SITE CERTIFICATE FOR THE BIGLOW CANYON WIND FARM

Issued by

Oregon Energy Facility Siting Council 625 Marion Street NE Salem OR 97301-3742

June 30, 2006

BIGLOW CANYON WIND FARM FINAL ORDER

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TABLE OF CONTENTS

5	
6	
7	

7			
8	I.	INTRODUCTION	2
9			
10	II.	SITE CERTIFICATION	2
11 12	III.	DESCRIPTIONS	1
13	111.	A. THE FACILITY	
14		B. LOCATION OF THE FACILITY	
15		D. LOCATION OF THE FACILITY	
16	IV.	SPECIFIC FACILITY CONDITIONS	6
17		A. ORGANIZATIONAL EXPERTISE, OAR 345-022-0010	
18		B. RETIREMENT AND FINANCIAL ASSURANCE, OAR 345-022-0050	
19		C. LAND USE, OAR 345-022-0030	
20		D. SOIL PROTECTION, OAR 345-022-0022.	
21		E. PROTECTED AREAS, OAR 345-022-0040	
22		F. SCENIC AND AESTHETIC VALUES, OAR 345-022-0080	
23		G. RECREATION, OAR 345-022-0100	
24		H. PUBLIC HEALTH AND SAFETY STANDARDS FOR WIND ENERGY FACILITIES, OAR 345-024-0010	
25		I. SITING STANDARDS FOR WIND ENERGY FACILITIES, OAR 345-024-0015	
26		J. SITING STANDARDS FOR TRANSMISSION LINES, OAR 345-024-0090	
27		K. THREATENED AND ENDANGERED SPECIES, OAR 345-022-0070	
28		L. FISH AND WILDLIFE HABITAT, OAR 345-022-0060	
29		M. STRUCTURAL STANDARD, OAR 345-022-0020	
30		N. HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES, OAR 345-022-0090	19
31		O. PUBLIC SERVICES, OAR 345-022-0110	20
32		P. WASTE MINIMIZATION, OAR 345-022-0120	21
33		Q. Noise Control Regulations, OAR 340-035-0035	23
34		R. REMOVAL-FILL LAW	
35		S. GROUND WATER ACT	26
36		T. PUBLIC HEALTH AND SAFETY	26
37			
38	V.	CONDITIONS REQUIRED BY COUNCIL RULES	27
39			
40	VI.	SUCCESSORS AND ASSIGNS	34
41			
42	VII.	SEVERABILITY AND CONSTRUCTION	34
43			
44	VIII.	GOVERNING LAW AND FORUM	34
45			
46	IX.	EXECUTION	34

OREGON ENERGY FACILITY SITING COUNCIL SITE CERTIFICATE FOR BIGLOW CANYON WIND FARM

I. INTRODUCTION

This site certificate for the Biglow Canyon Wind Farm ("Biglow" or the "facility") is issued and executed in the manner provided by ORS Chapter 469, by and between the State of Oregon ("State"), acting by and through its Energy Facility Siting Council (the "Council"), and Orion Sherman County Wind Farm LLC ("Orion" or "certificate holder"). This site certificate is a binding agreement between the State, acting by and through the Council, and Orion.

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in the Council's Final Order in the Matter of the Application for a Site Certificate for the Biglow Canyon Wind Farm (the "final order"), which the Council granted and approved in final form on June 30, 2006, and which by this reference is incorporated herein.

In interpreting this site certificate, any ambiguity shall be clarified by reference to the following, in order of priority: (1) this site certificate; (2) the final order issued on June 30, 2006; (3) the record of the proceedings that led to the final order; and (4) the Site Certificate Application for the Biglow Canyon Wind Farm, which the Oregon Department of Energy (the "Department") filed on March 20, 2006.

The terms used in this site certificate shall have the same meaning as set forth in ORS 469.300 and OAR 345-001-0010, except where otherwise stated or where the context clearly indicates otherwise.

II. SITE CERTIFICATION

A. To the extent authorized by state law and subject to the conditions set forth herein, the State authorizes the certificate holder to construct, operate and retire a wind energy facility, together with certain related or supporting facilities, at the site in Sherman County, Oregon, as described in Section III of this site certificate. ORS 469.401(1)

B. This site certificate is effective until it is terminated under OAR 345-027-0110 or the rules in effect on the date that termination is sought or until the site certificate is revoked under ORS 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. ORS 469.401(1)

C. This site certificate does not address, and is not binding with respect to, matters that were not addressed in the Council's final order. These matters include, but are not limited to: building code compliance, wage, hour and other labor regulations, local government fees and charges, and other design or operational issues that do not relate to siting the facility [ORS 469.401(4)] and permits issued under statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council. ORS 469.503(3)

D. Both the State and the certificate holder shall abide by local ordinances, state law, and the rules of the Council in effect on the date this site certificate is issued. In addition, upon a clear showing of a significant threat to public health, safety or the environment that requires application of later-adopted laws or rules, the Council may require compliance with such later-adopted laws or rules. ORS 469.401(2)

E. For a permit, license or other approval addressed in and governed by this site certificate, the certificate holder shall comply with applicable state and federal laws adopted in the future to the extent that such compliance is required under the respective state agency statutes and rules. ORS 469.401(2)

F. Subject to the conditions herein, this site certificate binds the State and all counties, cities and political subdivisions in Oregon as to the approval of the site and the construction, operation and retirement of the facility as to matters that are addressed in and governed by this site certificate. ORS 469.401(3)

Each affected state agency, county, city and political subdivision in Oregon with authority to issue a permit, license or other approval addressed in or governed by this site certificate shall, upon submission of the proper application and payment of the proper fees, but without hearings or other proceedings, issue such permit, license or other approval subject only to conditions set forth in this site certificate. ORS 469.401(3)

H. After issuance of this site certificate, each state agency or local government agency that issues a permit, license or other approval for the facility shall continue to exercise enforcement authority over such permit, license or other approval. ORS 469.401(3)

I. After issuance of this site certificate, the Council shall have continuing authority over the site and may inspect, or direct the Department to inspect, or request another state agency or local government to inspect, the site at any time in order to ensure that the facility is being operated consistently with the terms and conditions of this site certificate. ORS 469.430

III. DESCRIPTIONS

A. THE FACILITY

In the site certificate application, the certificate holder requested the flexibility, within defined 500-foot-wide turbine corridors, to defer the final selection of turbine vendor, turbine size, number of turbines to be installed, and precise turbine layout until after the issuance of a site certificate and prior to commencement of construction. In the site certificate application, the certificate holder defined the range of possible turbine vendors, sizes and numbers. In the site certificate application, the certificate holder also defined two alternative transmission line options, two alternative substation locations, and three alternative O&M facility locations. Subject to specific conditions, this site certificate grants that flexibility.

