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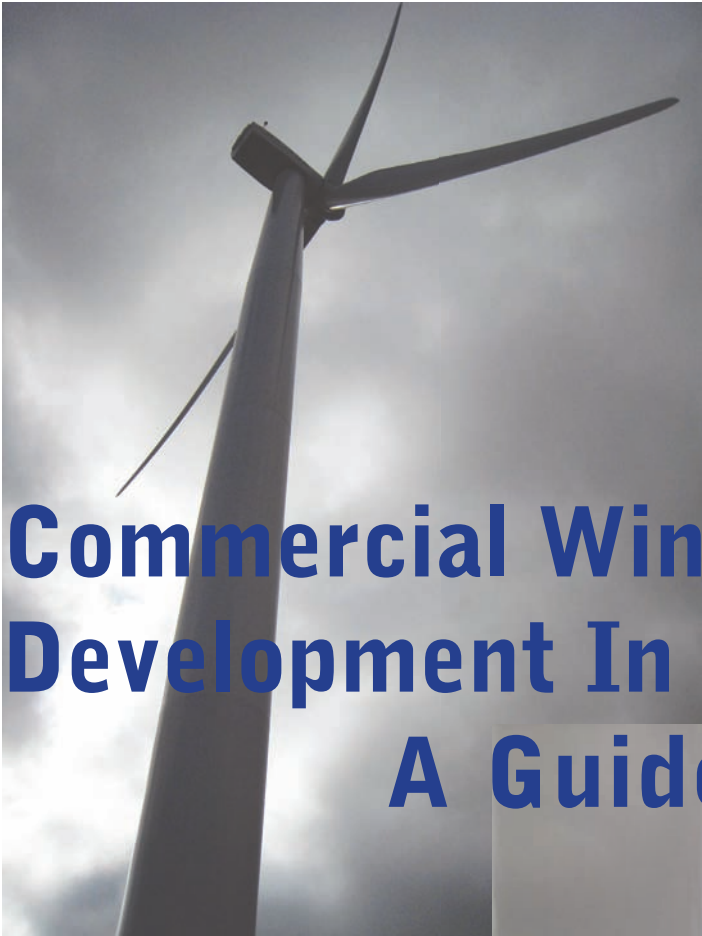
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*Cover photos:* ENR students and staff tour the Happy Jack wind farm in Laramie County. ENR photo credit.

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## INTRODUCTION

Agricultural operations in Wyoming serve as spaces for the production of food and fiber, and are also wildlife habitats, landscapes and spaces that create and accommodate a variety of lifestyles (Taylor 2003). With southern Wyoming's emergence as an area of premium wind capacity (U.S. Department of Energy 2008), many of these lands are now also potential spaces for utility- scale wind energy development. By entering into lease agreements with commercial developers, landowners have an opportunity to increase and diversify their operational income. Inherent in the new opportunities surrounding the development of these wind resources, however, is a measure of uncertainty about how to proceed with the operational, economic, lifestyle, and legal decisions that follow. This publication is intended to reduce that uncertainty by identifying key issues for landowners to consider prior to entering a wind energy lease agreement.<sup>1</sup>

The information in this document is summarized from communications with state agency officials, landowners and others involved with wind power development in Wyoming.<sup>2</sup> None of the information in this bulletin is intended to provide legal advice to individuals. Landowners should consult an attorney if they intend to enter a wind energy lease agreement.



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<sup>1</sup> Appendix A, "Commercial Wind Energy Development Resource Guide For Wyoming" provides more information about contacts, programs, publications, maps, and other general information about wind energy development. Appendix B is a glossary of legal terms and definitions used throughout the document, and Appendix C is a template for a wind energy lease agreement.

<sup>2</sup> Special appreciation is extended to Grant Stumbough, Mark Eisele and Jim Rogers for their generosity in sharing their time and knowledge.

## **1. DETERMINING WIND POWER CAPACITY AND DEVELOPMENT OPPORTUNITIES**

### **1.1 WYOMING STATE ENERGY OFFICE ANEMOMETER LOAN PROGRAM**

A first step for landowners interested in commercial wind development is to gain an understanding of the quality of their wind resource. The quality of a wind resource is determined by wind power density, wind speed at a certain height above ground, and wind variability (National Wind Coordinating Committee 1997). Geographic areas are categorized by wind “class,” defined numerically from class one (poor wind resources) to class seven (excellent wind resources) and based on wind speed and power at 50 meters and 80 meters above ground (U.S. Department of Energy 2008). Wyoming’s wind resources are excellent on ridge crests throughout the state, and especially in southeastern Wyoming north of Cheyenne, in south-central Wyoming from the Colorado border north to Casper, and in northeastern Wyoming between Casper and Gillette (U.S. Department of Energy 2008).

Through the Wyoming State Energy Office’s Anemometer Loan Program, administered by the Wyoming Business Council, landowners can determine the wind power capacity or class available on their land (Wyoming Business Council 2009).<sup>3</sup> The wind quality data that landowners gain through the program are valuable if they choose to enter negotiations with commercial wind energy developers.

The Anemometer Loan Program has a limited number of anemometer towers available for lease to landowners who successfully complete the application process (Wyoming Business Council 2009). There is a \$4,700 fee associated with the installation of the 50 meter tower used to gather the data to determine the feasibility of commercial wind energy development. Landowners are responsible for obtaining all required local land use permits prior to installation of the tower, wind direction vanes, and data logger.<sup>4</sup> Landowners also are responsible for monthly data collection and tower maintenance. Because data are analyzed at the cost of the Wyoming State Energy Office, data collected are in the public domain. All results are sent to the landowner (Wyoming Business Council 2009).

### **1.2 LANDOWNER CHECKLIST—DETERMINING WIND POWER CAPACITY AND DEVELOPMENT OPPORTUNITIES**

1. \_\_\_\_\_ Wyoming State Energy Office’s Anemometer Loan Program
  - a. \_\_\_\_\_ Contact the Wyoming Business Council for an application
  - b. \_\_\_\_\_ Contact local planning and zoning authorities for permitting information
  - c. \_\_\_\_\_ Obtain the permits required for the Anemometer Loan Program and mail to the Wyoming State Energy Program<sup>5</sup>

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<sup>3</sup> The Wyoming State Energy Program and its Anemometer Loan Program are facilitated by the Wyoming Business Council. For a web link to more details and contact information, see Section 2.2 of the appended Resource Guide (Appendix A).

<sup>4</sup> For contact information for planning and zoning authorities, see Section 7.1.2 of the appended Resource Guide (Appendix A).

<sup>5</sup> For mailing address, see Section 2.2 of the appended Resource Guide (Appendix A).

- d. \_\_\_\_ Follow Wyoming State Energy Office protocol for compliance with Anemometer Loan Program requirements (payments, data collection, tower maintenance, etc.)

## **2. COMPATIBILITY WITH EXISTING LAND USES**

### **2.1 AGRICULTURE**

Landowners typically retain existing surface or sub-surface rights when entering a wind energy lease agreement, including rights granted by existing mineral leases, special use leases, temporary use permits, and easements.<sup>6</sup> However, landowners and developers must consider the compatibility of commercial wind energy development with existing uses of agricultural land.

In the experience of some operators in Wyoming, utility-scale wind development can displace livestock for as long as two years (Eisele 2009). Although landowners may be able to negotiate reimbursement for displacement costs, the logistical aspects of displacement warrant consideration. Other operational issues may arise because of potential landowner obligations to the developer to avoid interfering with turbine energy production. “Interference” can include the construction of buildings above a certain height or within a certain distance of a turbine (Zalcman 2005).

Landowners who hold a mortgage from the Farm Service Agency (FSA) are subject to restrictions and a rigorous approval process that may discourage developers from pursuing a wind energy lease agreement (Aakre and Haugen 2009).<sup>7</sup> Participants in any of the following U.S. Department of Agriculture (USDA) programs will need to get USDA approval to enter a wind energy lease agreement while continuing participation in the program (Aakre and Haugen 2009)<sup>8</sup>:

- Conservation Reserve Program
- Commodity program payments
- Swampbuster provisions
- Environmental Quality Incentives Program
- Wildlife Habitat Incentives Program
- Farmland Protection Program
- Grassland Reserve Program
- Wetlands Reserve Program

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<sup>6</sup> See Appendix B for a typical legal definition of “existing uses.”

<sup>7</sup> For contact information for the FSA, see Section 3.1.1 of the appended Resource Guide (Appendix A).

<sup>8</sup> For contact information for the listed USDA programs, see Section 3.1.1 of the appended Resource Guide (Appendix A).

## 2.2 ENVIRONMENT AND WILDLIFE

During the investigative stages of commercial wind energy development, developers are responsible for conducting an environmental assessment. The Wyoming Governor's Office has mapped areas of environmental constraints for wind energy development in Wyoming (Wyoming Governor's Office).<sup>9</sup> Birds of prey, migratory birds and bats are known to be vulnerable to mortality at operating wind farm locations, but little is known about the impacts of wind energy development on the Greater Sage Grouse (sage grouse) or on big game species (National Academy of Sciences 2007).<sup>10</sup> However, under the Governor of Wyoming's Executive Order #3008-02, issued with the support of the U.S. Fish and Wildlife Service and intended to prevent the listing of sage grouse under the Endangered Species Act, certain areas in Wyoming have been designated greater sage grouse core protection areas (State of Wyoming Executive Department 2008). When greater sage grouse core protection areas coincide with private lands, developers may be held to more stringent requirements concerning the collection of baseline data and monitoring (Gamo 2009; Wyoming Department of Game and Fish *in preparation*).



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<sup>9</sup> For links to more information about environmental constraints and concerns regarding wind energy development, see Section 3.2 of the appended Resource Guide (Appendix A).

<sup>10</sup> For a link to the Wyoming Natural Diversity Database and its listings of species of concern in Wyoming, see Section 3.2.2 of the appended Resource Guide (Appendix A).

Other potential environmental concerns include invasive plant species and weed control associated with disturbance from construction and road development. Landowners may consider a contractual provision in the wind energy lease agreement that provides for an annual weed abatement program (Stumbough, February 2009).

### **2.3 CULTURAL AND HISTORIC RESOURCES**

The environmental assessment conducted by the developer will identify and consider cultural and historic resources. The presence of archeological sites or the listing of property on the National Register of Historic Places can also have implications for wind energy development.<sup>11</sup> If part of a property is listed or is eligible for listing on the National Register of Historic Places, developers will be required to avoid it or mitigate the effect of the development on the site (Capron 2009).

### **2.4 OTHER COMPATIBILITY ISSUES**

Other compatibility issues include terrain or topography and transmission access and capacity. Generally, the property to be leased must be in an accessible place with smooth, level terrain (National Wind Coordinating Committee 1997). It must also be located near an existing or proposed transmission line with available carrying capacity (Stumbough February 2009).<sup>12</sup> The Wyoming Infrastructure Authority's website summarizes all ongoing transmission projects in the state; if asked, developers can likely provide a plan for transmission and confirm that they have a Power Purchase Agreement (Wyoming Infrastructure Authority 2009; Stumbough February 2009). Finally, the land must not be located in a Federal Aviation Administration (FAA) no-fly zone.<sup>13</sup>

### **2.5 LANDOWNER CHECKLIST—COMPATIBILITY WITH EXISTING LAND USES**

2. \_\_\_\_ Consider operational compatibility
  - a. \_\_\_\_ Potential livestock displacement
    - i. \_\_\_\_ Alternative grazing locations
    - ii. \_\_\_\_ Compensation for costs incurred from displacement
  - b. \_\_\_\_ Restrictions on landowners
    - i. \_\_\_\_ Building height
    - ii. \_\_\_\_ Distance of buildings from wind turbines
    - iii. \_\_\_\_ Potential restriction on other land uses such as hunting (see section 4 for a more detailed discussion)
  - c. \_\_\_\_ Contact the Farm Service Agency about FSA mortgages and restrictions on commercial wind energy development
  - d. \_\_\_\_ Seek USDA approval if participant in USDA programs (listed above)

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<sup>11</sup> For information about contacts regarding national historic places, cultural trails, viewshed protection and archeological resources, see Section 3.3.1 of the appended Resource Guide (Appendix A).

<sup>12</sup> For links to more information about transmission capacity and contact information for the Wyoming Infrastructure Authority, see section 3.4 of the appended Resource Guide (Appendix A).

<sup>13</sup> For FAA contact information, see Section 3.5.1 of the appended Resource Guide (Appendix A).

3. \_\_\_\_ Consider the viability of terrain
  - a. \_\_\_\_ Gentle grade
  - b. \_\_\_\_ Smooth terrain
  - c. \_\_\_\_ Accessible for heavy machinery
4. \_\_\_\_ Consider transmission capacity issues
  - a. \_\_\_\_ Ask developer if they have a transmission plan
  - b. \_\_\_\_ Ask developer if they have a Power Purchase Agreement
5. \_\_\_\_ Consider potential environment and wildlife concerns
  - a. \_\_\_\_ Sensitive wildlife habitat
    - i. \_\_\_\_ Designated sage grouse core protection area
    - ii. \_\_\_\_ Presence of sage grouse leks
    - iii. \_\_\_\_ Presence of other sensitive wildlife habitat
  - b. \_\_\_\_ Species of concern or of potential concern
    - i. \_\_\_\_ Presence of sage grouse
  - c. \_\_\_\_ Invasive species control
    - i. \_\_\_\_ Annual weed abatement program
6. \_\_\_\_ Consider potential archeological/historic concerns
  - a. \_\_\_\_ Identify known archeological sites, especially places listed on the National Register of Historic Places
  - b. \_\_\_\_ Outline a procedure for dealing with archeological sites if they are uncovered
7. \_\_\_\_ Contact the Federal Aviation Association to determine proximity to no-fly zones

### **3. ECONOMIC IMPACTS AND OPTIONS**

Utility-scale wind development on agricultural lands is an opportunity for operators to diversify and further develop income bases. In this way, wind energy development can help ensure continued agricultural production on private lands. Organized into three tables, this section explains the compensation rates and payment arrangements typical in wind energy lease agreements.

#### **3.1 ADVANTAGES AND DISADVANTAGES OF PAYMENT ARRANGEMENTS**

The advantages and disadvantages of the types of payment arrangements encountered during commercial wind energy development are explained in and below Table 1.<sup>14</sup>

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<sup>14</sup> For links to further information about economic implications of wind energy lease agreements, see Section 4.1 of the appended Resource Guide (Appendix A).

Table 1: Advantages and Disadvantages of Pay Structures

Arrangement	Advantages	Disadvantages
Royalties	General: <ul style="list-style-type: none"> <li>• Take into account varying productivity</li> <li>• Give landowner incentive to work with developer to place the turbines on the most productive locations</li> <li>• Give landowners and developers incentives to ensure continuous power generation</li> <li>• Easy to verify if based on gross revenue</li> </ul>	Landowner: <ul style="list-style-type: none"> <li>• Difficult to verify electricity and revenue generated by each turbine:*</li> <li>• Individual turbine generation information is hard to obtain</li> <li>• Individual monitors on turbines do not reflect the energy sold because they do not account for energy losses in the electrical system</li> <li>• Developers generally do not like to share turbine productivity data</li> </ul>
Royalties/Minimum Guarantee Combination	<ul style="list-style-type: none"> <li>• Same as above, with additional benefits from an up-front fee or a minimum guarantee</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>
Flat or Fixed Fee (per turbine or per acre or per MW installed)	Landowner: <ul style="list-style-type: none"> <li>• Provides steady, predictable income stream</li> <li>• Protected in years of low power and/or revenue</li> </ul> Developer: <ul style="list-style-type: none"> <li>• Does well in high-production/revenue years</li> </ul> General: <ul style="list-style-type: none"> <li>• Can be used to compensate a landowner for use of land for an access road crossing the property, even if turbine is not installed on the land</li> <li>• Clarity and transparency</li> <li>• Easy to verify</li> </ul>	Landowner: <ul style="list-style-type: none"> <li>• Forgoes potentially higher, if fluctuating, level of income associated with royalty payments</li> </ul> Developer: <ul style="list-style-type: none"> <li>• Expenses are harder to bear in years of low power generation and/or revenue</li> </ul> General: <ul style="list-style-type: none"> <li>• Payments do not mirror actual revenue generated</li> <li>• Eliminates the economic incentive for the landowner to cooperate with the developer to ensure maximum power generation</li> </ul>
Lump Sum	Landowner: <ul style="list-style-type: none"> <li>• Source of immediate cash</li> </ul> Developer: <ul style="list-style-type: none"> <li>• Does not have to provide payments in subsequent years</li> </ul>	Landowner: <ul style="list-style-type: none"> <li>• Does not provide steady income stream</li> </ul> Developer: <ul style="list-style-type: none"> <li>• Must provide lump sum up front</li> </ul> Both: <ul style="list-style-type: none"> <li>• Bad “fit” to have financial transaction complete but physical use ongoing</li> </ul>
*In the United States, information about the amount of power generated by a facility is often publicly available from grid operating managers or the utility purchasing the power. Even so, such information does not indicate how much is generated by individual wind turbines within a project.		

Table 1: Advantages and Disadvantages of Different Payment Structures. Table reproduced from Global Energy Concepts. October 2005. Lease Agreements. Prepared for the New York State Energy Research & Development Authority. Available at [www.powernaturally.org](http://www.powernaturally.org).

In Wyoming, payment arrangements for wind energy lease agreements are typically a combination of escalating royalties and a minimum guarantee. To estimate annual revenue returns per turbine through royalties, landowners will need to have access to information from the Power Purchase Agreement between the producer and their buyer. Specifically, the landowner will need to multiply the electricity sale rate (typically in dollars per kilowatt hour), the annual kilowatt-hours of electricity generated per turbine (estimated at the point where power is measured), and the percentage share of the electricity sales owed to the landowner to get an estimate of annual returns (Harsh 2008).<sup>15</sup> If landowners enter a lease agreement with provisions for royalty payments, they can consider requesting access to power production information so they can audit royalty payments (Windustry 2005).

If a landowner is considering entering a wind lease agreement that provides for a lump-sum payment at the beginning of the contract, they can use a standard financial annuity formula to convert the lump-sum into annual payments for the purpose of comparison (Harsh 2008). Landowners should also discuss potential tax consequences of a one-time payment with their attorney. Finally, if considering the option of a fixed payment per turbine, landowners should know the size of the turbine. Typically, the larger a turbine is, the higher the payment (Harsh 2008).

### **3.2 POSSIBLE PAYMENT ARRANGEMENTS IN EACH STAGE OF DEVELOPMENT**

Specific payment structures vary among individual wind energy lease agreements and across each stage of wind energy development. Different types of payments can occur during each phase of development. In Table 2 below, “typical rates” represent the widest range of numbers collected from all sources, as rates likely differ depending on the level of wind capacity, the accessibility of the land, the desirability of the topography, the size of the land unit being leased, and other factors.

Except for one-time payments, the payment arrangements in Table 2 below can be tied to the Consumer Price Index or to another yearly inflationary index factor (Medicine Bow Conservation District 2009; Stumbough, February 2009). By procuring an inflation adjustment provision, landowners protect the value of future payments, just as developers protect the value of payments they will receive from buyers by using an inflationary adjustment provision in their Power Purchase Agreement (Harsh 2008).

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<sup>15</sup> For more economic estimation tools, see Section 4.1.1 of the appended Resource Guide (Appendix A).

Table 2: Possible Payment Arrangements in Each Stage of Development<sup>16</sup>

Phase	Type of Arrangement	Typical Rates
Development	Signing bonus	Equal to the first year's land lease payment; paid when lease agreement is signed
Development	Land lease payment	\$4-\$12 per acre per year  Land lease payments for years 1-3 may potentially be paid in advance
Development	Payment for placement of anemometer towers	\$1,000 to \$3,000 per tower
Construction	Construction fee	One-time payment of \$2,500 to \$4,500 per megawatt of name plate capacity installed
Operation	Royalty payment	The percentage of gross revenues may escalate per year, beginning at around 4% in year one and escalating to as high as 8% by the end of the wind energy lease agreement's term
Operation	Underground transmission lines rental payment	One-time payment of \$25 per rod*
Operation	High voltage above ground transmission lines rental payment	One-time payment of \$85 per rod; OR  Per-year payment of \$8 per rod
Operation	Road	One-time payment of \$25 per rod; OR  Initial payment of \$7.50 per rod followed by a payment of \$3 per rod per year
Operation	Storage or equipment staging areas rental payment	Up to \$2,500 per acre per year
Operation	Guaranteed minimum annual royalty payment	\$1,500 to \$5,000 megawatt of installed capacity  Can be indexed for inflation
Operation	Bonus percentage	1-3% bonus percentage paid for wind capacity factors over 40%
Decommissioning	Bond	Surety bond valued at 1.5 times the value of the wind farm
*“Rod” is a unit of distance equal to 16.5 feet.		