- 1. Major Structures. The Biglow Canyon Wind Farm will consist of up to 225 wind turbines with an aggregate nominal nameplate generating capacity of 337.5 megawatts (MW) of electricity or 150 wind turbines with an aggregate nominal nameplate generating capacity of 450 MW. The average electric generating capacity will be about 112.5 to 150 MW. Turbines will be mounted on tubular steel towers ranging in height from 265 to 280 feet at the hub with an overall height of from 400 to 445 feet including the turbine blades. The turbines will be erected within up to 30 corridors and spaced to optimize the facility's output. The facility will be located on private farmland that Orion has leased from the affected landowners.
 - 2. <u>Related or Supporting Facilities</u>. The facility includes the following related or supporting facilities:
 - a. Power Collection System. Each wind turbine will generate power at about 600 volts. The transformer sitting at the base of each wind turbine unit will increase the voltage to 34.5 kilovolts (kV). From the transformer, power will be transmitted to a central substation by means of electric cables. Most of the cables will be buried three feet or more below the surface in trenches about 3 feet wide. In areas where collector cables from several turbine strings follow the same alignment, *e.g.*, on approach to the substation, multiple sets of cables may be installed within a single trench. If the facility is fully developed, there will be about 468,000 feet (88.6 miles) of 3-wire collector cables. Generally, these cables will be above, below or adjacent to the fiber optic cables comprising the supervisory control and data acquisition system.

In some locations, the collector cables may be constructed above ground on pole or tower structures. Aboveground structures would allow the collector cables to span terrain, such as canyons, native grasslands, wetlands, and intermittent streams, thereby reducing adverse environmental impacts, or to span cultivated areas, thereby reducing adverse impacts to farming operations. Poles or towers supporting aboveground segments of the power collection system will be about 23 to 28 feet tall. Pending final site design, the certificate holder states that the length of the aboveground segments of the power collection system will be up to but not exceeding 15 miles.

b. <u>Substations and Interconnection System</u>. Under one of its transmission alternatives, the certificate holder would construct a new substation in the southern section of the facility site. The substation site would be a graveled, fenced area of up to 6 acres with transformers, switching equipment and a parking area. Transformers would be non-polychlorinated biphenyl (PCB) oil-filled types. The transmission line would be about 3 miles long and would interconnect with the Bonneville Power Administration (BPA) system at the existing Klondike Schoolhouse Substation.

SITE CERTIFICATE FOR BIGLOW CANYON WIND FARM – June 30, 2006

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Under its second transmission alternative, the certificate holder would construct a new substation near the center of the facility site. The substation site would be a graveled, fenced area of up to 6 acres with transformers, switching equipment and a parking area. Transformers would be non-PCB oil-filled types. The transmission line would be about 7 miles long and would interconnect with an electric transformer or switching facility to be installed at BPA's John Day Substation or Switchyard for delivery of electricity to BPA's high-voltage transmission system.

- Meteorological Towers. The certificate holder will will place up to 10 c. meteorological towers throughout the facility site to collect wind resource data. The towers would be up to 279 feet tall.
- d. Operations and Maintenance Building. The site of the operations and maintenance building will comprise about 5 acres. The O&M building will occupy about 5,000 square feet and will include office and workshop areas, control room, kitchen, bathroom, shower, utility sink, and other typical facilities. Water for the bathroom, shower and kitchen will be obtained from an onsite well constructed by a licensed contractor in accordance with local and state requirements. Water use will not be expected to exceed 1,000 gallons per day. Domestic wastewater generated at the O&M facility will drain into an onsite septic system. A graveled parking area for employees, visitors and equipment will be located adjacent to the O&M facility.

The certificate holder proposed three alternative locations for the O&M facility: (1) adjacent to the substation to be located in the southern section of the facility site in the event Biglow is interconnected to the BPA transmission system by means of the Klondike Schoolhouse Substation; (2) adjacent to the substation to be located near the center of the facility site in the event Biglow is interconnected to the BPA transmission system by means of the John Day Substation; or (3) at the site of an existing house located at 97327 Emigrant Lane, Wasco, Oregon.

- e. <u>Control System.</u> The certificate holder will install a supervisory control and data acquisition (SCADA) system to assist with the remote operation of the wind turbines, to collect data from each wind turbine, and to archive wind and performance data from various sources. The SCADA system will be linked by means of fiber optic cables or other means of communication to a central computer in the O&M facility.
- Access Roads. The certificate holder will construct about 40.5 miles of f. new roads to provide access to the wind turbine strings, together with turnaround areas at the end of each wind turbine string. The roads will be

about 28 feet wide and will be composed of crushed gravel. In addition, the certificate holder will improve about 0.7 mile of existing roads by providing an all-weather surface and, in some cases, widening the roads to accommodate construction vehicles.

g. Temporary Laydown and Staging Areas. Depending on whether it proceeds with the 150-turbine or 225-turbine configuration, the certificate holder will use a total of 186 or 261 laydown and staging areas to stage construction and store supplies and equipment during construction of the facility. The certificate holder will develop one 18,500 square-foot laydown area at the site of each wind turbine, a one-acre laydown area for each wind turbine string, and six additional 5-acre laydown areas at various locations throughout the facility site. The laydown areas will have a crushed gravel surface and will be returned to their pre-construction condition following completion of construction of the facility.

B. LOCATION OF THE FACILITY

The facility is located about 2.5 miles northeast of Wasco in Townships 1 and 2 North, Ranges 17 and 18 East, Willamette Meridian, Sherman County, Oregon.

IV. SPECIFIC FACILITY CONDITIONS

The conditions listed in this section include conditions based on representations in the site certificate application and supporting record. The Council deems these representations to be binding commitments made by the applicant. These conditions are required under OAR 345-027-0020(10).

This section includes other specific facility conditions the Council finds necessary to ensure compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect the public health and safety.

A. ORGANIZATIONAL EXPERTISE, OAR 345-022-0010

(1) Before beginning construction of the facility, the certificate holder shall notify the Department of the identity and qualifications of the engineering, procurement and construction (EPC) contractor(s) for specific portions of the work. The certificate holder shall select EPC contractors that have substantial experience in the design and construction of similar facilities. The certificate holder shall report to the Department any change of major construction contractors.

(2) The certificate holder shall contractually require all construction contractors and subcontractors involved in the construction of the facility to comply with all applicable laws and regulations and with the terms and conditions of the site certificate. Such contractual provisions shall not operate to relieve the certificate holder of responsibility under the site certificate.

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(3) During construction of the facility, the certificate holder shall have an on-site assistant construction manager who is qualified in environmental compliance to ensure compliance with all construction-related site certificate conditions. During operation, the certificate holder shall have a project manager who is qualified in environmental compliance to ensure compliance with all ongoing site certificate conditions. The certificate holder shall notify the Department of the name, telephone number, fax number and e-mail address of these managers and shall keep the Department informed of any change in this information.

(4) Within 72 hours after discovery of conditions or circumstances that may violate the terms or conditions of the site certificate, the certificate holder shall report the conditions or circumstances to the Department.

В. RETIREMENT AND FINANCIAL ASSURANCE, OAR 345-022-0050

- (5) If the certificate holder elects to build the facility in a single phase using only GE 1.5-MW turbines, GE 3.0-MW turbines or a combination of these two GE turbines, before beginning construction of the facility and after considering all micrositing factors, the certificate holder shall provide to the Department a detailed map of the proposed facility showing the final locations where facility components are proposed to be built within the 500-foot-wide corridors shown on Revised Figures C-2 and C-2A of the ASC Supplement.
- If the certificate holder proposes to build the facility in more than one phase using (6) only GE 1.5-MW turbines, GE 3.0-MW turbines or a combination of these two GE turbines, before beginning construction of any phase of the facility and after considering all micrositing factors, the certificate holder shall provide to the Department a detailed map of that phase of the facility showing the final locations where facility components are proposed to be built within the 500-foot-wide corridors shown on Revised Figures C-2 and C-2A of the ASC Supplement, shall identify on this map the facilities that would constitute that phase of construction, and shall provide documentation defining the quantities of each of the following components that would constitute that phase of construction: GE 1.5-MW turbines, GE 3.0-MW turbines, pad transformers, meteorological towers, substation, O&M facility, miles of 230-kV or 500-kV transmission line, miles of aboveground 34.5-kV collector system, miles of access road, acres of turnarounds and access road intersections, and acres of temporary laydown area.
- (7) If the certificate holder elects to build the facility in a single phase using any turbines other than the GE 1.5-MW turbines or GE 3.0-MW turbines, before beginning construction of the facility and after considering all micrositing factors, the certificate holder shall provide to the Department a detailed map of the proposed facility showing the final locations where facility components are proposed to be built within the 500-foot-wide corridors shown on Revised Figures C-2 and C-2A of the ASC Supplement. The certificate holder shall include with

this map documentation defining quantities of each of the following components that would constitute the complete facility: turbines, pad transformers, meteorological towers, substation, O&M facility, miles of 230-kV or 500-kV transmission line, miles of aboveground 34.5-kV collector system, miles of access road, acres of turnarounds and access road intersections, and acres of temporary laydown area. For each turbine, the certificate shall define the turbine manufacturer, turbine capacity, weight of steel, height of tower, sweep of blade, and size of concrete foundation.

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(8)If the certificate holder elects to build the facility in more than one phase using any turbines other than the GE 1.5-MW turbines or GE 3.0-MW turbines, before beginning construction of any phase of the facility and after considering all micrositing factors, the certificate holder shall provide to the Department a detailed map of that phase of the facility showing the final locations where facility components are proposed to be built within the 500-foot-wide corridors shown on Revised Figures C-2 and C-2A of the ASC Supplement, shall identify on this map the facilities that would constitute that phase of construction, and shall provide documentation defining the quantities of each of the following components that would constitute that phase of construction: turbines, pad transformers, meteorological towers, substation, O&M facility, miles of 230-kV or 500-kV transmission line, miles of aboveground 34.5-kV collector system, miles of access road, acres of turnarounds and access road intersections, and acres of temporary laydown area. For each turbine, the certificate shall define the turbine manufacturer, turbine capacity, weight of steel, height of tower, sweep of blade, and size of concrete foundation.

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(9)If the certificate holder elects to build the facility in a single phase using only GE 1.5-MW turbines, GE 3.0-MW turbines or a combination of these two GE turbines, before beginning construction of the facility the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit in the amount of \$6.208 million (in 2005 dollars) naming the State of Oregon, acting by and through the Council as beneficiary or payee. If the certificate holder elects to build the facility in a single phase using any turbines other than the GE 1.5-MW or GE 3.0-MW turbines or if the certificate holder elects to build the facility in more than one phase using any combination of turbines, before beginning construction of any phase of the facility, the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit naming the State of Oregon, acting by and through the Council, as beneficiary or payee in the amount (in 2005 dollars) determined by the Department as the gross cost of demolition and site restoration minus the carbon steel scrap value plus the one-percent performance bond amount, ten-percent administration and project management costs and twenty-percent future developments contingency applicable to the proposed phase of construction, together with any previous phases of construction. If the certificate holder elects to build the facility in more than one phase using only GE 1.5-MW turbines, GE 3.0-MW turbines or a combination of the two GE turbines, the Department will establish the amount of the bond or

letter of credit by applying the unit costs described in Table 5 of the Council's 1 final order on the site certificate application (incorporated herein by this 2 reference) to the number of units identified by the certificate holder and verified 3 by the Department as applicable to the proposed phase and any previous phases of 4 construction and adding to that subtotal the one-percent performance bond 5 amount, ten-percent administration and project management costs and twenty-6 percent future developments contingency. If the certificate holder elects to build 7 the facility using any turbines other than the GE 1.5-MW turbines or GE 3.0-MW 8 turbines, for each phase of construction the Department will establish the amount 9 of the bond or letter of credit by using its Facility Retirement Cost Estimating 10 Guide to estimate the gross cost of demolition and site restoration minus the 11 carbon steel scrap value plus the one-percent performance bond amount, ten-12 percent administration and project management costs and twenty-percent future 13 developments contingency. 14 15 (a) 16 annually, using the following calculation: 17 Adjust the gross cost (in 2005 dollars) to present value, using the (i) 18 19 20 21 22 23

- The certificate holder shall adjust the amount of the bond or letter of credit
 - U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' Oregon Economic and Revenue Forecast or by any successor agency (the "Index"). If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust 2005 dollars to present value.
 - Adjust the estimated carbon steel scrap value by an index factor (ii) derived from the Producer Price Index values, not seasonally adjusted, reported by the U.S. Department of Labor, Bureau of Labor Statistics, "Commodities: Metals and Metal Products: Carbon Steel Scrap" (Series ID: WPU101211). Using the average monthly index value for the 12 months ending with December of the year preceding the year in which the adjustment is made as the numerator and the average monthly index value for the 12 months ending with December 2005 (277.2) as the demoninator, multiply the estimated scrap value of \$149 per net ton (in 2005 dollars) by the resulting factor. If at any time the Producer Price Index Values are no longer published, the Council shall select a comparable calculation to adjust the estimated scrap value.
 - Multiply the adjusted carbon steel scrap value (ii) per net ton by (iii) the number of tons of carbon steel scrap applicable to the phase or phases of construction to which the letter of credit applies and subtract the resulting value from the adjusted gross cost (i).
 - Add 1 percent of the subtotal (iii) for the adjusted performance (iv) bond amount, 10 percent of the subtotal (iii) for the adjusted administration and project management costs, and 20 percent of the subtotal (iii) for the adjusted future developments contingency.