Another protective provision found in some wind energy lease agreements is a guarantee that the landowner will be offered the same terms and conditions as those arranged in similar locations. That type of guarantee is commonly referred to as a “most favored nation clause” (Stumbough, February 2009). Additionally, some landowners garner payment through non-traditional forms of compensation, such as the placement of a small-scale generator at their headquarters (Medicine Bow Conservation District 2009), or payments from developers to landowners in exchange for the use of water and gravel (Stumbough, February 2009).

<sup>16</sup> The rates listed are derived from personal communication with the chair of Windy Ranches, LLC, Jim Rogers (Rogers 2009) and from the Southeastern Wyoming's Resource Conservation & Development Coordinator's document “Southeastern Wyoming Commercial Wind Development Terms – A Range of Payments and Terms Agreed Upon by Landowners” (Stumbough, February 2009).



Photo courtesy of Todd Heward

### **3.3 EXAMPLES OF COMPENSATION RATES AND AGREEMENTS**

The next examples of compensation rates and arrangements, in Table 3, are derived from existing wind energy lease agreements proposed for state lands and reviewed by the Wyoming Office of State Lands & Investments' State Board of Land Commissioners (Wyoming Office of State Lands and Investments 2009).<sup>17</sup> The wind energy lease agreements described below are available to the public.<sup>18</sup>

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<sup>17</sup> See Appendix C to view a wind energy lease agreement template provided by the Wyoming Office of State Lands & Investments.

<sup>18</sup> For links to the Office of State Lands and Investments and the State Board of Land Commissioners, see Section 6.3 of the appended Resource Guide (Appendix A). From the Office of State Lands and Investments' Web site, select the link to "Boards." After the page has loaded, select the "Past Board Agendas" link. Selecting dates from the "Past Matters of the State Board of Land Commissioners" drop-down menu will lead to meeting minutes. Minutes about the approval of special use lease applications that involve wind energy will lead to a summary of the proposed wind energy lease agreement and, in some cases, the lease agreement itself.

Table 3: Examples of Lease Compensation in Wind Energy Agreements Reviewed by the State Board of Land Commissioners (SBLC) <sup>19</sup>

<b>Review Date</b>	<b>Installed Mega Watt (MW) and Term</b>	<b>Initial Payment</b>	<b>Installation Fees</b>	<b>Operating Fees</b>	<b>Other Payment Arrangements</b>	<b>SBLC Director's Recommendation</b>
February 2009	199.5 MW 57 years	\$3.57 per acre for 7 years  Payable annually in advance until the operations date	One-time installation fee of \$2,500 per MW of installed name plate capacity  50% payable at beginning of construction, 50% payable upon the operations date	4% of gross revenue from operations date through term.  No escalation	Minimum annual rent of \$2,500 per year per MW of installed name plate capacity OR \$5.25 per year per acre; whichever is greater	Deny—lease compensation does not represent fair market value
February 2009	300 MW 40 years	\$6.50 per acre per year for the first five years  \$8.50 per acre per year for years 6-8  Payable annually in advance until the operations date	One-time installation fee of \$4,000 per turbine; OR \$3,000 per MW of installed name plate capacity; whichever is greater  50% payable at beginning of construction, 50% payable upon the operations date	4% of gross revenues for years 1-10 from the operations date  5% for years 11-20  6% for years 21 through term	Minimum annual rent of \$5,000 per MW of installed name plate capacity OR \$11.50 per acre; whichever is greater  Operating fees are paid quarterly	Approve

<sup>19</sup> See Appendix B for definitions of the terms used throughout this text and especially in Table 3. See Appendix C for an example of a wind energy lease agreement.

December 2008	250 MW 35 years	\$7 per acre per year for the first 4 years.  \$9 per acre per year for years 5-7  Payable quarterly until commencement of construction	One-time installation fee equal to \$3,500 per MW of installed name plate capacity  50% payable at beginning of construction, 50% payable upon operations date	5.5% of the gross annual revenues for years 1-10  6.5% for years 11-15  7% for years 16-20  8% for years 21-35	Minimum annual rent of \$3,500 per MW of installed name plate capacity OR \$11.50 per acre; whichever is greater	Approve
October 2008	300 MW to increase to 600 MW 50 years	\$4 per acre per year for the first 4 years  \$5 per acre per year for years 5-8.  Payable quarterly until commencement of construction	One-time installation fee of \$3,000 per MW of installed name plate capacity.  50% payable upon construction date, 50% payable upon operations date	4% of the gross annual revenues for years 1-20.  5% for years 21-50.	Minimum rental of \$3,000 per MW of installed name plate capacity	Approve
April 2007	20-30 MW 35 years	\$2.50 per acre payable monthly until commencement of construction	One time installation fee equal to \$2,000 per MW of installed wind energy capacity  Payable at beginning of construction	4.5% of the gross annual revenues until the 10 <sup>th</sup> year anniversary of the beginning of commercial operation  5.5% until the 15 <sup>th</sup> anniversary  6.5% until the 20 <sup>th</sup> anniversary, 7.5% thereafter	Minimum rental of \$2,500 per MW of installed capacity of wind turbines	Approve

August 2006	17.5 MW 25 years	\$2.25 per acre  Payable monthly until commencement of construction	One time installation fee equal to \$2,000 per MW of installed wind energy capacity  Payable at beginning of construction	2.5% of the gross annual revenues until the 10 <sup>th</sup> anniversary of the beginning of commercial operation  3.5% thereafter	Minimum rental of \$1,500 per MW of installed capacity of wind turbines	Approve
August 2004	35 years	\$2.25 per acre per year until commencement of construction	One time installation fee of \$2,000 per MW of installed capacity of wind turbines or other power generation facilities	2.5% of gross annual revenues for twenty years from the operations date  3.5% from the twentieth year until the termination of the lease  OR \$1,500 for each MW of installed capacity of wind turbines or other power generation facilities, whichever is greater	Provides for the adjustment of annual operating fees if the federal production tax credit is adjusted up or down or expires	Approve

When considering the economic benefits of entering a wind energy lease agreement, landowners may wish to calculate the necessary cost of payments to a landowner's association or an attorney, as well as the potential cost of a "break up" fee to terminate negotiations (Stumbough, February 2009).

### **3.4 OTHER OPTIONS AND CONSIDERATIONS**

Landowners who are unable or do not wish to pursue a wind energy lease agreement individually may apply to join a landowner wind association.<sup>20</sup> Benefits to landowners may include sharing resources such as legal services, collective bargaining, and the creation of large blocks of land to enhance the ability to market a wind resource (Frank and Midcap 2008).

For landowners who are not interested or are unable to enter a wind energy lease agreement but who could benefit from diversifying their income base, economic alternatives such as conservation easements or the development of small scale renewable energy systems may be worth considering.<sup>21</sup> Producers who gain 50% or more of their gross income from agricultural operations are eligible for the Rural Energy for America Program (REAP)/Feasibility Grant Program to conduct a feasibility study for renewable energy systems, including wind. The grants are limited to \$50,000 and awarded on a competitive basis.<sup>22</sup>

### **3.5 LANDOWNER CHECKLIST--- ECONOMIC IMPACTS AND OPTIONS**

8. \_\_\_\_ Consider the advantages and disadvantages of income and operational diversification
  - a. \_\_\_\_ Determine if utility-scale wind energy development is a suitable or preferred diversification option
  - b. \_\_\_\_ Consider economic alternatives or complements
    - i. \_\_\_\_ Conservation easements
    - ii. \_\_\_\_ Rural Energy for America Program Grants/Feasibility Grant Program
9. \_\_\_\_ Understand the advantages and disadvantages of payment structures (see Table 1)
  - a. \_\_\_\_ Royalties or royalties/minimum guarantee
    - i. \_\_\_\_ Estimate annual returns per turbine
    - ii. \_\_\_\_ Confirm developer has a Power Purchase Agreement
    - iii. \_\_\_\_ Request access to power production information to audit royalty payments
  - b. \_\_\_\_ Lump Sum
    - i. \_\_\_\_ Consider potential tax consequences
    - ii. \_\_\_\_ Compare to payments over time using a standard financial annuity formula to find the annual payment equivalent

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<sup>20</sup> For wind association contact information and publications, see Section 6.2 of the appended Resource Guide (Appendix A).

<sup>21</sup> For information on economic alternatives to commercial wind energy development, see Section 4.2 of the appended Resource Guide (Appendix A).

<sup>22</sup> For more information about the REAP program see Section 4.2.1 of the appended Resource Guide (Appendix A).

- c. \_\_\_\_ Flat or fixed fee
  - i. \_\_\_\_ Understand the size of the turbines
- 10. \_\_\_\_ Become familiar with payment arrangements and ranges of compensation rates for each stage of wind energy development (see Tables 2 and 3)
- 11. \_\_\_\_ Become familiar with typical compensation rates in lease agreements (see Table 3), specifically for operations with similar wind potential, size, transmission access and topography
  - a. \_\_\_\_ Consider the advantages and disadvantages of joining a local wind association
  - b. \_\_\_\_ Contact neighbors and other landowners who have entered wind energy lease agreements
  - c. \_\_\_\_ Review new wind energy lease agreements proposed for state lands as they become publically available through the Wyoming Office of State Lands & Investments website (see Footnote 16 for directions to lease agreements)

#### **4. LIFESTYLE IMPACTS**

Even if a landowner has high quality wind, no significant environmental, topographic or archeological concerns, and has decided that pursuing wind energy development makes economic sense for existing operations, other lifestyle considerations may influence the decision to enter a wind energy lease agreement. Lifestyle considerations include questions of privacy, access, safety, the risk of disruption from noise or light, and changes in land uses.

Developer personnel will need to access turbine sites, production areas, and storage areas. For landowners accustomed to living in isolated areas, mental preparation and acceptance of some level of disruption of that privacy may be necessary. The risk of lifestyle disruptions from wind energy development can be minimized, although not eliminated, by careful foresight on the part of the landowner.

##### **4.1 AREA LEASED**

Generally, it is advantageous for developers to lease large acreages or entire properties. Prior to entering a wind energy lease agreement, landowners should consider desired setbacks from residential areas and property lines and also general exclusion areas which the developer has no right to access (Global Energy Concepts 2005; Zalcman 2005; Medicine Bow Conservation District 2009). Regardless of the acreage leased, all water rights should remain with the landowner (Medicine Bow Conservation District 2009).



Photo: Courtesy of Tony Hoch

## **4.2 ACCESS AND SAFETY**

Landowners and developers can also work together to determine access routes and access points (Stumbough, February 2009). Ideally, landowner input about the location of access routes, roadway directions and control points that are suitable for all needs will be considered (Aakre and Haugen 2009). Access points can be controlled by locked gates, and access hours can be limited to set work hours (Medicine Bow Conservation District 2009). Landowners may also consider requesting written assurances that personnel will only enter their land during pre-determined work hours, will not bring dogs or guns onto their property, will not place living quarters on their property, and will not leave trash or unused equipment behind (Stumbough February 2009; Medicine Bow Conservation District 2009).

## **4.3 SOUND AND LIGHT**

Legal provisions are more difficult to implement and may be less effective in regards to sound and light disruptions (Global Energy Concepts 2005). Sound and light standards can be negotiated for construction and personnel activities, including reasonable hours of activity. In

some cases, sound standards can also be negotiated for the turbines (Global Energy Concepts 2005).

#### **4.4 LAND USE RIGHTS**

Landowners typically maintain the right to use their land for continued agricultural operations. Developers may prefer, however, to restrict hunting on the private lands they are leasing to protect turbines and operational equipment. Landowners who value hunting as part of their lifestyle or as an economic activity may wish to consider their willingness to cede hunting rights prior to entering a wind energy lease agreement. It is important for both the landowner and the landowner's legal counsel to understand the degree of flexibility the landowner is willing to offer when negotiating these issues.

#### **4.5 AESTHETIC CHANGES**

Questions of the aesthetic changes brought by commercial wind farm placement are important to many landowners, especially those with historical ties to the landscape. Landowners may wish to note and understand their reactions to large wind farms on previously open viewsheds before entering a wind energy lease agreement. For some, the impacts of industrial wind energy developments to lifestyle will take precedent to other economic and operational considerations. For others, entering a wind energy lease agreement will provide income security and help retain agricultural lands and lifestyle.

#### **4.6 LANDOWNER CHECKLIST--- LIFESTYLE IMPACTS**

12. \_\_\_\_ Area leased
  - a. \_\_\_\_ Consider desired setbacks from residences and property lines
  - b. \_\_\_\_ Consider the location of general exclusion areas for development and for access
13. \_\_\_\_ Consider questions of privacy, access, general disruption, and safety
  - a. Consider how to mitigate privacy, access, safety and general disruption issues
    - i. \_\_\_\_ Controlled access points
    - ii. \_\_\_\_ Limited access hours
    - iii. \_\_\_\_ Access exclusion areas
    - iv. \_\_\_\_ Smoking ban
    - v. \_\_\_\_ No living quarters for personnel
    - vi. \_\_\_\_ Limitations on the use of guns and dogs by developer personnel
14. \_\_\_\_ Change in land use options
  - a. \_\_\_\_ Review existing land uses
  - b. \_\_\_\_ Consider the potential loss of some of those uses
    - i. \_\_\_\_ Hunting
    - ii \_\_\_\_ Other recreational uses

15. \_\_\_\_ Determine the location of turbines relative to residences, the viewscape, livestock facilities and important wildlife areas
- a. \_\_\_\_ Consider the potential for noise and light disruption
  - b. \_\_\_\_ Consider mitigation strategies for noise and light disruption
    - i. \_\_\_\_ Sound and light standards for construction and operation activities
    - ii. \_\_\_\_ Designated construction hours
    - iii. \_\_\_\_ Sound standards for turbines
  - c. \_\_\_\_ Consider and prepare for aesthetic changes to viewsheds and landscapes

## **5. LEGAL COUNSEL AND WIND ENERGY LEASE AGREEMENTS**

### **5.1 LEGAL COUNSEL**

A landowner's lease agreement with a commercial wind developer can determine the outcome of all of the above considerations. The following checklist about the contractual aspects of commercial wind farm development represents only the types of issues landowners may wish to consider as they enter into a wind energy lease agreement.<sup>23</sup> Every contractual agreement between a landowner and a developer has unique possibilities that differ across regions and operations and must be negotiated with the help of formal legal counsel. The first step for a landowner to take after deciding to pursue commercial wind development or after being approached by a developer is to obtain legal counsel.<sup>24</sup>

Major considerations in most wind energy lease agreements include the area leased, the length of the agreement, economic arrangements, liability, approved land uses and restrictions, questions of access and maintenance, technical agreements, decommissioning, and reclamation.

### **5.2 TERM OF LEASE AGREEMENT**

The term of a wind energy lease agreement is divided into segments. The initial stage of a lease often takes the form of an "option agreement," which gives the developer the right to decide to pursue or opt out of development, typically after 1-5 years. The landowner will want to be released from all encumbrances if the developer chooses to opt out, which can be contractually guaranteed when the option agreement is developed (Stumbough, March 2009). If the developer chooses to pursue further development, the term of a lease generally ranges from 20-50 years. Due to changing markets, landowners may wish to procure the right to renegotiate the terms of the agreement after 20 years (Aakre and Haugen 2009). In previous wind energy lease agreements, any compensation rates that are open for renegotiation have also been guaranteed at a rate that is equal to or greater than the rate received for the first part of the contract (Medicine Bow Conservation District 2009). Finally, because the term of a lease agreement is generally lengthy, landowners and developers can consider developing conditions for the early termination of the contract by the other party. Through cooperation and the development of reasonable

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<sup>23</sup> To see an example of a wind energy lease agreement, see Appendix C.

<sup>24</sup> For additional references, see Section 6.1 of the appended Resource Guide (Appendix A).

conditions, both parties can keep the risk of lease termination low (Global Energy Concepts 2005).

### **5.3 AREA LEASED**

As discussed above, wind developers generally prefer to lease large acreages or entire properties. The wind energy lease agreement is where landowners can negotiate for the desired setbacks and exclusion areas they considered when thinking about the impacts of commercial wind energy development on their lifestyle. Also in regards to the area leased, landowners may be asked to identify any exceptions to the title of ownership and to assist the commercial developer in obtaining necessary subordination agreements or approvals from existing lien holders (Zalcman 2005).<sup>25</sup>

### **5.4 LIABILITY**

An agricultural operation's existing comprehensive liability policy is not likely to cover issues related to commercial wind energy development and operation. For this reason, wind energy lease agreements must state who is responsible for damages related to the wind energy development. The landowner will likely wish to explicitly limit liability.

### **5.5 DECOMMISSIONING AND DISPOSAL**

The maintenance and location of tools used to identify and protect access routes such as signs, gates, fences, locks, and security patrols typically are regulated through the wind lease agreement (Aakre and Haugen 2009; Global Energy Concepts 2005). The process for decommissioning a wind farm also falls under the purview of the lease agreement (Aakre and Haugen 2009). Typically, the developer is responsible for removing above-ground hardware, equipment, machinery, and foundation such as turbines, transformers, blades, towers, and above-ground wiring and foundations (Global Energy Concepts 2005). If the utility owns the project substation, the developer may not be accountable for removing that substation (Global Energy Concepts 2005). Underground wiring and foundations are often left in place, or foundations may be removed (Global Energy Concepts 2005). Foundations are generally removed to four feet below the ground, but landowners can negotiate an arrangement suitable for their purposes, from leaving the foundation in place to removing it entirely (Stumbough, April 2009). The decommissioning provisions of a lease agreement can also require that unused equipment be removed and not left on the land (Stumbough, February 2009). Also, the description of decommissioning can include a removal timeline and a provision for the release of all easements.

### **5.6 RECLAMATION**

Reclamation procedures are also outlined in wind energy lease agreements to ensure preservation of existing land uses after the wind farm has been decommissioned. Before the project begins, landowners may wish to conduct a baseline assessment to guide the establishment of standards for reclamation (Stumbough, February 2009). Procedures can be outlined for topsoil stockpiling,

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<sup>25</sup> For publications with further legal information, see Section 6.4 of the appended Resource Guide (Appendix A).

storage and future use (Stumbough February 2009). Other potential contractual guarantees may include long term weed control, disturbance protection for all major rock outcroppings and trees, the hiring of a reclamation professional to conduct reclamation after decommissioning, and the establishment of specific seed mixes and temporary protective fences (Medicine Bow Conservation District 2009). Bonds to provide for reclamation are most useful if valued to consider future inflationary costs for reclamation. Some county planning and zoning regulations may already require commercial developers to post bonds for reclamation and decommissioning. Otherwise, the lease agreement can also be used to procure this guarantee.<sup>26</sup>



Photo: Courtesy of Tony Hoch

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<sup>26</sup> County planning and zoning contact information and links to regulations are listed in section 7.1.3 of the appended Resource Guide.

**5.7 LANDOWNER CHECKLIST--- ENTERING A WIND ENERGY LEASE AGREEMENT:  
CONSIDERATIONS AND COMPONENTS <sup>27</sup>**

16. \_\_\_\_ Obtain legal counsel
  - a. \_\_\_\_ Independently retain legal counsel
  - b. \_\_\_\_ Retain legal counsel in conjunction with a wind association
17. \_\_\_\_ Length of agreement
  - a. \_\_\_\_ Option Agreement
    - i. \_\_\_\_ Length of option agreement
    - ii. \_\_\_\_ Landowner release from all encumbrances if developer opts out
    - iii. \_\_\_\_ Landowner access to or ownership of developer's wind and meteorological data if developer opts out
  - b. \_\_\_\_ Term of lease agreement (see Table 2 for typical length of term for wind energy lease agreements)
    - i. \_\_\_\_ Conditions of right to terminate contract
    - ii. \_\_\_\_ Royalty renegotiation at 20 years
18. \_\_\_\_ Area leased (for full discussion of landowner considerations when negotiating the area leased, see section 4 above)
  - a. \_\_\_\_ Setbacks
  - b. \_\_\_\_ Exclusion areas
  - c. \_\_\_\_ Potential contractual obligations to commercial developer regarding area leased
    - i. \_\_\_\_ Identify any person or entity to whom the landowner has sold, conveyed, leased, assigned, licensed, mortgaged, encumbered or transferred any of their leasehold or other right, title or interest in the property under consideration
    - ii. \_\_\_\_ Assist in obtaining necessary subordination agreements or approvals from existing lien holders
19. \_\_\_\_ Economic arrangements (for detailed discussion about all economic considerations prior to entering a wind energy lease agreement, see section 3 of this document)
  - a. \_\_\_\_ Compensation and pay structure for each phase of development (see Tables 1, 2 and 3 for guidance)
  - b. \_\_\_\_ Compensation for any loss of viable agricultural operations
  - c. \_\_\_\_ Compensation for potential property damage
  - d. \_\_\_\_ Non-conventional compensation
    - i. \_\_\_\_ small-scale generator
20. \_\_\_\_ Access stipulations (for a detailed discussion about landowner considerations in regards to access, see section 4 above).
21. \_\_\_\_ Maintenance and technical agreements
  - a. \_\_\_\_ Roads

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<sup>27</sup> For links to further legal resources, see Section 6 of the appended Resource Guide.

- i. \_\_\_\_ Location
    - ii. \_\_\_\_ Direction
    - iii. \_\_\_\_ Maintenance
    - iv. \_\_\_\_ Snow removal
  - b. \_\_\_\_ Signs
    - i. \_\_\_\_ Location
    - ii. \_\_\_\_ Maintenance
  - c. \_\_\_\_ Gates and locks
    - i. \_\_\_\_ Location
    - ii. \_\_\_\_ Type (key-card, key, code, etc.)
    - iii. \_\_\_\_ Personnel with access
    - iv. \_\_\_\_ Security patrols
  - d. \_\_\_\_ Fences and cattle guards
    - i. \_\_\_\_ Location
    - ii. \_\_\_\_ Maintenance
    - iii. \_\_\_\_ Immediate repair of fences if damaged
  - e. \_\_\_\_ Cable and transmission line burial depth
  - f. \_\_\_\_ Waterlines
    - i. \_\_\_\_ Immediate repair of water lines if damaged
    - ii. \_\_\_\_ Responsibility to haul water until waterline is repaired
- 22. \_\_\_\_ Liability and insurance
  - a. \_\_\_\_ Party responsibility for liability/insurance for any issue related to wind development
    - i. \_\_\_\_ Limited landowner liability
  - b. \_\_\_\_ Party responsible for additional coverage added to agricultural operation's existing comprehensive liability policy
  - c. \_\_\_\_ Party responsible for increase in landowner's regular premiums
  - d. \_\_\_\_ Requirements for insurance termination
    - i. \_\_\_\_ Written notice
    - ii. \_\_\_\_ Time of notice prior to termination
- 23. \_\_\_\_ Decommissioning and disposal
  - a. \_\_\_\_ Removal and disposal of all above-ground equipment, machinery, and foundation
    - i. \_\_\_\_ Turbines, transformers, blades, towers, above-ground wiring and foundations
  - b. \_\_\_\_ Distance below ground for foundation removal (i.e. foundation will be removed to ground level or to 1 meter below ground level.)
  - c. \_\_\_\_ All debris removed from the site
  - d. \_\_\_\_ All easements released after decommissioning
- 24. \_\_\_\_ Reclamation
  - a. \_\_\_\_ Bonds
    - i. \_\_\_\_ Required by county planning and zoning regulations

- ii. \_\_\_\_ Provided through wind energy lease agreement
- b. \_\_\_\_ Baseline range assessment prior to project
- c. \_\_\_\_ Standards for reclamation
- d. \_\_\_\_ Procedure for topsoil stockpiling, storage, and future use
- e. \_\_\_\_ Long-term weed control
- f. \_\_\_\_ Seed mix specifications
- g. \_\_\_\_ Party that will conduct reclamation
  - i. \_\_\_\_ Range professional
- h. \_\_\_\_ Temporary protective fencing
- i. \_\_\_\_ No disruption of major rock outcroppings or trees

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## APPENDIX A

### COMMERCIAL WIND ENERGY DEVELOPMENT RESOURCE GUIDE FOR WYOMING

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## **1. BACKGROUND ON COMMERCIAL WIND ENERGY DEVELOPMENT**

### **1.1 GENERAL INFORMATION**

American Wind Energy Association

[www.awea.org](http://www.awea.org)

Includes a wind energy resources library that offers publications and reports about basic wind information; small wind energy systems; how to finance wind projects; wind industry statistics; the integration of wind and utilities; and proceedings from workshops about birds, bats, and wind. Also provided are publications from other groups; basic wind fact sheets; renewable energy blogs; and wind energy mailing lists.

Iowa Energy Center

[www.energy.iastate.edu/links/renewable.htm](http://www.energy.iastate.edu/links/renewable.htm)

A clearinghouse of renewable energy links.

Montana State University (MSU) Extension: Wind Energy Resources

[www.msuextension.org/energy/wind/windhome.asp](http://www.msuextension.org/energy/wind/windhome.asp) and

[www.msuextension.org/energy/wind/Basics\\_of\\_Windlist.asp?cmd=resetall](http://www.msuextension.org/energy/wind/Basics_of_Windlist.asp?cmd=resetall)

Provides a basic overview of wind energy facts, terminology, technology, benefits and barriers through links to numerous publications, web sites and organizations.

Windustry

[www.windustry.org](http://www.windustry.org)

The organization works through outreach, education and advocacy to “remove the barriers to broad community ownership of wind energy.” Web site contains information about wind basics, links to other wind sites and networks, policy and research updates, and more.

### **1.2 PUBLICATIONS**

Constanti, M. and P. Beltrone. October 2006. Wind Energy Guide for County Commissioners.

Sponsored by the U.S. Department of Energy, the National Renewable Energy Laboratory, Wind Powering America, and the National Association of Counties.

Available at

[www.windpoweringamerica.gov/pdfs/wpa/county\\_commissioners.pdf](http://www.windpoweringamerica.gov/pdfs/wpa/county_commissioners.pdf) and at

[www.osti.gov/bridge](http://www.osti.gov/bridge).

Provides readers with information and links to additional websites and publications on the following topics: Brief Wind Energy Overview, Environmental Benefits, Wind Energy Myths and Facts, Economic Development Benefits, Wind Economics, The Development Process, Public Outreach, Siting Issues, Property Tax Incentives, Power System Impacts, Permitting, Zoning, and Siting Processes, Case Studies, and further information.

## **2. WIND POWER CAPACITY AND DEVELOPMENT OPPORTUNITIES IN WYOMING**

### **2.1 GENERAL INFORMATION**

U.S. Department of Energy Wind & Hydropower Technologies Program: Wyoming Wind Activities

[www.windpoweringamerica.gov/astate\\_template.asp?stateab=wy](http://www.windpoweringamerica.gov/astate_template.asp?stateab=wy)

Summarizes Wind Powering America activities in Wyoming, including a wind working group, anemometer loan program, wind maps, a small wind consumers guide, and state workshops.

U.S. Department of Energy's Energy Efficiency and Renewable Energy Program  
Wyoming News Page

[apps1.eere.energy.gov/states/state\\_news.cfm/state=WY](http://apps1.eere.energy.gov/states/state_news.cfm/state=WY)

Follows recent news about Wyoming's involvement in renewable energy and energy efficiency projects.

### **2.2 CONTACTS**

Laramie Rivers Conservation District

Phone: 307.721.0072

Fax: 307.745.6764

Address: 5015 Stone Road (CR 22) Laramie, WY 82070

[www.lrcd.net/](http://www.lrcd.net/)

Medicine Bow Conservation District

Phone: 307.379.2542

Mailing Address: P.O. Box 6 Medicine Bow, WY 82329

Physical Address: 510 Utah Medicine Bow, WY 82329

[www.wy.nrcs.usda.gov/contact/wypers/mbow.html](http://www.wy.nrcs.usda.gov/contact/wypers/mbow.html)

Saratoga-Encampment-Rawlins Conservation District

Phone: 307.326.8156

Fax: 307.326.8572

Mailing Address: P.O. Box 633 Saratoga, WY 82331

Physical Address: 101 Cypress Ave. Saratoga, WY 82331

[www.sercd.org/](http://www.sercd.org/)

Southeastern Wyoming Resource Conservation and Development Council

Phone: 307.322.2187

Fax: 307.322.4109

Email: [grant.stumbough@wy.usda.gov](mailto:grant.stumbough@wy.usda.gov)

Address: 1502 Progress Court Wheatland, WY 82201

[www.wy.nrcs.usda.gov/rcd/southeasternrcd.html](http://www.wy.nrcs.usda.gov/rcd/southeasternrcd.html)

## **2.3 PROGRAMS**

### **Anemometer Loan Program**

[www.wyomingbusiness.org/business/energy\\_anemometer.aspx](http://www.wyomingbusiness.org/business/energy_anemometer.aspx)

Sponsored by the Wyoming State Energy Office, the Anemometer Loan Program gives landowners the opportunity to determine the wind power capacity available on their lands. See website for application and program details.

Wyoming State Energy Office (Administered through the Wyoming Business Council)

Phone: 307.777.2824

Address: 214 West 15<sup>th</sup> Street, Cheyenne, WY 82002

Applicants for Wyoming's Anemometer Loan Program must mail copies of all necessary permits to the Wyoming State Energy Office.

## **2.4 PUBLICATIONS**

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Available at

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Available at

[www.nationalgridus.com/non\\_html/transmission-WestRenewableFuture.pdf](http://www.nationalgridus.com/non_html/transmission-WestRenewableFuture.pdf)

## **2.5 MAPS**

### **Carbon County "Wind Power Potential" Map**

[www.mmiplanning.com/cc06/planning\\_process/docs/map%20series/Wind/Wind%20Power%20-%20Carbon%20County.pdf](http://www.mmiplanning.com/cc06/planning_process/docs/map%20series/Wind/Wind%20Power%20-%20Carbon%20County.pdf)

### **Northwestern US Wind Mapping Project**

[www.windpowermaps.org/windmaps/windmaps.asp](http://www.windpowermaps.org/windmaps/windmaps.asp)

Offers state maps, including Wyoming, and an interactive zoom tool provided by the National Renewable Energy Laboratory to allow for zooming and pinpointing specific wind data within the state.

U.S. Department of Energy's Wind and Hydropower Technologies Program  
Wyoming Wind Resource Map

[www.windpoweringamerica.gov/images/windmaps/wy\\_50m\\_800.jpg](http://www.windpoweringamerica.gov/images/windmaps/wy_50m_800.jpg)

Shows wind speed estimated at 50 meters above the ground and estimates Wyoming's capacity for utility scale wind development.

### **3. COMPATIBILITY WITH EXISTING LAND USES**

#### **3.1 AGRICULTURAL OPERATIONS**

##### **3.1.1 CONTACTS**

Rocky Mountain Farmers Union (RMFU)

Phone: 303.752.5800

Fax: 303.752.5810

Address: 5655 South Yosemite Street, Suite 4000, Greenwood Village, Colorado 80111

[www.rmfu.org](http://www.rmfu.org)

United States Department of Agriculture (USDA) Programs, Wyoming

Natural Resource Conservation Service (NRCS) USDA Programs, Wyoming

Phone: 307.233.6763

Physical Address: 100 East B Street, Federal Building, 3<sup>rd</sup> Floor, Casper, WY 82602

Mailing Address: P.O. Box 33124, Casper, WY 82602

[www.wy.nrcs.usda.gov/programs/index.html](http://www.wy.nrcs.usda.gov/programs/index.html)

Conservation Reserve Program, Wyoming

[www.wy.nrcs.usda.gov/programs/crp/CRP.html](http://www.wy.nrcs.usda.gov/programs/crp/CRP.html)

Environmental Quality Incentives Program, Wyoming

[www.wy.nrcs.usda.gov/programs/eqip/eqip.html](http://www.wy.nrcs.usda.gov/programs/eqip/eqip.html)

Farmland Protection Program, Wyoming

[www.wy.nrcs.usda.gov/programs/frpp/frpp.html](http://www.wy.nrcs.usda.gov/programs/frpp/frpp.html)

Wetlands Reserve Program, Wyoming

[www.wy.nrcs.usda.gov/programs/WRP/wrp-home.html](http://www.wy.nrcs.usda.gov/programs/WRP/wrp-home.html)

Swampbuster Provisions

[www.nrcs.usda.gov/programs/compliance/WCindex.html](http://www.nrcs.usda.gov/programs/compliance/WCindex.html)

Wildlife habitat Incentives Program

[www.wy.nrcs.usda.gov/programs/whip/whip.html](http://www.wy.nrcs.usda.gov/programs/whip/whip.html)

Farm Service Agency (FSA) USDA, Wyoming  
Phone: 307.261.5231  
Fax: 307.261-5857  
Address: 951 Werner Court, Suite 130, Casper, WY 82601  
[www.fsa.usda.gov/wy](http://www.fsa.usda.gov/wy)

Grassland Reserve Program, Wyoming (USDA Farm Service Agency)  
[www.nrcs.usda.gov/programs/GRP/](http://www.nrcs.usda.gov/programs/GRP/)

Windy Ranches, LLC  
Jim Rogers, Chairman  
Phone: 307.745.8729  
Email: [BCAR1080@msn.com](mailto:BCAR1080@msn.com)

Wyoming Stock Growers Association  
Phone: 307.638.3942  
Fax: 307.634.1210  
Email: [info@wysga.org](mailto:info@wysga.org)  
Physical Address: 113 East 20<sup>th</sup> Street, Cheyenne, WY 82003  
Mailing Address: P.O. Box 206, Cheyenne, WY 82003  
[www.wysga.org](http://www.wysga.org)

### **3.1.2 PUBLICATIONS**

Frank, T. and B. Midcap. November 2008. Landowner Wind Associations in the West: A model for facilitating gigawatt-scale development. Prepared for the Rocky Mountain Farmers Union.

## **3.2 ENVIRONMENT AND WILDLIFE**

### **3.2.1 GENERAL INFORMATION**

Natural Renewable Energy Laboratory's Wind-Wildlife Literature Database (WILD)  
[www.nrel.gov/wind/wild.html](http://www.nrel.gov/wind/wild.html)

WILD contains research documents from journal articles, conference proceedings, government publications, books and utility company reports from around the world that focus on the effects of wind energy development on wildlife.

Bureau of Land Management (BLM)

Wind Energy Program Policies and Best Management Practices  
[www.blm.gov/pgdata/etc/medialib/blm/wo/Information\\_Resources\\_Management/policy/im\\_attachments/2009.Par.34083.File.dat/IM2009-043\\_att1.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/im_attachments/2009.Par.34083.File.dat/IM2009-043_att1.pdf)  
Instruction Memorandum No. 2009-043 (expires 30 September 2010)

Wind Energy Development Policy, Right-of-Way Management, Wind Energy  
[www.blm.gov/wo/st/en/info/regulations/Instruction\\_Memos\\_and\\_Bulletins/national\\_instruction/2009/IM\\_2009-043.html](http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2009/IM_2009-043.html)

Wind Energy Plan of Development (guideline document)  
[www.blm.gov/pgdata/etc/medialib/blm/wo/Information\\_Resources\\_Management/policy/im\\_attachments/2009.Par.10750.File.dat/IM2009-043\\_att2.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/im_attachments/2009.Par.10750.File.dat/IM2009-043_att2.pdf)

The BLM's memorandums and policies apply only to BLM-owned public lands; however the documents listed above are useful information sources regarding areas of critical environmental concern, species of concern, and general resource impacts from utility scale wind energy development.

### **3.2.2 CONTACTS**

Biodiversity Conservation Alliance  
Phone: 707.742.7987  
Email: [carmi@voiceforthewild.org](mailto:carmi@voiceforthewild.org)  
Address: P.O. Box 1512, Laramie, WY 82073  
[www.voiceforthewild.org](http://www.voiceforthewild.org)

A non-profit conservation organization that recently released a report on wind development (see publications section below).

Wyoming Game and Fish Department  
Phone: 307.777.4600  
Address: 5400 Bishop Boulevard Cheyenne, WY 82006  
<http://gf.state.wy.us/index.asp>

Wyoming Natural Diversity Database (WYNDD)  
Phone: 307.766.3032  
Email: [wndd@uwyo.edu](mailto:wndd@uwyo.edu)  
Address: 1000 E. University Ave, Dept.3381, Laramie, WY 82071  
<http://uwadmnweb.uwyo.edu/wyndd/>

A service and research unit of the University of Wyoming that maintains a comprehensive database on the distribution and ecology of rare plants, rare animals, and important plant communities in Wyoming. WYNDD maintains a listing of species of concern and species of potential concern in Wyoming on their website.

### **3.2.3 PUBLICATIONS**

Arnett, E.B., W.K. Brown, W.P. Erickson, J.K. Fiedler, B.L. Hamilton, T.H. Henry, A. Jain, G.D. Johnson, J. Kerns, R.P. Koford, C.P. Nicholson, T.J. O'Connell, M.D. Piorkowski, and R.D. Tankersley, Jr. 2008. Patterns of Bat Fatalities at Wind Energy Facilities in North America. *Journal of Wildlife Management* 72: 61-78.

- Collins, C.P., and T.D. Reynolds. 2006. Greater sage-grouse lek surveys and lek counts on Cotterel Mountain, 2006 Results. Ribgy, ID: TREC, Inc.
- D.P. Young, Jr., W.P. Erickson, M.D. Strickland, R.E. Good, and K.J. Sernka. January 2003. Comparison of Avian Responses to UV-Light-Reflective Paint on Wind Turbines: Subcontract Report, July 1999 – December 2000. Available at <http://www.nrel.gov/wind/pdfs/32840.pdf>
- Erickson, W.P., G. D. Johnson, M. D. Strickland, D. P. Young, Jr., K. J. Sernka, and R.E. Good. 2001. Avian Collisions with Wind Turbines: A Summary of Existing Studies and Comparisons to Other Sources of Avian Collision Mortality in the United States. National Wind Coordinating Committee. Available at [http://www.west-inc.com/reports/avian\\_collisions.pdf](http://www.west-inc.com/reports/avian_collisions.pdf).
- Intermountain West Joint Venture. 2005. Coordinated Implementation Plan for Bird Conservation in Central and Western Wyoming. Wyoming Steering Committee. Available at <http://www.iwjjv.org/Images/WYPlan2005.pdf>.
- Johnson, G. D., D. P. Young, Jr., W. P. Erickson, C. E. Derby, M. D. Strickland, and R. E. Good. 2000. Wildlife monitoring studies for the SeaWest windpower project, Carbon County, Wyoming 1995-1999, Final Report. WEST, Inc., 195 pp. Available at [http://www.west-inc.com/reports/fcr\\_final\\_baseline.pdf](http://www.west-inc.com/reports/fcr_final_baseline.pdf).
- Kunz, T.H., E. B. Arnett, W. P. Erickson, A. R. Hoar, G. D. Johnson, R. P. Larkin, M. D. Strickland, R. W. Thresher, and M. D. Tuttle. 2007a. Ecological impacts of wind energy development on bats: questions, research needs, and hypotheses. *Front. Ecol. Environ.* 5(6): 315–324. Available at <http://www.windaction.org/?module=uploads&func=download&fileID=1293>.
- Molvar, E.M., Biodiversity Conservation Alliance. November 2008. Wind Power in Wyoming: Doing it Smart from the Start. Available at <http://www.westernlaw.org/our-work/wildlife-corridors/WindPowerReport.pdf>
- Morrison, M. D. Strickland, and J. M. Szewczak. 2007b. Assessing impacts of wind-energy development on nocturnally active birds and bats: A guidance document. *Journal of Wildlife Management*. 71: 2449-2486. Available at <http://www.wind-watch.org/documents/wp-content/uploads/wild-71-08-45.pdf>.
- National Research Council (NRC). 2007. Environmental Impacts of Wind-Energy Projects. Washington, D.C.: The National Academies Press. Available at <http://www.eswr.com/latest/307/nrcwind.htm>.
- Reynolds, T.D. 2004. Draft Greater sage-grouse lek surveys and lek counts in the Cotterel Mountains, 2003 Results, Draft Summary Report. Rigby, ID: TREC, Inc.

Reynolds, T.D., and C.I. Hinckley. 2005. Greater sage-grouse lek surveys and lek counts on Cotterel Mountain. 2005 Results. Rigby, ID: TREC, Inc.

US Fish and Wildlife Service. 2003. Interim guidelines to avoid and minimize wind turbines. Available at <http://www.fws.gov/habitatconservation/wind.pdf>.

Young, D.P. Jr., W. P. Erickson, R. E. Good, M. D. Strickland, and G. D. Johnson. 2003. Avian and bat mortality associated with the initial phase of the Foote Creek Rim windpower project, Carbon County, Wyoming, November 1998 - June 2002, Final Report. Prepared for Pacificorp, Inc., SeaWest Windpower Inc., and Bureau of Land Management by WEST, Inc., Cheyenne, WY. Available at [http://www.westinc.com/reports/fcr\\_final\\_mortality.pdf](http://www.westinc.com/reports/fcr_final_mortality.pdf).

### **3.2.4 MAPS**

Wyoming Governor's Office  
[www.wyia.org/projects.htm](http://www.wyia.org/projects.htm)

Map of environmental constraints for wind development in Wyoming.

Molvar, E.M., Biodiversity Conservation Alliance. November 2008. Wind Power in Wyoming: Doing it Smart from the Start. Available at <http://www.westernlaw.org/our-work/wildlife-corridors/WindPowerReport.pdf>

Maps the location of sensitive wildlife habitats and landscapes, makes siting recommendations.