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1 2 3 4		(v)	Add the subtotal (iii) to the sum of the percentages (iv) and round the resulting total to the nearest \$1,000 to determine the adjusted financial assurance amount for the reporting year.
5 6 7		` '	ertificate holder shall use a form of bond or letter of credit approved e Council.
8 9		` /	ertificate holder shall use an issuer of the bond or letter of credit ved by the Council.
10 11 12		` /	ertificate holder shall describe the status of the bond or letter of in the annual report submitted to the Council under Condition (122).
13 14 15			ond or letter of credit shall not be subject to revocation or reduction e retirement of the facility.
16 17 18	(10)	(9), the certif	ate holder elects to use a bond to meet the requirements of Condition icate holder shall ensure that the surety is obligated to comply with
19 20 21		the surety exconstruction,	ents of applicable statutes, Council rules and this site certificate when ercises any legal or contractual right it may have to assume operation or retirement of the facility. The certificate holder shall
22232425		such rights an Council rules	nat the surety is obligated to notify the Council that it is exercising and to obtain any Council approvals required by applicable statutes, and this site certificate before the surety commences any activity to astruction, operate or retire the facility.
26 27 28 29 30 31 32	(11)	after the effective certificate is Council may accordance w	te holder shall begin construction of the facility within three years ctive date of the site certificate. Under OAR 345-015-0085(9), a site effective upon execution by the Council Chair and the applicant. The grant an extension of the deadline to begin construction in with OAR 345-027-0030 or any successor rule in effect at the time the stension is submitted.
33 34 35 36 37 38 39 40 41 42 43	(12)	after the effect the facility is construction completed; a consistent wi Department of extension of	the holder shall complete construction of the facility within five years extive date of the site certificate. Construction is complete when: (1) substantially complete as defined by the certificate holder's contract documents; (2) acceptance testing has been satisfactorily and (3) the energy facility is ready to begin continuous operation the site certificate. The certificate holder shall promptly notify the of the date of completion of construction. The Council may grant and the deadline for completing construction in accordance with OAR 0 or any successor rule in effect at the time the request for extension
44 45 46	(13)	The certificat	te holder shall construct a facility substantially as described in the e.

- (14) Notwithstanding OAR 345-027-0050(2), an amendment of the site certificate is required if the proposed change would increase the electrical generation capacity of the facility and would increase the number of wind turbines or the dimensions of existing wind turbines.
- (15) The certificate holder shall obtain all necessary state and local permits or approvals required for construction, operation and retirement of the facility or ensure that its contractors obtain necessary state and local permits or approvals.
- (16) Before beginning construction, the certificate holder shall notify the Department in advance of any work on the site that does not meet the definition of "construction" in OAR 345-001-0010 or ORS 469.300 and shall provide to the Department a description of the work and evidence that its value is less than \$250,000.

C. LAND USE, OAR 345-022-0030

- (17) The certificate holder shall construct the public road improvements described in the site certificate application to meet or exceed road standards for the road classifications in the County's Transportation System Plan and Zoning Ordinance because roads will require a more substantial section to bear the weight of the vehicles and turbine components than would usually be constructed by the County.
- (18) The certificate holder shall ensure that no equipment or machinery is parked or stored on any county road except while in use.
- (19) The site certificate holder shall design and construct private access roads to minimize the division of existing farm units.
- (20) The certificate holder shall not locate any aboveground facility structure (including wind turbines, O&M building, substations, and meteorological towers, but not including aboveground transmission and collector lines and junction boxes) within 30 feet from any property line or within 50 feet from the right-of-way of any arterial or major collector road or street and shall not allow any architectural feature, as described in Sherman County Zoning Ordinance Section 4.2, to project into these required setbacks by more than 2 feet.
- (21) The certificate holder shall locate access roads and temporary construction laydown and staging areas to minimize disturbance with farming practices and, wherever feasible, shall place turbines and transmission interconnection lines along the margins of cultivated areas to reduce the potential for conflict with farm operations. The certificate holder shall place aboveground transmission and collector lines and junction boxes along property lines and public road rights-of-way to the extent practicable.

(22)During operation of the facility, the certificate holder, in cooperation with 1 landowners, shall avoid impact on cultivated land to the extent reasonably 2 possible when performing facility repair and maintenance activities. 3 4 (23)Where necessary and feasible, the certificate holder shall provide access across 5 construction trenches to fields within the facility site and otherwise provide 6 adequate and timely access to properties during critical periods in the farming 7 cycle, such as harvest. 8 9 Before beginning construction of the facility, the certificate holder shall record a (24)10 Farm Management Easement covering the properties on which the certificate 11 holder locates wind power generation facilities. The certificate holder shall record 12 the easements in the real property records of Sherman County and shall file a 13 copy of the recorded easement with the Sherman County Planning Director. 14 15 The certificate holder shall remove from Special Farm Assessment the portions of (25)16 parcels on which facilities are located and shall pay all property taxes due and 17 payable after the Special Farm Assessment is removed from such properties. 18 19 20 D. **SOIL PROTECTION, OAR 345-022-0022** 21 The certificate holder shall conduct all construction work in compliance with an (26)22 Erosion and Sediment Control Plan (ESCP) satisfactory to the Oregon 23 Department of Environmental Quality and as required under the National 24 Pollutant Discharge Elimination System (NPDES) Storm Water Discharge 25 General Permit #1200-C. The certificate holder shall include in the ESCP any 26 procedures necessary to meet local erosion and sediment control requirements and 27 storm water management requirements. 28 29 (27)During construction of the facility, the certificate holder shall limit truck traffic to 30 designated existing and improved road surfaces to avoid soil compaction, to the 31 extent possible. 32 33 (28)The certificate holder shall cover turbine pad areas with gravel or other non-34 erosive material immediately following exposure during construction and shall 35 maintain the pad area covering during operation of the facility. 36 37 (29)During construction of the facility, the certificate holder shall restore areas that 38 are temporarily disturbed in accordance with the methods, monitoring procedures 39 and success criteria described in the Revegetation Plan that is incorporated in this 40 order as Attachment B and as that Revegetation Plan may be amended from time 41

to time. During operation of the facility, the certificate holder shall restore areas

that are temporarily disturbed during facility maintenance or repairs according to

the same methods and monitoring procedures.

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1 2 3		(30)	During operation of the facility, the certificate holder shall routinely inspect and maintain all roads, pads and trenched areas and, as necessary, maintain or repair erosion control measures.		
4 5 6 7 8		(31)	During construction of the underground collector system, the certificate holder shall open the smallest necessary sections of trench during each day of construction and backfill the trenches as soon as is practical after power lines have been set in the trenches.		
9 10 11 12 13		(32)	During construction of the facility, the certificate holder shall strip and stockpile soil from laydown areas only during the time of year when rainfall is lowest, minimizing erosion from precipitation.		
14 15		(33)	During construction of the facility, the certificate holder shall use straw bales or similar containment features to protect soil stockpiles from erosion, as needed.		
16 17 18		(34)	During construction of the facility, the certificate holder shall keep wind-borne erosion to a minimum by using water trucks for dust suppression, as necessary.		
19 20 21 22 23		(35)	During construction of the facility, the certificate holder shall restore staging locations by bringing them back to their original contours, covering them with topsoil, and revegetating or preparing them for planting of wheat or barley or use as range land.		
24 25	E.	Proti	ECTED AREAS, OAR 345-022-0040		
26 27 28 29 30 31		(36)	Without Department approval, the certificate holder shall not move any turbines within its micrositing corridors such that a worst-case visual impact beyond that stated in the ASC and ASC Supplement would occur for the John Day Wildlife Refuge, the John Day Federal Wild and Scenic River, or the John Day State Scenic Waterway (Parrish Creek to Tumwater Falls).		
32 33 34	F.		C AND AESTHETIC VALUES, OAR 345-022-0080 onditions]		
35 36 37	G.		EATION, OAR 345-022-0100 onditions]		
38 39 40	Н.	PUBLI 024-0	C HEALTH AND SAFETY STANDARDS FOR WIND ENERGY FACILITIES, OAR 345-010		
41 42 43 44 45		(37)	During construction, operation or retirement of the facility, the certificate holder shall notify the Department within 72 hours of any accidents that may result in public health and safety concerns, including mechanical failures on the site associated with construction or operation of the facility.		