## **3.3 ARCHEOLOGICAL CONCERNS**

### **3.3.1 CONTACTS**

Bureau of Land Management Field Offices

Buffalo Field Office  
Phone: 307.684.1100  
Address: 1425 Fort Street, Buffalo, WY 82834  
[www.blm.gov/wy/st/en/field\\_offices/Buffalo.html](http://www.blm.gov/wy/st/en/field_offices/Buffalo.html)

Casper Field Office  
Phone: 307.261.7600  
Address: 2987 Prospector Drive, Casper, WY 82604  
[www.blm.gov/wy/st/en/field\\_offices/Casper.html](http://www.blm.gov/wy/st/en/field_offices/Casper.html)

Cody Field Office  
Phone: 307.578.5900  
Address: 1002 Blackburn Ave, PO Box 518, Cody, WY 82414  
[www.blm.gov/wy/st/en/field\\_offices/Cody.html](http://www.blm.gov/wy/st/en/field_offices/Cody.html)

Kemmerer Field Office

Phone: 307.828.4500

Address: 312 Highway 189 North, Kemmerer, WY 83101

[www.blm.gov/wy/st/en/field\\_offices/Kemmerer.html](http://www.blm.gov/wy/st/en/field_offices/Kemmerer.html)

Lander Field Office

Phone: 307.332.8400

Physical Address: 1335 Main, Lander, WY 82520

Mailing Address: P.O. Box 589, Lander, WY 82520

[www.blm.gov/wy/st/en/field\\_offices/Lander.html](http://www.blm.gov/wy/st/en/field_offices/Lander.html)

Newcastle Field Office

Phone: 307.746.6600

Address: 1101 Washington Boulevard, Newcastle, WY 82701

[www.blm.gov/wy/st/en/field\\_offices/Newcastle.html](http://www.blm.gov/wy/st/en/field_offices/Newcastle.html)

Pinedale Field Office

Phone: 307-367-5300

Physical Address: 1625 West Pine Street, Pinedale, WY 82941

Mailing Address: P.O. Box 768, Pinedale, WY 82941

[www.blm.gov/wy/st/en/field\\_offices/Pinedale.html](http://www.blm.gov/wy/st/en/field_offices/Pinedale.html)

Rawlins Field Office

Phone: 307.328.4200

Physical Address: 1300 North Third, Rawlins, WY 82301

Mailing Address: P.O. Box 2407, Rawlins, WY 82301

[www.blm.gov/wy/st/en/field\\_offices/Rawlins.html](http://www.blm.gov/wy/st/en/field_offices/Rawlins.html)

Rock Springs Field Office

Phone: 307.352.0256

Address: 280 Highway 191 North, Rock Springs, WY 82901

[www.blm.gov/wy/st/en/field\\_offices/Rock\\_Springs.html](http://www.blm.gov/wy/st/en/field_offices/Rock_Springs.html)

Worland Field Office

Phone: 307.347.5100

Physical Address: 101 South 23<sup>rd</sup> Street, Worland, WY 82401

Mailing Address: P.O. Box 119, Worland, WY 82401

[www.blm.gov/wy/st/en/field\\_offices/Worland.html](http://www.blm.gov/wy/st/en/field_offices/Worland.html)

State Archeologist for the Bureau of Land Management

Phone: 307.775.6108

Address: 5353 Yellowstone Road Cheyenne, WY 82009

Email: [Ranel\\_Capron@blm.gov](mailto:Ranel_Capron@blm.gov)

## State Historic Preservation Offices

Cheyenne Office  
Wyoming State Historic Preservation Office  
Phone: 307.777.7697  
Fax: 307.777.6421  
Address: 2301 Central Avenue, Barrett Building, 3rd Floor, Cheyenne, Wyoming 82002  
<http://wyoshpo.state.wy.us/>

Laramie Office  
Wyoming Cultural Records and State Historic Preservation Office  
Phone: 307.766.5323  
Fax: 307.766.4262  
Physical Address: University of Wyoming Anthropology Building, 12<sup>th</sup> & Lewis Streets, Laramie, WY 82071  
Mailing Address: Department 3431, 1000 E. University Avenue, Laramie, Wyoming 82071  
<http://wyoshpo.state.wy.us/>

## 3.4 TRANSMISSION CAPACITIES

### 3.4.1 CONTACTS

Wyoming Infrastructure Authority  
Phone: 307.635.3573  
Fax: 307.635.5336  
Email: [info@wyia.org](mailto:info@wyia.org)  
Address: 200 East 17th Street, Unit B. Cheyenne, WY 82001  
[www.wyia.org/projects.htm](http://www.wyia.org/projects.htm)  
The Wyoming Infrastructure Authority is responsible for all aspects of electric transmission development and operation. A portion of their website is dedicated to transmission projects.

### 3.4.2 PUBLICATIONS

Meah, K., Zhang, Y. and S. Ula. October 2006. Wind Energy Resources in Wyoming and Simulation for Existing Grid Connection. Available at  
<http://ieeexplore.ieee.org/ielx5/4075697/4075698/04076055.pdf?tp>.

## 3.5 NO FLY ZONES

### 3.5.1 CONTACTS

Federal Aviation Administration (FAA) Northwest Mountain Region, Wyoming  
Phone: 307.472.8949  
Address: Casper, WY  
[www.faa.gov/airports\\_airtraffic/airports/construction/airspace\\_analysis](http://www.faa.gov/airports_airtraffic/airports/construction/airspace_analysis)

## **4. ECONOMIC IMPLICATIONS**

### **4.1 ECONOMIC IMPLICATIONS FOR UTILITY SCALE WIND DEVELOPMENT**

#### **4.1.1 GENERAL INFORMATION**

National Renewable Energy Laboratory

Wind Energy Finance Calculator

<http://analysis.nrel.gov/windfinance/default.asp>

Tool designed to evaluate the economics of potential utility-scale wind energy projects.

Designed for users familiar with conducting financial analyses.

Office of State Lands and Investment

State Board of Land Commissioners Meeting Notes

<http://slf-web.state.wy.us/>

The State Board of Land Commissioners reviews wind energy lease agreements proposed for state lands. Their meetings are open to the public; meeting notes and wind energy lease agreements that go before the board can be found online.

Ontario Landowners Guide to Wind Energy Appendix C

Royalty Revenue Calculator

<http://wind-works.org> or

[www.ofa.on.ca/policyissues/issues/Ontario%20Landowners%20Guide%20to%20Wind%20Energy.pdf](http://www.ofa.on.ca/policyissues/issues/Ontario%20Landowners%20Guide%20to%20Wind%20Energy.pdf)

Spreadsheet calculator that estimates annual revenues landowner will receive from a lease and the net present value of the revenue stream over the life of the project.

#### **4.1.2 CONTACTS**

Southeastern Wyoming Resource Conservation and Development Council

Phone: 307.322.2187

Fax: 307.322.4109

Email: [grant.Stumbough@wy.usda.gov](mailto:grant.Stumbough@wy.usda.gov)

Address: 1502 Progress Court Wheatland, WY 82201

[www.wy.nrcs.usda.gov/rcd/southeasternrcd.html](http://www.wy.nrcs.usda.gov/rcd/southeasternrcd.html)

Wyoming Department of Revenue

Phone: 307.777.7961

<http://revenue.state.wy.us/PortalVBVS/DesktopDefault.aspx?tabindex=3&tabid=10>

Can help constituents determine the tax consequences of easements garnered for wind energy development purposes.

### **4.1.3 PUBLICATIONS**

Pedden, M. Analysis: Economic Impacts of Wind Applications in Rural Communities; 6/18/04 - 1/31/05. Prepared for the US Department of Energy. Available at [www.nrel.gov/wind/pubs\\_issues.html#wildlife](http://www.nrel.gov/wind/pubs_issues.html#wildlife) or at <http://www.osti.gov/bridge>

Azeka, M. 2002. "Rural Economic Development Impacts of Wind Power: Foote Creek Rim Projects" (PowerPoint presentation for SeaWest Wind Energy). Available at [www.state.co.us/oemc/events/cwade/2002/presentations/Azeka,%20Mike.pdf](http://www.state.co.us/oemc/events/cwade/2002/presentations/Azeka,%20Mike.pdf).

Tegen S., M. Milligan and M. Goldberg. June 2007. Economic Development Impacts of Wind Power: A Comparative Analysis of Impacts within the Western Governors' Association States. Conference Paper. Available at [www.nrel.gov/wind/pubs\\_issues.html#wildlife](http://www.nrel.gov/wind/pubs_issues.html#wildlife).

Sterzinger, G., F. Beck, and D. Kostiuk. 2003. The effect of wind development on local property values. Washington, DC: Renewable Energy Policy Project, 78 pp. Available online at [www.repp.org/articles/static/1/binaries/wind\\_online\\_final.pdf](http://www.repp.org/articles/static/1/binaries/wind_online_final.pdf).

## **4.2 ECONOMIC ALTERNATIVES TO UTILITY SCALE WIND ENERGY DEVELOPMENT**

### **4.2.1 CONTACTS**

Green River Valley Land Trust (GRVLT)

Phone: 307.367.7007

Fax: 307.367.7207

Email: [info@grvlandtrust.org](mailto:info@grvlandtrust.org)

Physical Address: 131 South Jackson Avenue, Pinedale, WY 82941

Mailing Address: P.O. Box 1580, Pinedale, WY 82941

[www.grvlandtrust.org/](http://www.grvlandtrust.org/)

Jackson Hole Land Trust

Phone: 307.733.4707

Email: [info@jhlandtrust.org](mailto:info@jhlandtrust.org)

Physical Address: 555 East Broadway, Suite 228, Jackson, WY 83001

Mailing Address: P.O. Box 2897, Jackson, WY 83001

[www.jhlandtrust.org/](http://www.jhlandtrust.org/)

Natural Resources Conservation Service, Wyoming (NRCS, USDA Program)

Phone: 307-233-6750

Fax: 307-233-6753

Physical Address: 100 East B Street, 3rd Floor, Casper, WY 82602

Mailing Address: P.O. Box 33124, Casper, WY 82602

[www.wy.nrcs.usda.gov/](http://www.wy.nrcs.usda.gov/)

The Conservation Fund

Phone: 307.733.2360

Fax: 307.733.2365

Email:

Physical Address: 145 E. Snow King Avenue Jackson, WY 83001

Mailing Address: P.O. Box 4441 Jackson, WY 83001

[www.conservationfund.org/](http://www.conservationfund.org/)

The Wyoming Stock Growers Agricultural Land Trust (WSGALT)

Phone: 307.772.8751

Fax: 307. 634.1210

Email: [info@wsgalt.org](mailto:info@wsgalt.org)

Physical Address: 113 East 20<sup>th</sup> Street, Cheyenne, WY 82003

Mailing Address: P.O. Box 206, Cheyenne, WY 82003

[www.wsgalt.org/index.html](http://www.wsgalt.org/index.html)

Wind River Program

Jackson Hole Land Trust

Phone: 307.455.3766

Physical Address: 116 East Ramshorn Street, 1C, Dubois, WY 82513

Mailing Address: P.O. Box 1779, Dubois, WY 82513

Wyoming Rural Development Office (Satellite location)

Phone: 307.233.6700

Email: [jon.crabtree@wy.usda.gov](mailto:jon.crabtree@wy.usda.gov)

Address: 100 East B ST., Room 1005, Casper, WY 82601

USDA Valued-Added Producer Grant: <http://www.rurdev.usda.gov/rbs/coops/vadg.htm>

USDA Rural Energy For America Program/Feasibility Grant:

[www.rurdev.usda.gov/rbs/busp/REAPFEAS.htm](http://www.rurdev.usda.gov/rbs/busp/REAPFEAS.htm)

Wyoming Wildlife and Natural Resource Trust

Phone: 307.856.4665

Address: 500 East Fremont, Riverton, WY 82501

[wwnrt.state.wy.us/index.htm](http://wwnrt.state.wy.us/index.htm)

#### **4.2.2 PUBLICATIONS**

Agopian, N. and M. Harm Benson January 2007. Wyoming Open Spaces, William D. Ruckelshaus Institute of Environment and Natural Resources. "Conservation Easements: Wyoming Update. Available at <http://ces.uwyo.edu/PUBS/B1177.pdf>

Harm Benson M. November 2004. Wyoming Open Spaces, William D. Ruckelshaus Institute of Environment and Natural Resources. Perpetuity – What Does It Mean for Conservation Easements and the Wyoming Constitution. Available at <http://www.uwyo.edu/openspaces/docs/Perpetuities.pdf>

Iverson, J. and A Perrigo. December 2002. Wyoming Open Spaces, William D. Ruckelshaus Institute of Environment and Natural Resources. Conservation Easements: An Introductory Review for Wyoming. Available at <http://www.uwyo.edu/openspaces/docs/conservation-easements.pdf>

Iverson, J. and A. Perrigo. December 2002. Wyoming Open Spaces, William D. Ruckelshaus Institute of Environment and Natural Resources. Public Funding Mechanisms for Open Space Protection: An Introduction for Wyoming, Available at <http://www.uwyo.edu/openspaces/docs/public-funding.pdf>.

## **5. LIFESTYLE IMPLICATIONS**

### **5.1 GENERAL INFORMATION**

Industrial Wind Action Group  
[www.windaction.org](http://www.windaction.org)

The Industrial Wind Action Group is dedicated to providing information on industrial wind energy to enable communities and government officials to make informed decisions. Includes personal stories from people with industrial wind energy developments close to their homes.

### **5.2 CONTACTS**

Southeastern Wyoming Resource Conservation and Development Council  
Phone: 307.322.2187  
Fax: 307.322.4109  
Email: [grant.Stumbough@wy.usda.gov](mailto:grant.Stumbough@wy.usda.gov)  
Address: 1502 Progress Court Wheatland, WY 82201  
[www.wy.nrcs.usda.gov/rcd/southeasternrcd.html](http://www.wy.nrcs.usda.gov/rcd/southeasternrcd.html)

Wyoming Stock Growers Association  
Phone: 307.638.3942  
Fax: 307.634.1210  
Email: [info@wysga.org](mailto:info@wysga.org)  
Physical Address: 113 East 20<sup>th</sup> Street, Cheyenne, WY 82003  
Mailing Address: P.O. Box 206, Cheyenne, WY 82003  
[www.wysga.org](http://www.wysga.org)

### **5.3 PUBLICATIONS**

Gipe, P.B. 2005. Design as if people matter: Aesthetic guidelines for the wind industry. Tehachapi, CA: Paul Gipe & Assoc. Available online [www.ilr.tu-berlin.de/WKA/design.html](http://www.ilr.tu-berlin.de/WKA/design.html).

Van den Berg, F., E. Pedersen, J. Bouma, and R. Bakker. 2008. Project WINDFARMperception: Visual and acoustic impact of wind turbine farms on residents, Final report. European Union FP6-2005-Science-and-Society-20, Specific Support Action, Project no. 044628, 87 pp. Available at [www.wind-watch.org/documents/wp-content/uploads/wfp-final-1.pdf](http://www.wind-watch.org/documents/wp-content/uploads/wfp-final-1.pdf).

## **6. WIND ENERGY LEASE AGREEMENTS**

### **6.1 LEGAL CONTACTS**

Wyoming State Bar Association

Phone: 307.632.9061

Fax: 307.632.3737

Physical Address: 4124 Laramie Street, Cheyenne, WY 82003

Mailing Address: PO Box 109, Cheyenne, WY 82003

[www.wyomingbar.org](http://www.wyomingbar.org)

For a detailed list of Wyoming attorneys practicing renewable energy law, contact the State Bar Association.

### **6.2 WIND ASSOCIATIONS**

Antelope Gap Wind Energy Association

John Watson, Chairperson

Phone: 307.836.2647

Email: [agwea@alive.com](mailto:agwea@alive.com)

Bordeaux Wind Energy Association

Larry Bacon, Chairperson

Phone: 307.331.8432

Email: [ldbacon89@cloudblue.net](mailto:ldbacon89@cloudblue.net)

Chugwater Wind Association

Dan Kennedy, Chairperson

Email: [k2enr@netcommander.com](mailto:k2enr@netcommander.com)

Dwyer Wind Energy Association

Dennis Miller, Chairperson

Phone: 307.331.8690

Glendo Wind Energy Association

Larry Cundall, Chairperson

Email: [cundallranch@starband.net](mailto:cundallranch@starband.net)

Orin Junction Wind Energy Association  
Jonnie Pickinpaugh, Chairperson  
Phone: 307.358.3564

Rocky Mountain Farmers Union (RMFU)  
Phone: 303.752.5800  
Fax: 303.752.5810  
Address: 5655 South Yosemite Street, Suite 4000, Greenwood Village, Colorado 80111  
[www.rmfu.org](http://www.rmfu.org)

South Chugwater Wind Energy Association  
Teresa Miller, Chairperson  
Phone: 307.421.5710  
Email: [Teresa.miller@airgas.com](mailto:Teresa.miller@airgas.com)

Slater Wind Energy Association  
[slaterwind@yahoo.com](mailto:slaterwind@yahoo.com)

Walker Creek Wind Energy Association  
Terry Henderson, Chairperson  
Phone: 307.351.3234 (cell)  
Email: [tmhenderson@hughes.net](mailto:tmhenderson@hughes.net)

Windy Ranches, LLC  
Jim Rogers, Chairperson  
Phone: 307.745.8729  
Email: [BCAR1080@msn.com](mailto:BCAR1080@msn.com); [jgr1080@carbonpower.net](mailto:jgr1080@carbonpower.net)

### **6.3 GENERAL INFORMATION**

Office of State Lands and Investment  
State Board of Land Commissioners Meeting Notes  
<http://slf-web.state.wy.us/>

The State Board of Land Commissioners reviews wind energy lease agreements proposed for state lands. Their meetings are open to the public; meeting notes and wind energy lease agreements that go before the board can be found online.

### **6.4 PUBLICATIONS**

Aakre, D. and R. Haugen. February 2009. Wind Turbine Lease Considerations for Landowners. North Dakota State University Extension Service. Available at [www.ag.ndsu.edu/pubs/agecon/market/ec1394.pdf](http://www.ag.ndsu.edu/pubs/agecon/market/ec1394.pdf).

Global Energy Concepts. October 2005. Lease Agreements. Prepared for the New York State Energy Research & Development Authority. Available at [www.powernaturally.org](http://www.powernaturally.org). Accessed 14 March 2009.

- Harsh, S. 2008. Department of Agricultural, Food and Resource Economics, Michigan State University. Landowner Guidelines for Evaluating Wind Energy Production Contracts. Available at [http://web1.msue.msu.edu/wind/WindLease-Easement\\_WorkSheet-V5.pdf](http://web1.msue.msu.edu/wind/WindLease-Easement_WorkSheet-V5.pdf).
- McEowen, R. January 2009. Iowa State University Center for Agricultural Law and Taxation. Wind Energy Production: Legal Issues and Related Liability Concerns for Landowners in Iowa and Across the Nation. Available at [www.calt.iastate.edu/briefs/CALTLegalBrief-WindEnergyProduction-LegalIssues.pdf](http://www.calt.iastate.edu/briefs/CALTLegalBrief-WindEnergyProduction-LegalIssues.pdf).
- Nardi, R., Esq. Willeke & Daniels. September 2005. Wind Energy Easement and Lease Agreements. Prepared for Windustry. Available at [www.windustry.org/wind-energy-easement-and-lease-agreement-guidelines](http://www.windustry.org/wind-energy-easement-and-lease-agreement-guidelines).
- Noling, B. 2003. Guidelines for Landowners in Negotiating Wind Energy Lease Agreements. [www.swkroa.com/formspublications.html](http://www.swkroa.com/formspublications.html).
- Shoemaker, J.A. and C. Anderson Brekken. August 2006. Community Wind: A Review of Select State and Federal Policy Incentives. Available at [www.flaginc.org/topics/pubs/index.php#WindPropAgmnt](http://www.flaginc.org/topics/pubs/index.php#WindPropAgmnt).
- Shoemaker, J. June 2007. Negotiating Wind Energy Property Agreements. Available at [www.flaginc.org/topics/pubs/index.php#WindPropAgmnt](http://www.flaginc.org/topics/pubs/index.php#WindPropAgmnt).
- Stoel Rives Renewable Energy Team. July 2008. Stoel Rives, LLP. The Law of Wind: A Guide to Business and Legal Issues. Available at [www.stoel.com/webfiles/LawOfWind.pdf](http://www.stoel.com/webfiles/LawOfWind.pdf)
- Windustry's Wind Easement Working Group. September 2005. Wind Energy Easements and Leases: Compensation Packages. Available at [www.windustry.org/compensation-packages-for-wind-energy-land-agreements](http://www.windustry.org/compensation-packages-for-wind-energy-land-agreements).
- Zalcman, F. October 2005. Harvesting the Wind: A Legal Guidebook for Landowners. Pace Law School Energy Project. Prepared for the New York State Energy Research & Development Authority. Available at [www.pownaturally.org](http://www.pownaturally.org).

## **7. OTHER WIND RESOURCES**

### **7.1 PLANNING AND ZONING**

#### **7.1.1 CONTACTS**

Albany County Planning and Zoning Department  
Phone: 307.721.2568  
Address: 1002 South Third Street Laramie, WY 82070  
[www.co.albany.wy.us/Departments/Planning/tabid/59/Default.aspx](http://www.co.albany.wy.us/Departments/Planning/tabid/59/Default.aspx)

Campbell County Planning Department

Phone: 307.6682.1970

Address: 500 S Gillette Ave., Ste 500 Gillette, WY 82716

<http://ccg.co.campbell.wy.us/departments/index.html>

Carbon County Planning and Development Department

Phone: 307.328.2651

Fax: 307.328.2735

Address: P.O. Box 487, Carbon Building, Suite 304, Rawlins, WY 82301

[www.carbonwy.com/planninganddevelopment.html](http://www.carbonwy.com/planninganddevelopment.html)

Crook County Growth & Development Office

Phone: 307.283.4548

Fax: 307.283.4549

Address: P.O. Box 848 Sundance, WY 82729

[www.crookcounty.wy.gov/growth&dev.html](http://www.crookcounty.wy.gov/growth&dev.html)

Fremont County Planning and Rural Addressing

Phone: 307.332.1077 OR 307.857.3987

Fax: 307.332.1132

Address: Room 360 Courthouse, 450 N. 2<sup>nd</sup> Street, Lander, WY 82520

Email: [fremontcoplanning@hotmail.com](mailto:fremontcoplanning@hotmail.com)

[fremontcountywy.org/planning.htm](http://fremontcountywy.org/planning.htm)

Hot Springs County Planner's Office

Phone: 307.864.2961

Address: 415 Arapahoe St. Thermopolis, WY 82442

Email: [hscplanner@hscounty.com](mailto:hscplanner@hscounty.com)

[www.hscounty.com/Departments/Planner/Default.aspx](http://www.hscounty.com/Departments/Planner/Default.aspx)

Johnson County Planning Department

Phone: 307.684.1907 OR 307.684.2392

Address: 26 N. DeSmet Street, Ste. A Buffalo, WY

<http://www.johnsoncountywyoming.org/planner.html>

Laramie County Planning and Development Office

Phone: 307.633.4304

Fax: 307.633.4519

Email: [planning@laramiecounty.com](mailto:planning@laramiecounty.com)

Address: 309 W. 20<sup>th</sup> St. Cheyenne, WY 82001

[www.laramiecounty.com/\\_departments/\\_planning/index.asp](http://www.laramiecounty.com/_departments/_planning/index.asp)

Lincoln County Office of Planning and Development

Phone: 307.877.9056 (Kemmerer)

307.885.3106 (Afton)

Address: 520 Topaz Suite 109 Kemmerer, WY 83101

421 Jefferson Street Suite 701, 61 E. 5<sup>th</sup> Ave. Afton, WY 83110

Natrona County Development

Phone: 307.235.9435

Address: 120 West First Street, Suite 200 Casper, WY

[www.natrona.net/?load=Development/DevelopmentHome](http://www.natrona.net/?load=Development/DevelopmentHome)

Park County Planning and Zoning

Phone: 307.527.8540 (Cody)

307.754.8540 (Powell)

Address: 1002 Sheridan Avenue Cody, WY 82414

[www.parkcounty.us/planningandzoning/planandzone.htm](http://www.parkcounty.us/planningandzoning/planandzone.htm)

Platte County Planning & Zoning Office

Phone: 307.322.1341

Email: [mjohnson@plattecountywoming.com](mailto:mjohnson@plattecountywoming.com)

Address: 718 9<sup>th</sup> St. Wheatland, WY 82201

<http://www.plattecountyywoming.com/PlanningandZoning/Default.aspx>

Sheridan County Public Works Department

Phone: 307.674.2920

Address: 224 South Main, Suite B-1 Sheridan, WY82801

<http://www.sheridancounty.com/info/pw-plan/overview.php>

Sublette County Planning and Zoning Office

Phone: 307.367.4375

Mailing Address: P.O. Box 506 Pinedale, WY 82941

Physical Address: 21 South Tyler Avenue Pinedale, WY 82941

<http://www.sublettewyo.com/pz/index.html>

Sweetwater County Planning and Zoning Department

Phone: 307.872.3914 OR 307.922.5430

Fax: 307.872.6469

Address: 80 West Flaming Gorge Way

[www.sweet.wy.us/pz/index.html](http://www.sweet.wy.us/pz/index.html)

**Teton County Planning and Development**

Phone: 307.733.3959

Fax: 307.733.4451

Physical Address: Teton County Administration Building, 200 South Willow Street Jackson, WY 83001

Mailing Address: P.O. Box 1727 Jackson, WY 83001

Email: [tetonplan@tetonwyo.org](mailto:tetonplan@tetonwyo.org)

[www.tetonwyo.org/plan/](http://www.tetonwyo.org/plan/)

**Uinta County Planning & Development Department**

Phone: 307.783.0318

Fax: 307.783.0318 (Evanston)

[www.uintacounty.com/index.asp?nid=46](http://www.uintacounty.com/index.asp?nid=46)

**Washakie County Planner**

Phone: 307.347.6778

Address: 1001 Big Horn Avenue Worland, WY 82401

[www.washakiecounty.net/plan.htm](http://www.washakiecounty.net/plan.htm)

## **7.1.2 REGULATIONS**

**Natrona County Wind Energy Siting Regulations**

[www.natrona.net/development/documents/WECS%20Emergency%20Regulations.pdf](http://www.natrona.net/development/documents/WECS%20Emergency%20Regulations.pdf)

**Park County Wind Energy Siting Regulations**

[www.parkcounty.us/planningandzoning/Nov08DevelopmentRegs.pdf](http://www.parkcounty.us/planningandzoning/Nov08DevelopmentRegs.pdf)

**Platte County Wind Energy Siting Regulations**

[www.plattecountywyoming.com/forms/windenergyregs.pdf](http://www.plattecountywyoming.com/forms/windenergyregs.pdf)

**Platte County Comprehensive Land Use Plan**

[www.plattecountywyoming.com/forms/complanduseplan.pdf](http://www.plattecountywyoming.com/forms/complanduseplan.pdf)

**Sweetwater County Wind Energy Siting Regulations**

[www.sweet.wy.us/pz/Language\\_Amendments/Adopted\\_Wind\\_Farm\\_Regulations.pdf](http://www.sweet.wy.us/pz/Language_Amendments/Adopted_Wind_Farm_Regulations.pdf)

## **7.2 TRADE ASSOCIATIONS AND WORKING GROUPS**

### **7.2.1 CONTACTS**

**Interwest Energy Alliance**

Address: P.O. Box 272, Conifer, CO, 80433

Phone: 303.679.9331

[www.interwest.org](http://www.interwest.org)

The Interwest Energy Alliance is the western regional partner organization of the American Wind Energy Association and represents the leading companies in the wind energy industry in the interior western United States. The Interwest Energy Alliance brings together a unique mix of industry and non-governmental advocacy groups, which helps facilitate a consensus-based approach to project development throughout the West.

Wyoming Wind Power Producers Coalition (WPPC)

Address: 2515 Warren Avenue Ste. 450 Cheyenne, WY 82001

The Wyoming Power Producers Coalition (WPPC) is Wyoming's new wind Trade Association. Their membership includes about 25% of those 30-40 smaller developers.

Wyoming Wind Working Group

Phone: 307.358.2007

Funded through U.S. Department of Energy and administered through the State Energy Office, the Renewable Energy Coalition of Wyoming's Wind Working Group brings together public stakeholders, developers, utilities, advocacy groups and government agencies.

## **APPENDIX B**

### **DEFINITION OF TERMS**

*The following definitions come from the wind energy lease agreement template provided by the Wyoming Office of State Lands & Investments. See Appendix C to view the template.*

**Assignee** – Any person or entity to whom Lessee has sold, conveyed, leased, assigned, licensed, mortgaged, encumbered or transferred, conditionally or unconditionally, this Lease Agreement, in whole or part, or any of the Lessee’s leasehold or other right, title or interest in the Property or any portion thereof, or Lessee Improvements or any portion thereof.

**Bond** – At Lessee’s option, either a letter of credit (issued in a form and by a financial institution reasonably acceptable to Owner), a cash deposit, a surety bond (from an issuer with a Best’s Rating of not less than A), or other security reasonably acceptable to owner.

**Commencement of Construction** - The first date on which dirt is excavated for installation and construction of a foundation for any Wind Turbine Generator (WTG) on the Property.

**Existing Uses** – Any rights to the surface or sub-surface covering some or all of the Property and existing prior to the Effective Date of [the] Lease Agreement, including but not limited to those granted by all existing mineral leases, grazing leases, special use leases, temporary use permits, easements or other rights granted by Owner or Owner’s predecessor in title.

**Gross Revenues** – During the lease term, all amounts actually received by Lessee from the sale of electricity generated on the Property, including the sale of credits for greenhouse gas reduction or the generation of renewable or alternative energy on the Property. If Lessee sells the production, energy, electricity or capacity from the Windpower Facilities to a person or entity affiliated with or in any way related to Lessee, then “gross revenues” shall mean all consideration paid for said production, energy, electricity or capacity, regardless of time or place of receipt, under the first contract which is an arms’ length bona fide transaction. “Gross Revenues” shall not include any proceeds received from the sale, lease, financing, or other disposition of any Windpower Facilities; any gross revenues generated from any Wind power Facilities not located on the Property; any production tax credits; investment tax credits, or other tax credits or benefits; or any proceeds from the sale, lease, financing or other disposition of any interest in this Lease Agreement or any other Lessee Improvements (or any interest therein) or any rental or lump sum payment received by Lessee in exchange for Lessee assigning, subleasing, mortgaging, or otherwise transferring all or any interest of Lessee in this Lease Agreement.

**Name Plate Capacity** – The megawatt capacity of any WTG installed (or to be installed), as determined by the manufacturer.

**Operations Date** – When Windpower Facilities are installed on the Property, in whole or in part, and begin the delivery of electricity to the utility electric grid.

## **APPENDIX C**

### **WIND ENERGY LEASE AGREEMENT TEMPLATE**

*The following template for a wind energy lease agreement was provided by the Wyoming Office of State Lands & Investments and is subject to change. Please check the Wyoming Office of State Lands and Investments' Web site for the most current version of the agreement template, <http://slf-web.state.wy.us/estate/adobe/windtemplate.pdf>.*

### **WIND ENERGY LEASE AGREEMENT**

This Wind Energy Lease Agreement (Lease Agreement) is effective ("Effective Date") as of the first day of the month in which the Board of Land Commissioners approved this Lease between the STATE OF WYOMING, BOARD OF LAND COMMISSIONERS (Owner), and \* (Lessee). In consideration of the payments and the performance by the parties of each of the provisions set forth herein, the parties agree as follows:

#### Article 1

#### DEFINITIONS

- 1.1 Assignee. Any person or entity to whom Lessee has sold, conveyed, leased, assigned, licensed, mortgaged, encumbered or transferred, conditionally or unconditionally, this Lease Agreement, in whole or part, or any of Lessee's leasehold or other right, title or interest in the Property or any portion thereof, or Lessee Improvements or any portion thereof.
- 1.2 Bond. At Lessee's option, either a letter of credit (issued in a form and by a financial institution reasonably acceptable to Owner), a cash deposit, a surety bond (from an issuer with a Best's Rating of not less than A), or other security reasonably acceptable to Owner.
- 1.3 Commencement of Construction. The first date on which dirt is excavated for installation and construction of a foundation for any Wind Turbine Generator (WTG) on the Property.
- 1.4 Director. The Director of the Office of State Lands and Investments.
- 1.5 Environmental Laws. The *Resource Conservation and Recovery Act* ("RCRA"), 42 U.S.C. 6901 *et seq.*, and the *Comprehensive Environmental Response, Compensation and Liability Act* ("CERCLA"), 42 U.S.C. § 9601 *et seq.* (as the same may, from time to time, be hereafter amended, replaced, re-codified, modified or substituted) and any other federal, state or local statute, law,

ordinance, code, rule, regulation, order or decree regulating, relating to, or imposing liability or standards of conduct, concerning any Hazardous Materials.

- 1.6 Existing Uses. Any rights to the surface or sub-surface covering some or all of the Property and existing prior to the Effective Date of this Lease Agreement, including but not limited to those granted by all existing mineral leases, grazing leases, special use leases, temporary use permits, easements or other rights granted by Owner or Owner's predecessor in title.
- 1.7 Force Majeure. Fire, earthquake, flood, or other casualty or accident; war, civil strife or other violence; any law, order, proclamation, regulation, ordinance, action, demand or requirement of any governmental agency or utility; or any other act or condition beyond the reasonable control of a party hereto.
- 1.8 Gross Revenues. During the lease term, all amounts actually received by Lessee from the sale of electricity generated on the Property, including the sale of credits for greenhouse gas reduction or the generation of renewable or alternative energy on the Property. If Lessee sells the production, energy, electricity or capacity from the Windpower Facilities to a person or entity affiliated with or in any way related to Lessee, then "Gross Revenues" shall mean all consideration paid for said production, energy, electricity or capacity, regardless of time or place of receipt, under the first contract which is an arms' length bona fide transaction. "Gross Revenues" shall not include any proceeds received from the sale, lease, financing, or other disposition of any Windpower Facilities; any gross revenues generated from any Windpower Facilities not located on the Property; any production tax credits, investment tax credits, or other tax credits or benefits; or any proceeds from the sale, lease, financing or other disposition of any interest in this Lease Agreement or any other Lessee Improvements (or any interest therein) or any rental or lump sum payment received by Lessee in exchange for Lessee assigning, subleasing, mortgaging, or otherwise transferring all or any interest of Lessee in this Lease Agreement.
- 1.9 Hazardous Materials. Asbestos containing materials, petroleum, explosives, toxic materials, or substances regulated as hazardous wastes, hazardous materials, hazardous substances, or toxic substances under any federal, state, or local law or regulation.
- 1.10 Initial Payments. The payments described in Paragraph 5.2.
- 1.11 Installation Fees. The payments described in Paragraph 5.3.

- 1.12 Leasehold Mortgage. Any mortgage, deed of trust or other security interest in this Lease Agreement, in any Sublease, or in any Windpower Facilities located on the Property.
- 1.13 Leasehold Mortgagee. Any person who is the beneficiary of any Leasehold Mortgage.
- 1.14 Lender Assignee. Any lender, creditor, or financing party who is an Assignee.
- 1.15 Lessee Improvements. Collectively, Windpower Facilities and Transmission Facilities.
- 1.16 Meteorological Towers. Meteorological towers and all other wind measurement equipment including wind anemometers, wind vanes, guy-wired towers and loggers.
- 1.17 Minerals and Mineral Resources. Coal, oil, gas, uranium, or other minerals of any kind, including without limitation aggregate, gravel, and precious stones (including diamonds and jade).
- 1.18 Monetary Default. Failure to pay, when due, any Rent, real property taxes, insurance premiums on insurance coverage required under Paragraph 7.1, interest due, or other monetary obligation of Lessee under this Lease Agreement.
- 1.19 Name Plate Capacity. The megawatt capacity of any WTG installed (or to be installed), as determined by the manufacturer.
- 1.20 Non-Curable Default. Those Non-Monetary Defaults which by the nature of such defaults are not reasonably susceptible of being cured or performed by a Leasehold Mortgagee, excluding those events of default that are not reasonably susceptible to cure only because the time for cure has passed under the terms of this Lease Agreement following acquisition of Lessee's leasehold estate by the Leasehold Mortgagee or its assignee or designee.
- 1.21 Non-Monetary Default. Any event of Default other than a Monetary Default.
- 1.22 Operations Date. When Windpower Facilities are installed on the Property, in whole or in part, and begin the delivery of electricity to the utility electric grid.
- 1.23 Operations Fees. The payments described in Paragraph 5.4.

- 1.24 Property. Owner's property as described in Paragraph 2.1.
- 1.25 Removal Date. The date on which any Windpower Facilities installed on the Property are completely removed from the Property in accordance with Article 11.
- 1.26 Removal Period. A period of 12 months following the later of (i) the expiration or termination of this agreement or (ii) the receipt of any necessary approvals for the removal of Lessee Improvement. In the event this Lease Agreement is terminated as a result of an event of default by Lessee under Paragraph 10.1 or Lessee's termination rights provided in Paragraph 13.6 the Removal Period shall be a period of 9 months following the later of (i) the expiration or termination of this agreement or (ii) the receipt of any necessary approvals for the removal of Lessee Improvement.
- 1.27 Rents. Collectively Initial Payments, Installation Fees, and Operating Fees (subject to the minimum fee described in Paragraph 5.5) as provided for in this Lease Agreement.
- 1.28 Repowering. Any expansion of or change in a Windpower Facility which results in a change in the generating capacity.
- 1.29 Sublessee. Any person or entity with whom Lessee has entered into a sublease for all or a portion of the Property.
- 1.30 Transmission Facilities. Substations, electric transmission lines (including towers, wires, and cables), or interconnection and switching facilities from which Lessee or others that generate energy may interconnect to a utility transmission system or the transmission system of another purchaser of electrical energy.
- 1.31 Wind Energy Development. Converting wind energy into electrical energy, and collecting and transmitting the electrical energy so converted, together with any and all activities directly related thereto including the following activities and the following phases:
- (a) *Initial phase* - Determining the feasibility of wind energy conversion and other power generation on the Property by (i) installing, operating, maintaining, repairing and removing Meteorological Towers and wind measurement equipment necessary to study wind speed, wind direction and other meteorological data; and (ii) undertaking geotechnical

reviews, environmental assessments, surveying, title examination, site engineering, soil sampling and other activities for determining the suitability of the Property for a Wind Energy Project.

- (b) *Construction phase* - Constructing, installing, replacing, relocating and removing from time to time, and maintaining Windpower Facilities on the Property, including the right to maintain and use a line or lines of towers, with such wires and cables as from time to time are suspended therefrom, and/or underground wires and cables, for the transmission of electrical energy and/or for communication purposes, and all necessary and proper foundations, footings, crossarms and other appliances and fixtures for use in connection with said towers, wires and cables on, along and in the Property in connection with Windpower Facilities, whether located on the Property, on adjacent property or elsewhere.
- (c) *Operation phase* - Capturing and converting all of the wind resources of the Property including the right to use and operate Windpower Facilities on the property and permitting the rotors of the WTGs located on adjacent properties to overhang the Property, as long as, the WTG spacing of any rotors overhanging the property is supported with scientific data and the Lessee has maximized the number and spacing of wind turbines located on the Property.
- (d) Undertaking any other activities, whether accomplished by Lessee or a third party authorized by Lessee to act on its behalf, that Lessee reasonably determines are necessary, useful or appropriate to accomplish any of the foregoing phases.

1.32 Wind Energy Project/Project. Any and all Lessee Improvements (i.e. all WTGs, Transmission Facilities, structures, equipment, machinery, wire, conduit, fiber, cable, poles, materials and property of every kind and character constructed, installed and/or placed on, above or below the Property by or on behalf of Lessee) that are constructed, developed or operated on the Property or on other property as an integrated system to generate, via wind, and deliver electrical power.

1.33 Windpower Facilities. Wind turbines, overhead and underground electrical distribution and communications lines, electric transformers, energy storage facilities, telecommunications equipment, power generation facilities to be operated in conjunction with large wind turbine installations, roads, meteorological towers and wind measurement equipment, control buildings, maintenance yards, and related facilities and equipment that are necessary for Wind Energy Development on the Property.

1.34 WTG. Any wind turbine generator or wind machine designed for the generation of electrical power from wind power, including without limitation, the associated

towers, blades, nacelles, support structures, guy wires, braces and directly related equipment.

## Article 2

### PROPERTY

2.1 Description. For good and valuable consideration, the receipt of which is hereby Acknowledged, Owner hereby leases to Lessee, and Lessee leases from Owner on the terms and conditions set forth below, the real property (the Property) of Owner located in the County of \_\_\_\_\_, State of Wyoming. The Property consists of approximately \_\_\_\_\_ acres of land and is described as:

\* of Section\*, Township \*, Range \*, 6<sup>th</sup> P.M., \* County, Wyoming

The Property is graphically depicted in the map attached hereto as Exhibit 1.

2.2 Disclaimer of Warranties. Lessee acknowledges that **OWNER HAS MADE NO EXPRESS WARRANTIES WITH REGARD TO THE PROPERTY and TO THE MAXIMUM EXTENT PERMITTED BY LAW, LESSEE WAIVES THE BENEFIT OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF HABITABILITY, OR FITNESS (OR SUITABILITY) FOR LESSEE'S PARTICULAR PURPOSE. BY EXECUTING THIS LEASE AGREEMENT AND OTHERWISE OCCUPYING THE PROPERTY, LESSEE SHALL BE DEEMED TO HAVE ACCEPTED THE SAME IN ITS "AS IS" CONDITION AS SUITABLE FOR THE PURPOSE HEREIN INTENDED.**

## Article 3

### USE AND OCCUPANCY OF PROPERTY

3.1 Uses. The Property leased under this Lease Agreement is leased to Lessee for Wind Energy Development on the Property and shall be used by Lessee only for those purposes. Lessee shall have the exclusive right to use the Property for Wind Energy Development as defined in Paragraph 1.31. Subject to Paragraph 8.1, nothing herein shall obligate the Lessee to construct, install or operate any Transmission Facilities or Windpower Facilities on the property.