(38)Before beginning construction of any phase of the facility, the certificate holder 1 shall submit a Notice of Proposed Construction or Alteration to the Federal 2 Aviation Administration (FAA) identifying the proposed final locations of the 3 turbines and related or supporting facilities for that phase of the facility. The 4 certificate holder shall notify the Department of the FAA's response as soon as it 5 has been received. 6 7 (39)The certificate holder shall enclose the facility substation with appropriate fencing 8 and locked gates to protect the public from electrical hazards. 9 10 (40)The certificate holder shall not locate turbine towers within 450 feet of any 11 residence. The certificate holder shall not locate turbine towers within 450 feet of 12 any public road, unless the certificate holder demonstrates to the Department's 13 satisfaction that a lesser setback is consistent with the protection of public health 14 and safety... 15 16 (41) The certificate holder shall construct turbine towers that are smooth steel 17 structures with no exterior ladders or access to the turbine blades and shall install 18 locked access doors accessible only to authorized personnel. 19 20 (42)During construction of the facility, the certificate holder shall follow 21 manufacturers' recommended handling instructions and procedures to prevent 22 damage to towers or blades that could lead to failure. 23 24 (43) During operation of the facility, the certificate holder shall have an operational 25 safety-monitoring program and shall inspect turbine blades on a regular basis for 26 signs of wear. The certificate holder shall repair turbine blades as necessary to 27 protect public safety. 28 29 (44)During operation of the facility, the certificate holder shall install and maintain 30 self-monitoring devices on each turbine, connected to a fault annunciation panel 31 or supervisory control and data acquisition (SCADA) system at the O&M facility, 32 33 to alert operators to potential dangerous conditions, and the certificate holder shall remedy any dangerous conditions immediately. 34 35 (45)During construction of the facility, the certificate holder shall install generator 36 step-up transformers at the base of each turbine tower in locked cabinets designed 37 to protect the public from electrical hazards and to avoid creation of artificial 38 habitat for raptor prey. 39 40 During construction of the facility, the certificate holder shall require that all on-41 (46)site construction contractors develop and implement a site health and safety plan 42 that informs on-site workers and others what to do in case of an emergency and 43 that includes the locations of fire extinguishers and nearby hospitals, important

telephone numbers, and first aid techniques.

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(47) During operation of the facility, the certificate holder shall develop and 1 implement a site health and safety plan that informs on-site employees and others 2 what to do in case of an emergency and that includes the locations of fire 3 extinguishers and nearby hospitals, important telephone numbers, and first aid 4 techniques. 5 6 7 I. SITING STANDARDS FOR WIND ENERGY FACILITIES, OAR 345-024-0015 8 The certificate holder shall construct turbines on concrete foundations and shall (48)9 cover the ground within a minimum 10-foot radius with non-flammable material. 10 The certificate holder shall maintain the non-flammable pad area covering 11 throughout operation of the facility. 12 13 (49)During construction and operation of the facility, the certificate holder shall 14 implement a plan to control the introduction and spread of noxious weeds. The 15 certificate holder shall develop the weed control plan in consultation with the 16 Sherman County Weed Control District and the Department. 17 18 (50)During construction of the facility, to reduce the visual impact of the facility, the 19 certificate holder shall: 20 21 Paint turbine towers, nacelles, rotors, meteorological towers, and cabinets (a) 22 containing pad-mounted equipment with a low-reflectivity, neutral gray, 23 white, off-white or earth tone finish to reduce contrast with the 24 surrounding background. 25 26 27 (b) Apply a low-reflectivity finish to the exterior of the O&M building and substation equipment to control their visual integration into the 28 surrounding background. 29 30 With the exception of the turbine manufacturer's logo that may appear on 31 (c) turbine nacelles, not allow any advertising to be used on any part of the 32 33 facility or on any signs posted at the facility. 34 (d) Use only those signs required by law or for facility safety or security, 35 except that the certificate holder may erect a sign near the O&M facility or 36 substation to identify the wind energy facility. 37 38 (51)The certificate holder shall design and construct the O&M building to be 39 generally consistent with the character of similar buildings used by commercial 40 farmers or ranchers in the area and shall paint the building in a neutral color to 41 blend with the surrounding background. 42 43 (52)The certificate holder shall not use exterior nighttime lighting except: 44

1 2			(a)	The minimum turbine tower lighting required by the Federal Aviation Administration.				
3 4 5			(b)	Security lighting at the O&M building and substation, provided that such lighting is shielded or directed downward to reduce glare.				
6 7			(c)	Minimum lighting necessary for repairs or emergencies.				
8 9	J.	SITING	G STANI	DARDS FOR TRANSMISSION LINES, OAR 345-024-0090				
10 11 12 13 14		(53)	curren	The certificate holder shall design the transmission lines so that alternating current electric fields shall not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public.				
15 16		(54)		ertificate holder shall design the transmission lines so that induced voltages ng from the transmission lines are as low as reasonably achievable.				
17 18	K.	THRE	ATENED	AND ENDANGERED SPECIES, OAR 345-022-0070				
19 20 21 22		(55)	the De	e beginning construction of the facility, the certificate holder shall deliver to epartment surveys for threatened and endangered plant and wildlife species by affected areas as identified in the ASC Supplement.				
23 24 25 26 27 28 29 30 31 32 33 34		(56)	the ON ODFV nesting two m databa have betwo m measu	struction of the facility begins after 2006, the certificate holder shall review NHIC and USFWS databases and consult with an expert designated by W on an annual basis before beginning construction to determine whether g bald eagles or peregrine falcons have been documented to occur within iles of the facility. The certificate holder shall report the results of the ase review and consultation to the Department and to ODFW and, if there been new documentations of nesting bald eagles or peregrine falcons within iles of the facility, the certificate holder shall implement appropriate res to protect the species from adverse impact, as approved by the truent and ODFW.				
35 36 37 38 39		(57)		ertificate holder shall implement measures to mitigate impacts to sensitive fe habitat during construction including, but not limited to, the following: Preparing maps to show sensitive areas, such as nesting or denning areas for sensitive wildlife species, that are off limits to construction personnel.				
40 41 42 43 44			(b)	Ensuring that a qualified person instructs construction personnel to be aware of wildlife in the area and to take precautions to avoid injuring or destroying wildlife or significant wildlife habitat.				
45 46 47			(c)	Avoiding unnecessary road construction, temporary disturbance and vehicle use.				