3.2 Access License. Owner hereby grants to Lessee permission, for a term consistent with the lease term, to utilize the Property for ingress to and egress from Windpower Facilities and Transmission Facilities within the Project by means of roads and lanes already existing on the Property, or otherwise by such route or routes as Lessee may construct from time to time. This access license shall run with the Property and shall inure to the benefit of and be binding upon Owner and Lessee and their respective transferees, successors, and assigns, and all persons claiming under them for the duration of this Lease Agreement. This access license shall automatically terminate upon the expiration or termination of this Lease Agreement.

3.3 Transmission Easement. In the event Lessee wishes to establish one or more Transmission Facilities on the Property, Lessee shall apply, to Owner, for an easement pursuant to Chapter 3 of the Rules of the Board of Land Commissioners. Lessee shall be required to follow all of Owner's applicable rules and regulations in force at the time Lessee applies for said Easement. The term of any transmission easement, if and when obtained, shall be the same as the Lease Term unless sooner terminated by the Lessee.

3.4 Easement Upon Termination. In the event of termination of this Lease Agreement pursuant to Article 10 of this Lease Agreement, Lessee may apply for any new easements pursuant to Chapter 3 of the Rules of the Board of Land Commissioners.

3.5 Repair and Maintenance. Owner shall not be required to make any repairs to the Property or Lessee Improvements located on the Property during the Lease Term.

3.6 Installation of Improvements. Other than the activities permitted in this Article 3 of this Lease Agreement, Lessee shall not cause any improvements to be installed on the Property without first obtaining the written consent of Owner. Lessee shall submit any application for Owner's consent to additional improvements on the Property in accordance with all applicable state statutes, rules, and regulations.

3.7 Interference with Existing Uses. Lessee's use of the Property for Wind Energy Development, including, without limitation, its installation and operation of Windpower Facilities, shall not unreasonably disturb any Existing Uses of the Property.

3.8 Post-Construction Reclamation. Upon the completion of the construction of the Lessee Improvements, all Property disturbed by Lessee, its agents, contractors, and/or employees, and not required for continuing operations of the Windpower Facilities, shall be restored to a condition and forage density reasonably similar to its original condition and forage density. Reclamation shall include, as reasonably required, leveling, terracing, mulching and other reasonably necessary steps to prevent soil erosion, to ensure the establishment of suitable grasses and forbs, and to control noxious weeds and pests. The post-construction reclamation

requirements under this Paragraph are separate and apart from the requirements found in Article 11 below.

#### **Article 4**

##### **TERM**

4.1. Term. This Lease Agreement shall be for a term commencing on the Effective Date and continuing until the \_\_\_\_\_ (\_\_\_\_th) anniversary of the Effective Date (the "Lease Term"). At the conclusion of the Lease Term, Lessee and Owner may renegotiate this Lease Agreement provided the total term of the lease does not exceed seventy-five (75) years and that Lessee complies with Chapter 5 of the Rules of the Board of Land Commissioners in effect at the time of renegotiation. In such event, Owner and Lessee shall enter into a new wind energy lease agreement evidencing the additional lease term. Any new wind energy lease agreement shall contain the terms and conditions (including the total Rents to be paid under such new lease term) agreed to by Owner and Lessee.

4.2 Termination for Failure to Develop. Owner may terminate this Lease Agreement or any portion of this Lease Agreement without being deemed in default and without further liability to Lessee if:

(a) Lessee shall fail to commence construction of the Windpower Facilities within four (4) years of the Effective Date.

(b) Upon Owner's receipt of the WTG locations as required by Paragraph 13.21, Owner may remove any quarter section (or portion thereof) of the Property from this Lease Agreement if that quarter section does not have a WTG located within that quarter section. Any Access License or other right granted by this Lease on any removed portion of the Property shall terminate and Lessee may apply to Owner for an easement, lease, or permit pursuant to Chapter 3, Chapter 5, and Chapter 14 of the Rules of the Board of Land Commissioners.

(c) Upon notification by the Owner to the Lessee that a portion of the Property is to be removed from this Lease as set forth in 4.2(b), the Lessee shall have a 30 day period in which to exercise an option to keep any such portion within this Lease, provided that Lessee pays annually in advance, an annual fee of \$\* per acre, on the portion not to be removed from this Lease. The fee due under this provision shall be adjusted for inflation as described in Paragraph 5.4(b). Any annual fee due under this provision shall begin at the Operations Date and continue throughout the remaining term of this Lease, or until such time as a WTG is placed on the portion and begins delivering electricity to the utility electric grid. This provision shall not be used to extend the commencement of construction deadline set forth in 4.2(a).

4.3 New Sublessee Agreement. Any Sublessee shall have the right to enter a new wind energy lease agreement evidencing such additional lease term, on all or part of the Property, as provided in this Article, if such Sublessee's right to enter into such new wind energy lease agreement is provided for in a sublease that has specifically been approved in advance by Owner.

4.4 New Memorandum of Recording. With respect to any additional lease term, Owner and Lessee shall execute in recordable form, and Lessee shall then record, a memorandum evidencing the additional lease term, satisfactory in form and substance to Owner and Lessee.

## **Article 5**

### **RENT**

5.1 Rent. In consideration of the rights granted hereunder, Lessee shall pay Owner the Rents provided herein, without notice or demand, for the use and occupancy of the Property during the term of this Lease Agreement.

5.2 Initial Payments. From the Effective Date of this Lease Agreement up to and including the calendar month preceding the Operations Date, Lessee shall pay \$\_\_\_\_\_ per acre per year, payable annually in advance.

5.3 Installation Fees. A one-time installation fee equal to \$\_\_\_\_\_ per megawatt ("MW") of installed capacity of any WTG or other power generation facilities to be built in any particular phase of construction, based on such facilities' Name Plate Capacity including any Repowering of such facilities. Each Installation Fee shall be paid fifty percent (50%) upon Commencement of Construction of such facilities and fifty percent (50%) at the Operations Date.

5.4 Operating Fees. From the Operations Date and until any Windpower Facilities installed on the Property are completely removed from the Property in accordance with Article 11, Lessee shall pay to Owner a quarterly operating fee which shall be the greater of (a) or (b):

(a) Gross Revenue Operating Fee. \* percent (\*%) of Lessee's Gross Revenues until the 10-year anniversary of the first day of the calendar quarter of the Operations Date, and \* percent (\*%) from the 10-year anniversary of the first day of the calendar quarter of the Operations Date until the 15-year anniversary of the first day of the calendar quarter of the Operations Date, and \* percent (\*%) from the 15-year anniversary of the first day of the calendar quarter of the Operations Date until the 20-

year anniversary of the first day of the calendar quarter of the Operations Date, and \* percent (\*%) from the 20-year anniversary of the first day of the calendar quarter of the Operations Date until the expiration of the Lease.

Example: If the Operations Date was 05-08-2009, the 10-year anniversary of the first day of the calendar quarter of the Operations Date would be 04-01-2019.

(b) Base Operating Fee. \$\* per calendar quarter for each MW of installed capacity of WTG or other power generation facilities so installed in or prior to such calendar quarter, adjusted for inflation as provided in this Paragraph 5.4. For the purposes of calculating the Base Operating Fee under this Paragraph, the Base Operating Fee shall be adjusted triennially by the increase or decrease in the Consumer Price Index ("CPI") as follows: The base for computing the increase or decrease in the CPI for purposes of this paragraph shall be the Consumer Price Index - All Urban Consumers, U.S. City Average, All Items (1982-84 Base = 100) published by the United States Department of Labor, Bureau of Labor Statistics (the "Index") for the month prior to the Effective Date of this Lease Agreement (the "Beginning Index"). The adjustment shall be effective on January 1 of the calendar year starting with the Operations Date and shall be determined by multiplying \* by a fraction, the numerator of which is the Index published for the month of December prior to each triennial adjustment and the denominator of which is the Beginning Index. If the Index is changed so that the base year differs from that used to calculate the Beginning Index, the Index shall be converted in accordance with the conversion factor published by the United States Department of Labor, Bureau of Labor Statistics. If the Index is discontinued or revised during the Lease Term, such other government Index or computation by which it is replaced shall be used in order to obtain substantially the same result as would be obtained if the Index had not been discontinued or revised. The amounts payable hereunder for a calendar quarter shall be prorated for each MW of installed capacity of Windpower Facilities for which the Operations Date or Removal Date occurs during such quarter, based on the number of days in such quarter following the Operations Date or prior to the Removal Date.

For purposes of determining payments in accordance with the Gross Revenue Operating Fee, when electricity produced by WTGs on the Property and other properties within the Project are delivered to a common meter, the number of kilowatt hours of electricity generated on the Property shall be determined monthly in accordance with the following formula:

$$CM \left( \frac{P}{PCM} \right) = TKW$$

CM is the total number of kilowatt hours available for sale at the common meter.

P is the total number of kilowatt hours generated on the Property as measured by individual meters at each WTG.

PCM is the total number of kilowatt hours generated on the Property and other properties within the Project as measured by individual meters at each WTG

TKW is the total number of kilowatt hours generated by Lessee for use in determining the Gross Revenue Operating Fee

(c) In conjunction with each quarterly Operating Fee made to Owner, Lessee shall furnish to Owner a statement setting forth the amount of Gross Revenues received by Lessee during each calendar quarter and the Operating Fee due Owner for such calendar quarter.

(d) Payments of the Operating Fee shall be made quarterly and shall be due within thirty (30) days of the end of each calendar quarter.

5.5 Minimum Fee. In no event shall the quarterly Operating Fee under Paragraph 5.4 of this Lease Agreement be less than \$\_\_\_\_\_ per acre (prorated for partial quarters and adjusted for inflation based on the consumer price index as described in paragraph 5.4(b) ) for any calendar quarter during the term of this Lease Agreement after the Operations Date.

## **Article 6**

### **ADDITIONAL AMOUNTS**

6.1 Additional Amounts. In addition to the Rents provided above, Lessee shall also pay the additional amounts described herein.

6.2 Surface Impact Payments. A surface impact payment shall be negotiated with the existing surface lessee of the Property prior to surface disturbance and paid pursuant to Chapter 5, Section 13 of the Board of Land Commissioners Rules and Regulations.

6.3 Reclamation Bond. No later than the Commencement of Construction, Lessee shall provide Owner with a Bond, to cover Lessee's estimated removal and surface restoration costs as provided in Article 11. The initial amount of the Bond shall be the estimated cost of satisfying Lessee's removal and surface restoration obligations, as provided in Article 11, net of estimated salvage value, if any, and such amount shall be increased by 15% every ten (10) years

(beginning with the tenth anniversary of the Bond) until the conclusion of the Lease Term. The Bond shall remain in effect until one year after the expiration of the Lease Term, unless fully drawn upon earlier by Owner or unless Owner provides the issuer of the Bond written notice authorizing the expiration of the Bond. Upon (i) the expiration of the Lease Term, and (ii) Lessee's compliance with its reclamation and indemnification obligations under Article 11, as reasonably determined by Owner, Owner shall be obligated to provide written notice to the issuer of the Bond authorizing the termination of the Bond. Any such written notice shall be provided by Owner within ten (10) days of written request by Lessee.

6.4 Interest. If Lessee shall fail to pay Owner any sum to be paid by Lessee to Owner hereunder within thirty (30) days after such payment is due, interest on the unpaid amount shall accrue at a rate of eighteen percent (18%) per annum, from the date payment was due until the date payment is made. Any such late charge shall be in addition to all other rights and remedies available to Owner hereunder or at law or in equity and shall not be construed as liquidated damages or limiting Owner's remedies in any manner. Following the dishonor of any check presented for payment, Owner shall have the right, at Owner's option, to require all further payments to be made by certified check, money order or wire transfer. For purposes of this Paragraph, any adjustment payment made by Lessee to correct a prior underpayment shall be treated as due on the date such underpayment was originally due; provided, however, any adjustment payment made by Lessee as the result of an independent audit conducted at Lessee's expense shall not be subject to a late charge as described herein.

6.5 Taxes. Lessee shall be responsible for and pay all taxes, assessments, and any other fees or charges of any type, which may be levied against or assessed by reason of (i) Lessee's leasehold interest hereunder or Lessee's use of the Property, and (ii) the Lessee Improvements and Lessee's, Assignee's, or Sublessee's equipment located on the Property. Lessee, Assignees and Sublessees shall not be responsible for the payment of any taxes, assessments, or other fees or charges of any type, which may be levied against or assessed by reason of (i) the value of the unimproved Property, and (ii) any improvements or equipment installed on the Property by Owner or lessees other than Lessee, Sublessees, or Assignees.

## **Article 7**

### **INSURANCE AND INDEMNITY**

7.1 Insurance. Lessee shall provide, at its expense, coverage against claims arising out of Lessee's, Sublessee's, or their respective contractors' and agents' occupation and use of the Property under this Lease Agreement for bodily injury and death, and from damage to or destruction of property of others, but excluding loss of use thereof, with minimum combined single limits of Five Hundred Thousand Dollars (\$500,000.00) per claimant and One Million Dollars (\$1,000,000.00) per occurrence, accident or incident, which has a commercially reasonable deductible.

(a) Owner shall be named as an additional insured by an endorsement of Lessee's general liability policy for the Lease Term, upon Commencement of Construction.

(b) It is understood and agreed that Lessee's policies are primary and not contributory. All insurance certificates shall be submitted to Owner before the Commencement of Construction. All insurance certificates provided by Lessee must include a clause stating that the insurance may not be canceled, amended or allowed to lapse until the expiration of at least thirty (30) days advance written notice to Owner.

(c) Lessee will report to Owner any physical damage to the Property caused by Lessee's use of the Property for Wind Energy Development, other than impacts that occur in the normal course of construction or operation of Lessee Improvements. Lessee will also advise Owner of any threatened or pending liability claim arising from Lessee's use of the Property for Wind Energy Development.

7.2 Indemnity. Lessee shall release, indemnify, and hold harmless the State of Wyoming, Owner, the Office of State Lands and Investments, and their officers, agents, employees, successors and assigns from any cause of action, or claims or demands to the extent arising out of Lessee's performance under this Lease Agreement. The foregoing release and indemnity shall not include losses of rent, business opportunities, profits and the like that may result from Owner's loss of use of the portion of the Property occupied by Windpower Facilities pursuant to this Lease Agreement. Further, the foregoing release and indemnity shall not extend to property damage or personal injuries allegedly attributable to risks of known and unknown dangers associated with electrical generating facilities, such as electromagnetic fields, unless such property damage or personal injuries are alleged by a third party in a claim or legal action

against Owner. Owner authorizes Lessee to take safety measures to reduce the risk that its operations and the Lessee Improvements will cause harm or injury to people, property, livestock or other animals.

## Article 8

### REPRESENTATIONS, WARRANTIES, AND COVENANTS

8.1. Lessee's Representations, Warranties, and Covenants. Lessee hereby represents, warrants, and covenants to Owner that:

(a) Lessee's Authority. Lessee has the unrestricted right and authority to execute this Lease Agreement and to perform or otherwise satisfy all obligations of Lessee described under this Lease Agreement. Each person signing this Lease Agreement on behalf of Lessee has been authorized to do so by all required member and/or manager consent. When signed by Lessee, this Lease Agreement shall constitute a legal, valid and binding Lease Agreement enforceable against Lessee in accordance with its terms.

(b) Development Efforts. Upon Lessee's receipt of all necessary land use approvals, building permits, environmental impact reviews, and other governmental permits and approvals required for the financing, construction, installation, maintenance and operation of Lessee Improvements on the Property and other nearby properties, and expiration of any applicable appeals periods without the filing of any appeal, Lessee shall use commercially reasonable efforts to install all of the WTGs on the Property as are so approved, using a reasonably diligent schedule for such installations in view of the other WTGs to be installed in the Project.

8.2. Owner's Representations, Warranties, and Covenants. Owner hereby represents, warrants, and covenants as follows:

(a) Owner's Authority. Owner is the sole owner of the Property and has the unrestricted right and authority to execute this Lease Agreement and to grant to Lessee the rights granted hereunder. Each person signing this Lease Agreement on behalf of Owner is authorized to do so. When signed by Owner, this Lease Agreement constitutes a legal, valid and binding agreement enforceable against Owner in accordance with its terms.

(b) Owner's Cooperation. Owner shall assist and fully cooperate with Lessee, at no out-of-pocket cost or expense to Owner, in complying with or obtaining any land use permits and approvals, building permits, environmental impact reviews or any other approvals required for the financing, construction, installation, replacement, relocation,

maintenance, operation or removal of Windpower Facilities, including execution of applications for such approvals. Owner's cooperation shall be required only to the extent of Owner's standing as record title owner of the property, but not in Owner's capacity as the State of Wyoming.

(c) Existing Uses. The only Existing Uses on the Property as of the Effective Date as shown in State records are those defined in Paragraph 1.6 above and listed on Exhibit 2 attached hereto, copies of which will be provided to Lessee upon request.

## **Article 9**

### **ASSIGNMENT AND SUBLEASING**

9.1 Assignments and Subleases. Lessee may assign this Lease Agreement and sublease the Property for Wind Energy Development.

(a) In the event Lessee assigns less than this entire Lease Agreement, then (i) the Assignee and Owner will enter into a new lease agreement, under terms and conditions identical to those found in this Lease Agreement except that the provisions regarding Rent shall only apply to the portion of the Property and/or Lessee Improvements covered by the new lease agreement, , and Owner shall not disturb the Assignee's continued use and enjoyment of the Property, or portion of the Property, for the full term of this Lease Agreement, as set forth in Article 4 of this Lease Agreement, or such shorter term as the Assignee may otherwise be entitled pursuant to the new lease agreement, and (ii) Lessee and Owner shall amend this Lease Agreement to reflect such partial assignment.

(b) An Assignee or a Sublessee shall have all of the rights and benefits of Lessee under and pursuant to this Lease Agreement. For the purposes of this Article, a merger, consolidation, or change in the ownership of Lessee shall not be considered an assignment or sublease of this Lease Agreement.

(c) In the event of an assignment or sublease by Lessee, Lessee agrees to comply with Owner's rules, regulations, procedures, and any applicable laws in effect at the time of assignment or sublease. The rules, regulations, procedures, and applicable laws in effect at the time of assignment or sublease will supercede the provisions provided for in

this Lease Agreement to the extent the provisions conflict. In the event that Owner's or the Director's consent or approval is required under any such rules, regulations, procedures or laws, in connection with any proposed assignment or sublease, such consent or approval shall not be unreasonably withheld, conditioned or delayed.

9.2 Assignee/Sublessee Rights and Obligations. Any Assignee or Sublessee shall only have the rights and benefits provided under this Lease Agreement, and none shall have any obligation or liability under this Lease Agreement, except to the extent provided in the form of assignment, conveyance or sublease document that is approved by Owner. No rights, benefits or obligations shall arise prior to the time that an assignment, conveyance or sublease has been approved by Owner. Any assignment or conveyance permitted hereunder shall release Lessee from obligations accruing after the date that liability is assumed by the Assignee. Lessee shall remain obligated under this Lease Agreement in the event of a sublease or in the event of a partial assignment to the extent the Lessee retains a leasehold interest in the Property.

9.3 Right to Cure Defaults/Notice of Defaults/Right to New Lease.

(a) To prevent termination of this Lease Agreement or any partial interest therein, any Assignee, Lender Assignee, or Sublessee shall have the right, but not the obligation, at any time prior to the termination, to pay any or all amounts due hereunder, and to do any or every other act or thing required of Lessee or anything necessary to cure any default and to prevent the termination of this Lease Agreement. As a condition to exercising any rights or remedies as a result of any alleged default by Lessee or a Sublessee, Owner shall give written notice of the default, in accordance with this Lease Agreement, to each Assignee, Sublessee and Lender Assignee, concurrently with delivery of such notice to Lessee, specifying in detail the alleged event of default and the required remedy. If there is more than one Sublessee, all Sublessees shall collectively designate not more than two (2) Sublessees to receive all notices from Owner with respect to this Lease Agreement. All such designations must be made in writing to the Owner and must be signed by all Sublessees. Owner's written notice to the two Sublessees so designated by Lessee shall satisfy Owner's obligation hereunder to give written notice of a default to each Sublessee. Each Assignee, Sublessee and any Lender Assignee shall have the same amount of time to cure a default as is given to Lessee pursuant to this Lease Agreement, which cure period for each such Sublessee shall commence to run with the end of the cure period given to Lessee in this Lease Agreement.

(b) If a Sublessee holds an interest in less than all of this Lease Agreement, the Property, or the Windpower Facilities, any default under this Lease Agreement shall be

deemed remedied, as to such partial interest, and Owner shall not disturb such partial interest, if the Sublessee shall have cured its pro rata portion of the default by paying the fees attributable to the Windpower Facilities in which Sublessee holds an interest.

(c) In the event of an uncured default by Lessee or in the event of a termination of this Lease Agreement by agreement, by operation of law or otherwise, each Sublessee, Assignee, and Lender Assignee shall have the right to request, that Owner, grant and enter into, a new lease, substantially identical to this Lease Agreement. If Sublessee, Assignee, or Lender Assignee shall have performed all unsatisfied obligations of Lessee under this Lease Agreement that relate to that portion of the Property in which Sublessee, Assignee, or Lender Assignee has an interest, and following due and proper compliance with Owner's rules, regulations, procedures, and any applicable statutes, Owner shall not unreasonably withhold, condition or delay granting and entering into such new lease. Additionally, Owner shall not disturb, the continued use and enjoyment by such Sublessee, Assignee or Lender Assignee of the Property, or portion of the Property, for the remaining Term of this Lease Agreement, as set forth in Article 4 of this Lease Agreement, or such shorter term as said Sublessee may otherwise be entitled pursuant to its sublease that was approved by Owner.

(d) Further, in the event of an uncured default by Lessee or in the event of a termination of this Lease Agreement by agreement, by operation of law or otherwise, Owner hereby agrees, provided the form of sublease approved by Owner so provides, that, if and for so long as:

- (i) a Sublessee is not in default under the Sublease (beyond any period given Lessee under this Lease Agreement to cure such default),
- (ii) such Sublessee attorns to Owner,
- (iii) the terms and conditions of the Sublease have been approved by Owner and do not contravene the terms and conditions of this Lease Agreement, and
- (iv) Sublessee shall satisfy all of its unsatisfied obligations from the date of default or termination, as applicable

Owner shall (A) recognize such Sublease, (B) not diminish nor interfere with such Sublessee's possession of the portion of the Property covered by the Sublease or with any term extension or renewal rights in the Sublease, and (C) not disturb such Sublessee's occupancy of such portion of the Property for the remaining Lease Term of this Lease Agreement or such shorter term as such Sublessee may be entitled under the sublease. The rights granted in the foregoing sentence shall also be available to a Lender Assignee that has rights in and to the Property.

9.4 Acquisition of Interest. The acquisition of all or any portion of Lessee's leasehold interest in the Property or the Lessee Improvements or this Lease Agreement by another person through foreclosure or other judicial or nonjudicial proceedings in the nature thereof or any conveyance in lieu thereof, shall not require the advance consent of Owner or constitute a breach of any provision or a default under this Lease Agreement, and Owner shall recognize the person as the Lessee's proper successor upon and following due and proper compliance with Owner's procedures.

9.5 New Lease. If this Lease Agreement is rejected by a trustee or debtor-in-possession in any bankruptcy or insolvency proceeding, or this Lease Agreement is terminated as result of any default (as provided in Article 10), and within sixty (60) days after such rejection or termination Lessee, or an Assignee, Lender Assignee, or Sublessee shall have arranged to the reasonable satisfaction of Owner for the payment of all fees or other charges due and payable by Lessee as of the date of such rejection or termination and the performance of all other unsatisfied obligations of Lessee up to the date of termination or rejection, then Owner will, upon compliance with all applicable rules, regulations, procedures, and laws, execute and deliver to Lessee, or such Assignee, Lender Assignee, or Sublessee, a new lease to the Property. Owner shall not unreasonably withhold, condition or delay executing and delivering such new lease which (i) shall be for a term equal to the remainder of the Lease Term, before giving effect to such rejection or termination, (ii) shall contain the same covenants, agreements, terms, provisions, and limitations as this Lease Agreement (except for any requirements that have been fulfilled by Lessee prior to rejection or termination of this Lease Agreement) and (iii) shall include only that portion of the Property in which Lessee or such other Assignee or Sublessee had an interest on the date of rejection or termination.

9.6 Extended Cure Period. If any Non-Monetary Default by Lessee, or an Assignee, Lender Assignee, or Sublessee under this Lease Agreement, cannot be cured without obtaining possession of all or part of the Property and/or all or part of the Windpower Facilities and/or all or part of Lessee's or another Assignee's or Sublessee's interest in this Lease Agreement, any such Non-Monetary Default shall be deemed remedied if:

(a) Within sixty (60) days for Lessee, or within ninety (90) days for Assignee, Lender Assignee, or Sublessees, after receiving notice from Owner as set forth in Paragraph 9.3 hereof, the Lessee, or an Assignee, Lender Assignee, or a Sublessee, shall have acquired possession of all or part of the Property and/or all or part of the Windpower Facilities and/or all or part of such interest in this Lease Agreement, or shall have commenced appropriate judicial or nonjudicial proceedings to obtain the same; and

(b) Lessee, or the Assignee, Lender Assignee, or Sublessee, shall be in the process of diligently prosecuting any such proceedings to completion; and

(c) After gaining possession of all or part of the Property and/or all or part of the Windpower Facilities and/or all or part of such interest in this Lease Agreement, Lessee, or an Assignee, Lender Assignee, or Sublessee, performs all other obligations as and when the same are due in accordance with the terms of this Lease Agreement; and

(d) Owner shall continue to receive all amounts due under this Lease Agreement.

In the event any of these conditions are not fully satisfied at any time, then the extended cure provision shall automatically terminate and Owner may proceed to terminate this Lease Agreement and exercise any other remedies available at law or equity in accordance with Paragraph 10.2. If Lessee, or an Assignee, Lender Assignee, or Sublessee, is prohibited by any process or injunction issued by any court or by reason of any action by any court having jurisdiction over any bankruptcy or insolvency proceeding involving Lessee, or any defaulting Assignee or Sublessee from commencing or prosecuting the proceedings described above, the sixty-day period or ninety-day period, specified above, shall be extended for the period of such prohibition.

9.7 Estoppel Certificates. Owner shall execute such estoppel certificates, certifying that no default then exists under this Lease Agreement, if such be the case, as Lessee or an Assignee or Sublessee may reasonably request from time to time.

## Article 10

### DEFAULT AND LESSOR'S REMEDIES

10.1 Events of Default. The following events shall be deemed to be events of default by Lessee under this Lease Agreement; provided, that Assignees, Lender Assignees, Sublessees and Leasehold Mortgagees shall have the right to cure any default under this Lease Agreement after notice from Owner pursuant to Paragraphs 9.3 and 12.2:

(a) Lessee shall fail to pay any amount payable under this Lease Agreement within thirty (30) days of when due;

(b) Lessee shall fail to comply with any other term, provision or covenant of this Lease Agreement within sixty (60) days after notice from Owner to Lessee, specifying Lessee's failure to comply; provided, however, that if the nature of Lessee's obligation is of such a nature that it cannot reasonably be cured within such 60-day period, Lessee shall not be deemed to be in default so long as Lessee commences curing such failure within such 60-day period and diligently prosecutes the same to completion; and

(c) Lessee shall do or permit to be done anything that creates a lien upon the Property and such lien is not removed or bonded around within sixty (60) days after written notice thereof from Owner to Lessee.

10.2 Remedies. Upon the occurrence of any event of default by Lessee, but subject to the rights of Assignees, Lender Assignees, Sublessees and Leasehold Mortgagees to cure any default under this Lease Agreement, Owner may enforce the provisions of this Lease Agreement in any manner provided by law or in equity, including, without limitation, the termination of this lease as provided below, without further notice or demand whatsoever, unless any such further notice or demand are required by law.

(a) Termination of this Lease Agreement. At Owner's option, and after satisfaction of applicable laws, rules and regulations, Owner may terminate this Lease Agreement and, in such event, Lessee shall surrender the Property to Owner upon expiration of the Removal Period. If upon termination of this Lease Agreement Lessee fails to surrender the Property upon expiration of the Removal Period, Owner may enter upon and take possession of the Property by any lawful means, and lock out, expel, or remove Lessee without being guilty in any manner of trespass, without liability for any damage or loss occasioned thereby, and without prejudice to any remedies available to Owner for possession of the Property, collection of amounts due, breach of contract, or otherwise. In such event, Lessee agrees to pay to Owner on demand the following: (i) any unpaid Rents and other sums due and payable under this Lease Agreement; and (ii) reasonable attorneys' fees and costs incurred in connection with the collection of amounts due under this Lease Agreement, the enforcement and termination of this Lease Agreement, expenses of restoring the Property in accordance with Paragraph 11.1, and interest on all such amounts due in accordance with Paragraph 6.4.

10.3 Non-Exclusive Remedies. Pursuit of any one remedy shall not preclude pursuit of any other remedy herein provided or any other remedy provided by law or equity, nor shall pursuit of any remedy herein provided constitute a forfeiture or waiver of any Rents or other sums due to Owner hereunder or of any damages accruing to Owner by reason of Lessee's

violation of any of the terms, provisions, and covenants herein contained. Owner's acceptance of Rents following an event of default shall not be construed as Owner's waiver of any such event of default. Additionally, no affirmative waiver by Owner of any event of default or any violation or breach of the terms, provisions and covenants contained in this Lease Agreement shall be deemed or construed to constitute a waiver of any other violation or default. No payment by Lessee or on behalf of Lessee or receipt by Owner of any amount less than the amounts due by Lessee hereunder shall be deemed to be anything other than on account of the amounts due by Lessee, nor shall any endorsement or statement on any check or document accompanying any payment be deemed an accord and satisfaction.

## Article 11

### RECLAMATION

11.1 Removal of Lessee Improvements. Upon the expiration or termination of this Lease Agreement, Lessee shall, within the Removal Period, satisfactorily accomplish each of the following items:

(a) Remove from the Property all above-ground and below-ground Lessee Improvements to a depth of not less than two (2) feet below the surface grade, all in a manner which minimizes injury to the Property, by:

(i) removal of all concrete footings, foundations, and other fixtures to a depth of not less than two (2) feet below the surface grade; and

(ii) hauling away and disposing of, in a lawful manner, all removed concrete and other waste materials.

(b) Reclaim and restore the Property disturbed by Lessee, or any permitted Sublessees or Assignees, to a condition and forage density reasonably similar to its condition and forage density on the Effective Date, consistent with the uses permitted by this Lease Agreement, by reseeding any disturbed soil surface with suitable flora and restoring the terrain and contour to as close as reasonably practicable to their condition as of the Effective Date, and, as reasonably required, all leveling, terracing, mulching and other reasonably necessary steps to prevent soil erosion, to ensure the establishment of suitable grasses and forbs, and to control noxious weeds and pests.

11.2 Failure to Remove. If Lessee fails to remove from the Property the Lessee Improvements, equipment, or any other personal property, within the Removal Period, or such longer period as Owner may provide by express written extension, Owner may do so, in which case Lessee shall reimburse Owner for all reasonable costs of removal and restoration incurred

by Owner. Lessee agrees and acknowledges that in the event it fails to remove the Lessee Improvements (and any other improvements approved by Owner), equipment or any other personal property within the Removal Period (or any written extension granted by Owner), then Lessee shall forfeit ownership of the Lessee Improvements (and any other improvements approved by owner), equipment, or any other personal property and shall not be entitled to any portion of the proceeds Owner may realize from the sale of the Lessee Improvements, equipment, or any other personal property.

## Article 12

### ENCUMBRANCES

12.1 Construction Liens. Lessee shall keep the Property free and clear of all liens and claims of liens for labor and services performed on, and materials, supplies, or equipment furnished to the Property in connection with Lessee's use of the Property pursuant to this Lease Agreement; provided, however, that if Lessee wishes to contest any such lien, Lessee shall, within sixty (60) days after it receives notice of the filing of such lien, remove such lien from the Property or sufficiently bond around such lien pursuant to applicable law.

12.2 Leasehold Mortgage. Provided that Owner receives a "Notice of Security Interest in State Lease" or other advance written notice of a Leasehold Mortgage in accordance with all State laws, rules, regulations and Owner's procedures then any Leasehold Mortgagee shall, for so long as its Leasehold Mortgage is in existence and until the lien thereof has been extinguished, be entitled to the protections set forth in this Article. No Leasehold Mortgage shall encumber or affect in any way the interest of Owner or Owner's fee interest in and to the Property.

12.3 Leasehold Mortgagee's Right to Possession, Acquire, and Assign. A Leasehold Mortgagee shall have the absolute right:

- (a) to assign its security interest;
- (b) to enforce its lien and acquire title to the leasehold estate by foreclosure or any other lawful means and thereafter to assign or transfer the leasehold estate to a third party;
- (c) to take possession of and operate the Property, the Lessee Improvements or any portion thereof and to perform all obligations to be performed by Lessee or a Sublessee hereunder, or to cause a receiver to be appointed to do so; and
- (d) to acquire title to the leasehold estate by an assignment in lieu of foreclosure and thereafter to assign or transfer the leasehold estate to a third party.

Owner's consent shall not be required for the acquisition of the encumbered leasehold or subleasehold estate by a third party who acquires the same by foreclosure or assignment in lieu of foreclosure. Upon the Leasehold Mortgagee's acquisition of the leasehold estate, whether by foreclosure or assignment in lieu of foreclosure, Leasehold Mortgagee shall have the right to assign said acquired leasehold estate provided the Leasehold Mortgagee and proposed assignee (as applicable) shall first satisfy each of the following conditions: (i) any such assignee shall assume all of Lessee's obligations under this Lease Agreement; (ii) Leasehold Mortgagee and/or any proposed assignee shall have satisfied, to Owner's reasonable satisfaction, every obligation of Lessee, except non-curable defaults, if any, existing under this Lease Agreement which remains unsatisfied at the time of the proposed assignment; and (iii) Leasehold Mortgagee and any such assignee shall satisfy all applicable State laws, rules, regulations and Owner's procedures relating to assignment of leases on State lands.

12.4 Leasehold Mortgagee's Notice of Default/Opportunity to Cure. As a condition to exercising any rights or remedies as a result of any alleged default by Lessee, Owner shall give written notice of the default to each Leasehold Mortgagee concurrently with delivery of such notice to Lessee, specifying in detail the alleged event of default and the required remedy. If there is more than one Leasehold Mortgagee, all Leasehold Mortgagees shall collectively designate not more than two (2) Leasehold Mortgagees to receive notice from Owner on behalf of all Leasehold Mortgagees with respect to this Lease Agreement and Owner's provision of notice to said two designated Leasehold Mortgagees shall be deemed to be notice to all Leasehold Mortgagees. In the event the Owner gives such a written notice of default, the following provisions shall apply to each Leasehold Mortgagee:

(a) The Leasehold Mortgagee shall have the same period after receipt of notice of default to remedy the default, or cause the same to be remedied, as is given to Lessee after Lessee's receipt of notice of default, plus, in each instance, the following additional time periods: (i) thirty (30) days, for a total of sixty (60) days after receipt of the notice of default in the event of any Monetary Default; and (ii) sixty (60), for a total of one hundred twenty (120) days after receipt of the notice of default in the event of any Non-Monetary Default, provided that such 120-day period shall be extended for the time reasonably required to complete such cure, including the time required for the Leasehold Mortgagee to perfect its right to cure such Non-Monetary Default by obtaining possession of the Property (including possession by a receiver) or by instituting foreclosure proceedings, provided the Leasehold Mortgagee acts with reasonable and continuous diligence. The Leasehold Mortgagee shall have the absolute right to substitute itself for Lessee and perform the duties of Lessee hereunder for purposes of curing such defaults. Owner expressly consents to such substitution, agrees to accept such performance, and authorizes the Leasehold Mortgagee (or its employees, agents, representatives or contractors) to enter upon the Property to complete such performance with all the rights, privileges and obligations of the original Lessee hereunder. Owner shall not terminate this Lease Agreement prior to expiration of the cure periods available to a Leasehold Mortgagee as set forth above.

(b) During any period of possession of the Property by a Leasehold Mortgagee (or a receiver requested by such Leasehold Mortgagee) and/or during the pendency of any foreclosure proceedings instituted by a Leasehold Mortgagee, the Leasehold Mortgagee shall pay or cause to be paid the Rents and all other monetary obligations payable by Lessee hereunder which have accrued and are unpaid at the commencement of said period and those which accrue thereafter during said period. Following acquisition of Lessee's leasehold estate by the Leasehold Mortgagee or its assignee or designee as a result of either foreclosure or acceptance of an assignment in lieu of foreclosure, or by a purchaser at a foreclosure sale, the Leasehold Mortgagee or party acquiring title to Lessee's leasehold estate shall, as promptly as reasonably possible, commence the cure of all defaults hereunder and thereafter diligently process such cure to completion, whereupon Owner's right to terminate this Lease Agreement based upon such defaults shall be deemed waived and this Lease Agreement shall continue in full force and effect; *provided, however*, the Leasehold Mortgagee or party acquiring title to Lessee's leasehold estate shall not be required to cure any Non-Curable Default. Any Non-Curable Defaults, if any, shall be deemed waived by Owner upon completion of foreclosure proceedings or acquisition of Lessee's interest in this Lease Agreement by such party.

(c) Any Leasehold Mortgagee or other party who acquires Lessee's leasehold interest pursuant to foreclosure or assignment in lieu of foreclosure shall not be liable to perform the obligations imposed on Lessee by this Lease Agreement incurred or accruing after such Leasehold Mortgagee or other party no longer has ownership of the leasehold estate.

(d) Neither the bankruptcy nor the insolvency of Lessee shall be grounds for terminating this Lease Agreement as long as the Rents and all other monetary charges payable by Lessee hereunder are paid by the Leasehold Mortgagee and all other obligations of Lessee which the Leasehold Mortgagee is capable of performing continue to be performed all in accordance with the terms of this Lease Agreement.

(e) Nothing herein shall be construed to extend this Lease Agreement beyond the Lease Term or to require a Leasehold Mortgagee to continue foreclosure proceedings after a default has been cured. If a default is cured and the Leasehold Mortgagee discontinues foreclosure proceedings, this Lease Agreement shall continue in full force and effect.

12.5 New Lease to Mortgagee. If this Lease Agreement is rejected or disaffirmed pursuant to bankruptcy law or other law affecting creditors' rights, the Owner will upon written request from any Leasehold Mortgagee within ninety (90) days after any such event and upon any such Leasehold Mortgagee's compliance with all applicable rules, regulations, procedures, and laws, enter into a new lease of the Property (and Owner shall not unreasonably withhold, condition or delay entering into such new lease), on the following terms and conditions:

(a) The terms of any new lease shall commence on the date of rejection or disaffirmation and shall continue for the remainder of the Lease Term, at the same Rent and subject to the same terms and conditions set forth in this Lease Agreement. Such new lease shall be subject to all existing subleases on the date of rejection or disaffirmation, provided the Sublessees are not then in default.

(b) Any new lease shall be executed within thirty (30) days after the conclusion of the ninety (90) day period in which Leasehold Mortgagees may request the execution of a new lease, provided said Leasehold Mortgagee: (i) pays to Owner all Rents and other monetary charges payable by Lessee under the terms of this Lease Agreement up to the date of execution of the new lease, as if this Lease Agreement had not been rejected or disaffirmed, less the Rents and other payments actually collected by Owner from Sublessees or other occupants of the Property and previously or thereafter applied against such Rent obligation; and (ii) performs all other obligations of Lessee under the terms of this Lease Agreement except for any non-curable defaults, if any; and (iii) agrees in writing to perform, or cause to be performed, all non-monetary obligations which have not been performed by Lessee and would have accrued under this Lease Agreement up to the date of commencement of the new lease, except those obligations which constitute non-curable defaults, if any. Any new lease granted the Leasehold Mortgagee shall enjoy the same priority as this Lease Agreement over any lien, encumbrance or other interest created by Owner.

(c) At the option of the Leasehold Mortgagee, the new lease may be executed by a designee of such Leasehold Mortgagee without the Leasehold Mortgagee assuming the burdens and obligations of Lessee thereunder.

(d) After the rejection or disaffirmation of this Lease Agreement and during the period thereafter during which any Leasehold Mortgagee shall be entitled to enter into a new lease of the Property, Owner will not terminate any sublease or the rights of any Sublessee thereunder unless such Sublessee shall be in default under such sublease. During such period, if the Owner shall receive any rent and other payments due from Sublessees, including Sublessees whose attornment it shall have agreed to accept, it will do so as agent of such Leasehold Mortgagee and shall deposit such rents and payments in a separate and segregated account in trust subject to a right of setoff against amounts due to Owner; and, upon the execution and delivery of such new lease, shall account to the Lessee under said new lease for the rent and other payments made by said Sublessees; and the Lessee shall thereupon assign the rent and other payments due under said subleases to any Leasehold Mortgagees under this Lease Agreement. The collection of rent by Owner acting as an agent pursuant to this Section shall not be deemed an acceptance by Owner for its own account of the attornment of any Sublessee unless Owner shall have agreed in writing with such Sublessee that its tenancy shall be continued following the expiration of any period during which a Leasehold Mortgagee may be granted a new Lease, in which case such attornment shall take place upon such expiration but not before. Owner shall not be under any obligation to enforce any subleases.