L. FISH AND WILDLIFE HABITAT, OAR 345-022-0060

- (58)The certificate holder shall design and construct all aboveground transmission line support structures following the practices suggested by the Avian Powerline Interaction Committee (APLIC 1996, referenced in the site certificate application, p. P-33) and shall install anti-perching devices on transmission pole tops and cross arms where the poles are located within one-half mile of any wind turbine.
- (59)The certificate holder may construct turbines and other facility components within the 500-foot corridors shown on Figures P-1 through P-10 of the site certificate application and March 2006 supplement, subject to the following requirements addressing potential habitat impact:
 - (a) The certificate holder shall not construct any facility components within areas of Category 1 or Category 2 habitat and shall avoid temporary disturbance of Category 1 or Category 2 habitat.
 - (b) The certificate holder shall design and construct facility components that are the minimum size needed for safe operation of the energy facility.
 - To the extent possible, the certificate holder shall construct facility (c) components in the locations shown on Figure C-2 of the March 2006 site certificate application supplement.
- (60)During construction, the certificate holder shall protect the area within a 1300foot buffer around any active nests of the following species during the sensitive period, as provided in this condition:

Species	Sensitive Period	Early Release Date
Swainson's hawk	April 1 to August 15	May 31
Golden eagle	February 1 to August 31	May 31
Ferruginous hawk	March 15 to August 15	May 31
Burrowing owl	April 1 to August 15	July 15

The 1300-foot buffer may be reduced, with Department approval, if there is an adequate physical barrier between the nest site and the construction impacts such that a 1300-foot buffer proves to be excessive.

During the year in which construction of any phase occurs, the certificate holder shall use a protocol approved by the Oregon Department of Fish and Wildlife (ODFW) to determine whether there are any active nests of these species within a half-mile of any areas that would be disturbed during construction. If a nest is occupied by any of these species after the beginning of the sensitive period, the certificate holder shall not engage in high-impact construction activities (activities that involve blasting, grading or other major ground disturbance) or allow high levels of construction traffic within 1300 feet of the nest site, or such lesser

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distance as may be approved by the Department in the event there is an adequate physical barrier between the nest site and the construction impacts.

In addition, the certificate holder shall flag the boundaries of the 1300-foot buffer area, or such lesser distance as may be approved by the Department in the event there is an adequate physical barrier between the nest site and the construction impacts, and shall instruct construction personnel to avoid any unnecessary activity within the buffer area. The certificate holder shall direct a qualified independent third-party biological monitor, as approved by the Department, to observe the active nest sites during the sensitive period for signs of disturbance and to notify the Department of any non-compliance with this condition. If the monitor observes nest site abandonment or other adverse impact to nesting activity, the certificate holder shall implement appropriate mitigation, in consultation with ODFW and subject to the approval of the Department, unless the adverse impact is clearly shown to have a cause other than construction activity. The certificate holder may begin or resume high impact construction activities before the ending day of the sensitive period if any known nest site is not occupied by the early release date. If a nest site is occupied, then the certificate holder may begin or resume high-impact construction before the ending day of the sensitive period with the approval of ODFW, after the young are fledged. The certificate holder shall use a protocol approved by ODFW to determine when the young are fledged (the young are independent of the core nest site).

(61) The certificate holder shall conduct wildlife monitoring and mitigation in accordance with the Wildlife Monitoring and Mitigation Plan that is incorporated in the order as Attachment A and as may be amended from time to time.

(62) The certificate holder shall restore areas that are temporarily disturbed during construction in accordance with the methods, monitoring procedures and success criteria set forth in the Revegetation Plan that is incorporated in the order as Attachment B and as may be amended from time to time.

(63) Before beginning construction of the facility, the certificate holder shall acquire the legal right to create, maintain and protect a habitat mitigation area for the life of the facility by means of an outright purchase, conservation easement or similar conveyance and shall provide a copy of the documentation to the Department. Within the habitat mitigation area, the certificate holder shall improve the habitat quality in accordance with the Habitat Mitigation Plan that is incorporated in the order as Attachment C and as may be amended from time to time.

(64) For the life of the project, the certificate holder shall provide to the appropriate staff of the Confederated Tribes of the Warm Springs Reservation of Oregon the same annual mitigation and monitoring reports it submits to the Department.

(65) For the life of the project, the certificate holder shall consult annually with the appropriate staff of the Confederated Tribes of the Warm Springs Reservation of Oregon to discuss noxious weed or other issues that may arise from the close proximity of the facility site and tribal lands. The certificate holder shall provide a summary of that consultation in the annual report it provides to the Department.

M. STRUCTURAL STANDARD, OAR 345-022-0020

(66) Before beginning construction of the facility, the certificate holder shall conduct a site-specific geotechnical investigation and shall report its findings to the Oregon Department of Geology & Mineral Industries (DOGAMI). The certificate holder shall conduct the geotechnical investigation after consultation with DOGAMI and in accordance with the Oregon Board of Geologists Examiners guidelines entitled: Guidelines for Engineering Geology Reports and Site-Specific Seismic Hazard Report.

(67) The certificate holder shall design and construct the facility in accordance with requirements set forth by the State of Oregon's Building Code Division and any other applicable codes and design procedures.

(68) The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety presented by non-seismic hazards. As used in this condition, "non-seismic hazards" include settlement, landslides, flooding and erosion.

N. HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES, OAR 345-022-0090

Before beginning construction of any phase of the facility, the certificate holder (69)shall provide to the Department a map showing the final design locations of all components of that phase of the facility and areas that would be temporarily disturbed during construction and also showing the areas surveyed by CH2M Hill in preparing the Cultural Resources Survey for Biglow Canyon Wind Farm included in the site certificate application as Attachment S-1. The certificate holder shall hire qualified personnel to conduct field investigation of all areas of permanent or temporary disturbance that CH2M Hill did not previously survey and shall provide to the Department a written report of the field investigation. If any significant historic, cultural or archaeological resources are found during the field investigation, the certificate holder shall ensure that construction and operation of the facility will have no impact on the resources. The certificate holder shall instruct all construction personnel to avoid areas where the resources were found and shall implement other appropriate measures to protect the resources.

(70) The certificate holder shall ensure that a qualified person instructs construction personnel in the identification of cultural resources.