(e) If more than one Leasehold Mortgagee makes a written request for a new lease pursuant hereto, the new lease shall be delivered to the Leasehold Mortgagee requesting such new lease whose Leasehold Mortgage is prior in lien, and the written request of any other Leasehold Mortgagee whose lien is subordinate shall be void and of no further force or effect.

(f) The provisions of this Section shall survive the rejection or disaffirmation of this Lease Agreement and shall continue in full force and effect thereafter to the same extent as if this Section were a separate and independent contract made by Owner, Lessee and such Leasehold Mortgagee, and, from the effective date of such rejection or disaffirmation of this Lease Agreement to the date of execution and delivery of such new lease, such Leasehold Mortgagee may use and enjoy said Property without hindrance by Owner or any person claiming by, through or under Owner; provided that all of the conditions for a new lease as set forth herein are complied with.

12.6 Leasehold Mortgagee's Consent to Amendment, Termination or Surrender. Notwithstanding any provision of this Lease Agreement to the contrary, the parties agree that so long as there exists an unpaid Leasehold Mortgage, this Lease Agreement shall not be materially modified or amended and Owner shall not accept a surrender of the Property or any part thereof or a cancellation or release of this Lease Agreement from Lessee prior to expiration of the term without the prior written consent of the Leasehold Mortgagee. This provision is for the express benefit of and shall be enforceable by each Leasehold Mortgagee.

12.7 No Waiver. No payment made to Owner by a Leasehold Mortgagee shall constitute an agreement that such payment was, in fact, due under the terms of this Lease Agreement; and a Leasehold Mortgagee having made any payment to Owner pursuant to Owner's wrongful, improper or mistaken notice or demand shall be entitled to the return of any such payment.

12.8 No Merger. There shall be no merger of this Lease Agreement, or of the leasehold estate created by this Lease Agreement, with the fee estate in the Property by reason of the fact that this Lease Agreement or the leasehold estate or any interest therein may be held, directly or indirectly, by or for the account of any person or persons who shall own the fee estate or any interest therein, and no such merger shall occur unless and until all persons at the time having an interest in the fee estate in the Property and all persons (including Leasehold Mortgagee) having an interest in this Lease Agreement or in the estate of Owner and Lessee shall join in a written instrument effecting such merger and shall duly record the same.

## Article 13

### MISCELLANEOUS

13.1 Ownership of Windpower Facilities. Owner shall have no ownership or other interest in the Lessee Improvements installed on the Property.

13.2 Net Lease. Lessee and Owner acknowledge and agree that Owner shall not be required to make any expenditure, incur any obligation, or incur any liability of any kind whatsoever in connection with the ownership, construction, operation, maintenance, repair or reconstruction of the Lessee Improvements.

13.3 Requirements of Governmental Agencies. Lessee, at its expense, shall comply in all material respects with valid laws, ordinances, statutes, orders, and regulations of any governmental agency applicable in connection with its possession of, construction upon and use of the Property. Lessee shall have the right, in its sole discretion, to contest by appropriate legal proceedings, the validity or applicability to the Property or Windpower Facilities of any law, ordinance, statute, order, regulation, property assessment, or the like now or hereafter made or issued by any federal, state, county, local or other governmental agency or entity. Owner will not interfere in such contest provided, however, this provision shall not apply to any law, ordinance, statute, order, regulation, property assessment, or the like that is applicable to all state trust lands or the Owner's fiduciary obligations with respect to those lands. Any such contest or proceeding shall be controlled and directed by Lessee; provided, however, in the event Owner is required to be a party in any such proceeding under applicable law or is requested to be a party by Lessee, it may control and direct its participation in such proceeding at no out-of-pocket expense to either party.

13.4 Hazardous Materials.

(a) Lessee's use, possession, or control of the Property shall not cause the contamination or pollution of any environmental medium, including soil, surface waters, groundwaters, sediments, and surface and subsurface strata, ambient air or any other environmental medium in, on, or under, the Property, by any waste, pollutant, or contaminant in violation of Environmental Laws. Lessee shall use the degree of care required by applicable Environmental Laws to prevent the contamination or pollution of the Property. Lessee and its Sublessees, contractors or agents shall not bring on the Property any Hazardous Materials, except in compliance with Environmental Laws or in ordinary products commonly used in connection with the permitted use of Property and stored in the proper manner and quantities and in accordance with all applicable Environmental Laws. Any such products, including but not limited to oils or solvents,

which become a regulated waste when spent shall be manifested and removed for offsite disposal at an authorized facility in accordance with applicable law. Lessee shall not engage in or allow any activity on the Property that requires a solid or hazardous waste management permit without specific prior written approval from Owner.

(b) Lessee's violation of the foregoing prohibition shall constitute a material breach and default hereunder and Lessee shall indemnify, hold harmless and defend Owner from and against any claims, damages, penalties, liabilities, and costs (including reasonable attorney's fees and court costs) caused by or arising out of (i) a violation of the foregoing prohibition; or (ii) the release or disposal of any Hazardous Materials on, under, or about the Property by Lessee or its agents, directors, officers, servants, employees, contractors, invitees, customers, guests or licensees. In conformance with the requirements of applicable law, Lessee shall clean up, remove, remedy and repair any soil or ground water contamination and damage caused by the release or disposal of any Hazardous Materials in, on, under, or about the Property, by Lessee or its agents, directors, officers, servants, employees, contractors, invitees, customers, guests or licensees. Lessee shall immediately give Owner written notice of any breach or suspected breach of this Paragraph 13.4, upon learning of the presence or any release of any Hazardous Materials, or upon receiving notice from any governmental agency pertaining to Hazardous Materials which may affect the Property. The obligations of Lessee hereunder shall survive the expiration or earlier termination, for any reason, of this Lease Agreement.

(c) Owner represents that, to Owner's actual knowledge, without duty of inquiry or investigation, (i) there is no environmental contamination, pollution, or similar condition in or under the Property and there has been no environmental contamination, pollution or similar activity at the Property, and (ii) Owner currently has no liability under any environmental law in connection with the Property, and (iii) Owner has not received any notice of any environmental liability or any alleged violation of any law involving protection of the environment or Hazardous Materials with respect to the Property.

#### 13.5 No Interference; Multiple Use of the Property.

(a) Owner's activities and any grant of rights to the Property, all granted under one or more grazing lease, mineral lease, special use lease, temporary use permits, or easement that Owner makes to any person or entity subsequent to the Effective Date shall not (i) unreasonably interfere with Lessee's construction, installation, maintenance, removal, or operation of the Lessee Improvements, located on the Property; Lessee's access over the Property to such Lessee Improvements; or the undertaking of any other

activities permitted by this Lease Agreement; or, (ii) require Lessee to relocate or remove any of Lessee's Improvements located on the Property.

(b) No transfer of Mineral ownership, Mineral rights, or the creation of any agency or representative relationship whatsoever, is intended or granted to Lessee by or through this Lease Agreement. This Lease Agreement is subject to any and all Existing Uses which now cover some or all of the Property. Owner recognizes that Lessee, and its Assignees and Sublessees, cannot undertake Wind Energy Development, including but not limited to the commitment to develop, construct and operate Lessee Improvements on the Property, if there is or may occur any development or exploitation of Mineral Resources on or under the Property which would in any way interfere with or adversely affect the Wind Energy Development or the free flow of wind across the Property. Therefore, in order to permit Lessee's use of the Property for Wind Energy Development and Lessee Improvements, and to permit Owner to enter into future mineral leases in such a manner as to permit both activities to be pursued simultaneously, Owner and Lessee have agreed:

(i) Upon the issuance of any new mineral leases or sales or exchanges of minerals under the Property during the term of this Lease Agreement, Owner will include the following stipulations in any such new lease or sale or exchange as a term and condition to any such lease or sale or exchange that any buyer or lessee or other party to the Minerals transaction :

(A) A pre-dated wind energy lease exists on the surface of this parcel/lease/property and as such, any party granted a mineral lease hereon shall use the surface of this parcel/lease/property in a manner that reasonably accommodates the enjoyment of, and avoids impairment of, the pre-existing wind energy lease .

(B) Lessee shall limit any drilling, mining or other extraction activity for the production of leased minerals from the parcel/lease/property to occur only in those areas on the surface of the parcel/lease/property that are at least five-hundred (500) feet from any wind turbine generator or proposed wind turbine generator of the wind lessee on the property.

(ii) With regard to new leases or sales or exchanges of Minerals under the Property, Lessee and Owner each commit to work cooperatively together to ensure that Owner can benefit from the exploitation of the Mineral Resources under the Property and to ensure that Lessee can undertake Wind Energy Development with reasonable certainty that the exploitation of Owner's Mineral Resources will not interfere with or adversely affect such Wind Energy Development or the free flow of wind across the Property.

(c) Lessee acknowledges receipt of information from Owner indicating whether there are Existing Uses on the Property which are listed in Exhibit 2 attached to this Lease Agreement; the Existing Uses are the only rights granted by Owner, which now cover or encumber some or all of the Property leased by Lessee for Wind Energy Development. Lessee is responsible for reviewing records of the Mineral Leasing Division of the Office of State Lands and Investments to determine if there has, in the past, been active mining activity and any reclamation thereof. Lessee is responsible for contacting the Department of Environmental Quality to determine if the Property is included in an approved mining plan, and obtaining a complete and current copy of said mining plan, including all amendments thereto, a description of the land covered thereby, and a description of any surface or underground facilities or structures installed or removed thereunder.

(d) Lessee has had and will have a full opportunity to investigate the status of the Existing Uses and the past, present, and any future (or potential) mining activities under the Existing Uses; and Lessee enters into and accepts this Lease Agreement and Lessee's rights are subject to the Existing Uses. Lessee shall advise Owner of the planned or contemplated Wind Energy Development and Lessee Improvements on the Property that are over or near to the land covered by Existing Uses, and Owner shall, after consultation with the lessees under Existing Uses, notify Lessee in writing, whether or not, in the opinion of said lessees, the use and exploitation of Existing Uses is anticipated to interfere with or adversely affect the Wind Energy Development and Lessee Improvements described in Lessee's notice to Owner or the free flow of wind across the Property.

13.6 Lessee's Right to Terminate. Lessee shall have the right to terminate this Lease Agreement, effective upon 30 days' written notice to Owner from Lessee and every Assignee,

Lender Assignee, Sublessee and Leasehold Mortgagee having an interest in this Lease Agreement, the Lessee Improvements, or the Property at the time of notice.

13.7 Force Majeure. If performance of this Lease Agreement or of any obligation hereunder is prevented or substantially restricted or interfered with by reason of an event of Force Majeure, the affected party, upon giving notice to the other party, shall be excused from such performance to the extent of and for the duration of such prevention, restriction or interference. The affected party shall use reasonable efforts to avoid or remove such causes of nonperformance and shall immediately continue performance hereunder whenever such causes are removed.

13.8 Successors and Assigns. This Lease Agreement shall inure to the benefit of and be binding upon Owner and Lessee and, to the extent provided in any assignment, sublease or other transfer under Paragraph 9.1 hereof, any Assignee, Sublessee and their respective heirs, transferees, successors and assigns, and all persons claiming under them. References to Lessee in this Lease Agreement shall be deemed to include Assignees, Lender Assignees, and Sublessees, as applicable, which, following due and proper compliance with Owner's procedures, hold a direct ownership interest in this Lease Agreement and actually are exercising rights under this Lease Agreement to the extent consistent with such interest.

13.9 Memorandum of Lease. Owner and Lessee shall execute in recordable form, and Lessee shall then record, a memorandum of this Lease Agreement satisfactory in form and substance to Lessee and Owner. Following due and proper compliance with its rules, regulations and procedures, Owner shall consent to the recordation of the interest of an Assignee or Sublessee in the Property.

13.10 Notices. All notices or other communications required or permitted by this Lease Agreement, including payments to Owner, shall be in writing and shall be deemed given when personally delivered to Owner, Lessee, Assignee, Lender Assignee, Sublessee or a Leasehold Mortgagee, if any. In lieu of such personal service, notice shall be deemed given five (5) days after deposit in the United States mail, first class, postage prepaid, certified, and addressed as follows (provided, however, that payments to Owner shall only be deemed made when said payment is actually received by Owner):

If to Owner:

State of Wyoming

Office of State Lands and  
Investments

122 West 25th Street,

Herschler Building

Cheyenne, WY 82002-0600

Attn: Assistant Director, Surface  
Leasing

If to Lessee:

{INSERT}

If to any Assignee, Lender Assignee, Sublessee, or Leasehold Mortgagee:

To be provided when applicable.

Any party may change its address for purposes of this paragraph by giving written notice of such change to the other parties in the manner provided in this paragraph.

13.11 Entire Agreement; Amendments. This Lease Agreement constitutes the entire agreement between Owner and Lessee respecting its subject matter. Any agreement, understanding or representation respecting the Property, this Lease Agreement, or any other matter referenced herein not expressly set forth in this Lease Agreement or a subsequent writing signed by both parties is null and void. This Lease Agreement shall not be modified or amended except in a writing signed by both parties. No purported modifications or amendments, including without limitation any oral agreement (even if supported by new consideration), course of conduct or absence of a response to a unilateral communication, shall be binding on either party. Provided that no material default in the performance of Lessee's obligations under this Lease Agreement shall have occurred and remain uncured, Owner shall cooperate with Lessee in amending this Lease Agreement from time to time to include any provision that may be

reasonably requested by Lessee, Assignee, Lender Assignee, or Sublessee for the purpose of implementing the provisions contained in this Lease Agreement or for the purpose of preserving the security interest of any Assignee or Leasehold Mortgagee; provided, that Lessee shall obtain the prior written consent of every Leasehold Mortgagee and every relevant Assignee, Lender Assignee, and Sublessee to the requested amendment.

13.12 Legal Matters. The construction, interpretation and enforcement of this Lease Agreement shall be governed by the laws of the State of Wyoming. The Courts of the State of Wyoming shall have jurisdiction over this Lease Agreement and the parties, and the venue shall be the First Judicial District, Laramie County, Wyoming. The parties acknowledge and agree that they have each participated in the drafting of this Lease Agreement, and therefore, any rule of construction to the effect that ambiguities are to be resolved against the party drafting a contract shall not be employed in the interpretation of this Lease Agreement and is hereby waived.

13.13 Partial Invalidity. Should any provision of this Lease Agreement be held, in a final and unappealable decision by a court of competent jurisdiction, to be either invalid, void or unenforceable, the remaining provisions hereof shall remain in full force and effect, unimpaired by the holding. Notwithstanding any other provision of this Lease Agreement, the parties agree that in no event shall the term of this Lease Agreement or any Transmission Easement be longer than the longest period permitted by applicable law.

13.14 Right to Inspect Books and Production Records. Lessee shall, and shall require every affiliate of Lessee, any Assignee, Lender Assignee, and Sublessee to keep true, accurate and complete books, records, accounts, contracts and data sufficient to support and verify the calculation of all amounts due under this Lease Agreement, for a period of six (6) years after such amounts are due. Owner or any representative of Owner, including, without limitation, the Wyoming Department of Audit, shall have the right at all reasonable times and upon the provision of reasonable notice, to inspect such books, accounts, contracts, records, and any other relevant data in the possession or control of Lessee, any affiliate of Lessee, any Assignee and any Sublessee, and pertaining to the calculation of amounts due under this Lease Agreement, including, without limitation, statements, documents, records or other data, from third parties which verify price paid for, or quantity of, electricity generated by the Project, as applicable. Any such inspection and review shall take place at the office of Lessee or other entity whose records are being inspected and reviewed unless another location is otherwise agreed to by Owner and Lessee or other entity whose records are being inspected and reviewed. Lessee agrees that it shall require every affiliate, Assignee, Lender Assignee, and Sublessee to agree to and abide by the provisions of this Section with respect to any contract relating to the purchase and/or sale of power generated from the Project.

Without limiting the foregoing, at Owner's written request, no more than once a year and upon sixty (60) days notice to Lessee, Lessee shall either, at its election, (i) provide Owner with

information that enables Owner to confirm that all amounts payable under this Lease Agreement have been properly paid since the last time any such information was provided to Owner, but not more than six (6) years before; or (ii) at Lessee's expense, obtain from an independent auditor, reasonably acceptable to the State of Wyoming and mutually agreeable to both Owner and Lessee, an audit report confirming whether all amounts due under this Lease Agreement have been properly paid since the last time any such information was provided to Owner, but not more than six (6) years before. If Lessee shall retain an independent auditor to provide an audit report, any such auditor shall have reasonable access to all books, accounts, contracts, records, and any other relevant data, in the possession or control of Lessee, any Assignee, Sublessee, or Leasehold Mortgagee or any affiliate of Lessee, any Assignee, Sublessee or Leasehold Mortgagee and pertaining to the calculation of amounts due under this Lease Agreement.

In the event that the independent auditor is unable to render an opinion confirming whether all amounts due under this Lease Agreement have been properly paid for the period under examination, the auditor shall report, in writing and within the deadline established for providing the audit report, the reasons why independent auditor was unable to render such opinion. Owner and Lessee agree that any third party auditor retained by Lessee shall keep all audit information confidential, to the maximum extent permitted by law.

13.15 Calibration. Lessee or the interconnecting utility shall test and calibrate the electric meters according to the acceptable standards in the industry, at the location at which electricity generated on the Project is delivered to such utility (in accordance with the applicable interconnection agreement) and at the individual meters of the WTGs in the Project.

13.16 Sovereign Immunity. The State of Wyoming, the Wyoming Board of Land Commissioners and the Office of State Lands and Investments do not waive sovereign immunity by Owner entering into this Lease Agreement, and specifically retain immunity and all defenses available to them as sovereigns pursuant to WYO. STAT. ANN. § 1-39-104(a) and other state law.

13.17 Confidentiality. Owner is subject to the Wyoming Public Records Act (WYO. STAT. ANN. §§ 16-4-201 through -205) and any information provided to Owner under this Lease Agreement may be subject to disclosure. As such, Owner cannot represent that any information provided under this agreement will be kept confidential. However, if Lessee believes that information Lessee is providing falls within an exception to the Wyoming Public Records Act, Lessee may request that Owner keep such information confidential pursuant to such exception. If Owner agrees that such exception does apply, Owner will keep such information confidential.

13.18 Assignment in Connection with Transmission Lines. In connection with the exercise of the rights of Lessee hereunder, Lessee, upon due and proper compliance with

Owner's procedures, shall have the right to grant to any utility the right to construct, operate and maintain electric transmission, interconnection and switching facilities on the Property.

13.19 Survey. Lessee shall have the right, but not the obligation, to order a survey of the property. If so ordered, the cost of the survey shall be paid by the Lessee.

13.20 Consents and Approvals. Whenever the consent or approval of either party is required under this Lease Agreement, each party agrees that such consent or approval shall not be unreasonably withheld, conditioned or delayed.

13.21 Siting. Prior to construction, Lessee shall submit to Owner a description of the location of all the Windpower Facilities, as defined in Article 1. The description shall include maps or drawings depicting the location, if such maps or drawings are readily available. If applicable, Lessee shall submit to Owner any industrial siting application that has been submitted or any permit that has been issued pursuant to Wyoming Statute 35-12-101 through 35-12-119.

IN WITNESS WHEREOF, Owner and Lessee, acting through their duly authorized representatives, have executed this Lease Agreement on this \_\_\_\_ day of \_\_\_\_\_, 2009 with the intent that it be effective as of the Effective Date, and certify that they have read, understand and agree to the terms and conditions of this Lease Agreement.

"Owner"

"Lessee"

STATE OF WYOMING, BOARD OF LAND \*  
COMMISSIONERS

By: \_\_\_\_\_ By: \_\_\_\_\_

Name: Lynne Boomgaarden

Name: \*

Its: Director, Office of State Lands  
and Investments

Its:

Attorney General Approval as to Form

---

Bridget Hill, Senior Assistant Attorney General

ACKNOWLEDGMENTS

STATE OF WYOMING )

) ss.

County of Laramie )

The foregoing instrument was acknowledged before me by Lynne Boomgaarden, as Director, Office of State Lands and Investments, STATE OF WYOMING, this \_\_\_\_\_ day of \_\_\_\_\_, 2009.

Witness my hand and official seal.

(seal)

\_\_\_\_\_  
Title of Officer

My commission expires:\_\_\_\_\_

State of )

) ss

County of \_\_\_\_\_)

On \_\_\_\_\_, 2009, before me, \_\_\_\_\_, Notary Public, personally appeared \_\_\_\_\_, personally known to

me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature

\_\_\_\_\_

(seal)