- (71) The certificate holder shall ensure that a qualified archaeologist is present on site during any ground-disturbing activities, including grading and graveling; or, the certificate holder shall implement an alternate monitoring procedure, including a testing strategy, as agreed to in consultation with the Department, SHPO, and the tribes.
- (72) The certificate holder shall ensure that construction personnel cease all ground-disturbing activities in the immediate area if any archaeological or cultural resources are found during construction of the facility until a qualified archaeologist can evaluate the significance of the find. The certificate holder shall notify the Department and the State Historic Preservation Office (SHPO) of the find. If the archaeologist determines that the resource is significant, the certificate holder shall make recommendations to the Council for mitigation, including avoidance or data recovery, in consultation with the Department, SHPO, and other appropriate parties. The certificate holder shall not restart work in the affected area until the certificate holder has demonstrated to the Department that it has complied with the archaeological permit requirements administered by SHPO.
- (73) The certificate holder shall ensure that construction personnel proceed carefully in the vicinity of the mapped alignment of the Oregon Trail. If any intact physical evidence of the trail is discovered, the certificate holder shall avoid any disturbance to the intact segments, by redesign, re-engineering or restricting the area of construction activity. The certificate holder shall promptly notify the Department and SHPO of the discovery. The certificate holder shall consult with the Department and with SHPO to determine appropriate mitigation measures.

O. **Public Services, OAR 345-022-0110**

- (74) During construction of the facility, the certificate holder and its contractors shall obtain all water required for construction activities from off-site sources previously permitted for such uses.
- (75) Before beginning operation of the facility, the certificate holder shall have in operation a well suitable for delivering water, not exceeding 5,000 gallons per day, for domestic use at the facility's O&M building and, provided the rate of extraction would not exceed 5,000 gallons per day, blade-washing activities. The certificate holder shall not change the source of water for the facility's domestic use without prior Council approval.
- Ouring operation of the facility, the certificate holder and its contractors shall obtain all water required for blade-washing activities from off-site sources previously permitted for such uses or from the on-site well, provided such use of well water would not cause the rate of extraction to exceed 5,000 gallons in any one-day period.

(77)Before beginning construction of the facility, the certificate holder shall develop a 1 system for monitoring state highways and local roads that would serve as 2 transporter routes for delivering equipment to the facility site for degradation, 3 e.g., major potholes, so that safe travel paths may be maintained. The monitoring 4 system shall include site inspection and photographic cataloguing of existing road 5 conditions so that pre-construction conditions can be compared with conditions 6 after construction has been completed. Orion shall coordinate monitoring methods 7 and preferred mitigation efforts with Sherman County Public Works and the 8 Oregon Department of Transportation. 9 10 (78)After completing construction of the facility, the certificate holder shall restore 11 state highways and county roads affected by facility construction activities to at 12 least their pre-construction conditions, to the satisfaction of Sherman County 13 Public Works and the Oregon Department of Transportation. 14 15 (79)During construction of the facility, the certificate holder shall implement the 16 following measures to reduce traffic delays on county roads serving as transporter 17 routes for delivery of equipment to the facility site: 18 19 (a) Provide notice to adjacent landowners when construction takes place to 20 help minimize access disruptions; 21 22 Provide proper road signage and warnings of "Equipment on Road," (b) 23 "Truck Access," or "Road Crossings;" 24 25 (c) Implement traffic diversion equipment, such as advance signage and pilot 26 cars, whenever possible when slow or oversized loads are being hauled; 27 28 Encourage carpooling for the construction workforce to reduce traffic (d) 29 volume; 30 31 Employ flaggers, as necessary, to direct traffic when large equipment is (e) 32 33 entering or exiting public roads to minimize risk of accidents; and 34 (f) Maintain at least one travel lane at all times so that roadways will not be 35 closed to traffic as a result of construction vehicles entering or exiting 36 public roads. 37 38 39 Ρ. WASTE MINIMIZATION, OAR 345-022-0120 40 The certificate holder shall use hazardous materials in a manner that protects 41 (80)public health, safety and the environment and shall comply with applicable local, 42 state and federal environmental laws and regulations. 43 44 (81)If a spill or release of hazardous materials occurs during construction or operation 45

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of the facility, the certificate holder shall notify the Department within 72 hours

1 2 3 4 5 6 7		and shall clean up the spill or release and dispose of any contaminated soil or other materials according to applicable regulations. The certificate holder shall ensure that spill kits containing items such as absorbent pads are located on equipment and storage facilities to respond to accidental spills and shall instruct employees handling hazardous materials in the proper handling, storage and cleanup of these materials.
8 9 10 11	(82)	During construction of the facility, the certificate holder shall provide portable toilets for on-site sewage handling and shall ensure that the portable toilets are pumped and cleaned regularly by a licensed contractor that is qualified to pump and clean portable toilet facilities.
13 14 15 16	(83)	During operation of the facility, the certificate holder shall discharge sanitary wastewater generated at the O&M building to a licensed on-site septic system in compliance with county permit requirements. The certificate holder shall design the septic system with a capacity that is less than 2,500 gallons per day.
18 19	(84)	During construction of the facility, the certificate holder shall implement a waste management plan that includes but is not limited to the following measures:
20 21		(a) Training employees to minimize and recycle solid waste;
22232425		(b) Minimizing the generation of wastes from construction through detailed estimating of materials needs and through efficient construction practices;
26 27		(c) Recycling steel and other metal scrap;
28 29		(d) Recycling wood waste;
30 31		(e) Recycling packaging wastes, such as paper and cardboard;
32 33		(f) Collecting non-recyclable waste for transport to a landfill by a licensed waste hauler; and
34 35 36 37 38		(g) Segregating all hazardous wastes, such as used oil, oily rags and oil- absorbent materials, mercury-containing lights and lead-acid and nickel- cadmium batteries for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous wastes.
39 40 41 42 43 44 45 46	(85)	The certificate holder may dispose of waste concrete on site with the permission of the landowner and in accordance with OAR 340-093-0080 and other applicable regulations. The certificate holder shall dispose of waste concrete on site by placing the material in an excavated hole, covering the concrete with at least 3 feet of topsoil, and grading the area to match existing contours. If the waste concrete is not disposed of on site, the certificate holder shall arrange for proper disposal in a licensed landfill.

maximum sound power level of the GE 3.0-MW turbine is 106 dBA) will be used at the facility, before beginning construction, the certificate holder shall present information demonstrating to the satisfaction of the Department that each of the following requirements have been met at all 25 properties identified as noise sensitive properties in the site certificate application:

- (a) For any noise sensitive property listed in Table 12 where the predicted maximum hourly L_{50} noise level caused by the facility would equal or exceed 50 dBA, the certificate holder shall identify the final design locations of all turbines to be built and perform a noise analysis demonstrating, in accordance with OAR 340-035-0035(1)(b)(B)(iii)(IV), that the total hourly L_{50} noise level generated by the facility would not exceed 50 dBA at the appropriate measurement point. The certificate holder shall perform the noise analysis using the CADNA/A by DataKustik GmbH of Munich, Germany, and shall assume the following input parameters:
 - The maximum sound power level warranted by the manufacturer or confirmed by other means acceptable to the Department
 - The exact locations of the proposed turbines
 - The environmental factors included in the original noise analysis, *i.e.*, the temperature, relative humidity, barrier effects and ground effects used in the original analysis. If the certificate holder has cause to believe the environmental factors included in the original noise analysis are no longer valid for a particular receiver, the certificate holder shall perform the noise analysis for that receiver using both the environmental factors included in the original noise analysis and the environmental factors the certificate holder now believes to be applicable to that receiver.
- (b) Where the hourly L₅₀ noise levels caused by the facility would exceed 36 dBA but not exceed 50 dBA at any noise sensitive property listed in Table 12, the certificate holder has obtained a legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L₁₀ and L₅₀ by more than 10 dBA at the appropriate measurement point. A legally effective easement or real covenant shall: (i) include a legal description of the burdened property (the noise sensitive property); (ii) be recorded in the real property records of the county; (iii) expressly benefit the certificate holder; (iv) expressly run with the land and bind all future owners, lessees or holders of any interest in the burdened property; and (v) not be subject to revocation without the certificate holder's written approval.
- (c) If, for any noise sensitive property listed in Table 12 where the hourly L₅₀ noise levels caused by the facility would exceed 36 dBA but not exceed 50 dBA, the certificate holder has not obtained a legally effective easement or

real covenant as described in (b) above, the certificate holder shall identify the final design locations of all turbines to be built and perform a noise analysis demonstrating, in accordance with OAR 340-035-0035(1)(b)(B)(iii)(IV), that the total noise generated by the facility would meet the ambient noise degradation test at the appropriate measurement point on those noise sensitive properties. The certificate holder shall perform the noise analysis using the CADNA/A by DataKustik GmbH of Munich, Germany, and shall assume the following input parameters:

- The maximum sound power level warranted by the manufacturer or confirmed by other means acceptable to the Department
- The exact locations of the proposed turbines
- The environmental factors included in the original noise analysis, *i.e.*, the temperature, relative humidity, barrier effects and ground effects used in the original analysis. If the certificate holder has cause to believe the environmental factors included in the original noise analysis are no longer valid for a particular receiver, the certificate holder shall perform the noise analysis for that receiver using both the environmental factors included in the original noise analysis and the environmental factors the certificate holder now believes to be applicable to that receiver.
- (91) If turbines other than the GE 1.5-MW turbines (for which the certificate holder states the maximum sound power level warranted by the manufacturer is 104 dBA) or the GE 3.0-MW turbines (for which the certificate holder has assumed a maximum sound power level of 106 dBA) will be used at the facility, before beginning construction of the facility the certificate holder shall identify the final design locations of all turbines to be built, perform a complete new noise analysis for all turbines, and generate a new table listing each noise sensitive property, as defined in OAR 340-035-0015(3), and the predicted maximum hourly L₅₀ noise level at each noise sensitive property. The certificate holder shall perform the noise analysis using the CADNA/A by DataKustik GmbH of Munich, Germany, and shall assume the following input parameters:
 - The maximum sound power level warranted by the manufacturer or confirmed by other means acceptable to the Department
 - The exact locations of the proposed turbines
 - The environmental factors included in the original noise analysis, *i.e.*, the temperature, relative humidity, barrier effects and ground effects used in the original analysis. If the certificate holder has cause to believe the environmental factors included in the original noise analysis are no longer valid for a particular receiver, the certificate holder shall perform the noise analysis for that receiver using both the environmental factors included in the original noise analysis and the environmental factors the certificate holder now believes to be applicable to that receiver.

After generating the new table identifying noise sensitive properties and the predicted maximum hourly L_{50} noise level at each noise sensitive property, the

1 2			certificate holder shall meet Conditions (90)(a), (90)(b) and (90)(c) with respect to the noise sensitive properties identified in that table.				
3 4 5	R.	REMOVAL-FILL LAW [No conditions]					
6 7 8	S.		UND WATER ACT onditions]				
9 10 11	T.	PUBL	IC HEALTH AND SAFETY				
12 13 14 15		(92)	During operation of the facility, the certificate holder shall maintain built-in fire prevention measures in each turbine that would shut down the turbine automatically before mechanical problems create excess heat or sparks.				
16 17 18 19 20 21 22		(93)	During construction and operation of the facility, the certificate holder shall develop and implement fire management plans in consultation with local fire control authorities to minimize the risk of fire and to respond appropriately to any fires that occur on the facility site. In developing the fire management plans, the certificate holder should take into account the dry nature of the region and should address risks on a seasonal basis.				
23 24 25 26		(94)	During construction and operation of the facility, the certificate holder shall ensure that each on-site company vehicle contains a fire extinguisher, water spray can, shovel, emergency response procedures book, and two-way radio for immediate communication with the O&M facility.				
27 28 29 30 31		(95)	During construction of the facility, the certificate holder shall clear vegetation from a laydown area adjacent to each wind turbine where welding, cutting, grinding, or other flame- or spark-producing operations are likely to occur.				
32 33 34 35 36 37		(96)	Upon beginning operation of the facility, the certificate holder shall provide to all local fire departments maps of the facility site. During operation of the facility, the certificate holder shall provide to all local fire departments the names and telephone numbers of facility personnel available to respond on a 24-hour basis in case of an emergency on the facility site.				
38 39 40 41 42 43		(97)	During operation of the facility, the certificate holder shall ensure that all on-site employees receive annual fire prevention and response training by qualified instructors or members of the local fire department and that all employees are instructed to keep vehicles on roads and off dry grassland, except when off-road operation is required for emergency purposes.				
43 44 45 46		(98)	During operation of the facility, the certificate holder shall ensure that water-carrying trailers ("water buffaloes") are maintained at strategic locations around the facility site and that a water buffalo is always present at a job site where there				

is substantial risk of fire. Each water buffalo shall be equipped with one-inch hoses, have a capacity of 500 gallons of water, and be equipped with a 5-horsepower pump with a pumping rate of 60 gallons per minute. Each water buffalo shall be capable of being towed by on-site service vehicles or pickup trucks.

(99) The certificate holder shall take reasonable steps to reduce or manage exposure to electromagnetic fields (EMF), consistent with Council findings presented in the "Report of EMF Committee to the Energy Facility Siting Council," March 30, 1993, and subsequent findings. Effective on the date of this site certificate, the certificate holder shall provide information to the public, upon request, about EMF levels associated with the energy facility and related transmission lines.

(100) At least 30 days before beginning preparation of detailed design and specifications for the electrical transmission lines, the certificate holder shall consult with the Oregon Public Utility Commission staff to ensure that its designs and specifications are consistent with applicable codes and standards.

V. CONDITIONS REQUIRED BY COUNCIL RULES

This section lists conditions specifically required by OAR 345-027-0020 (Mandatory Conditions in Site Certificates), OAR 345-027-0028 (Monitoring Conditions), and OAR Chapter 345, Division 26 (Construction and Operation Rules for Facilities). All references to the Office of Energy or Office shall be construed to refer to the Department of Energy. These conditions should be read together with the specific facility conditions included in Section IV to ensure compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect the public health and safety. The certificate holder shall comply with all site certificate conditions.

The Council recognizes that many specific tasks related to the design, construction, operation and retirement of the facility will be undertaken by the certificate holder's agents or contractors. Nevertheless, the certificate holder is responsible for ensuring compliance with all provisions of the site certificate.

(101) OAR 345-027-0020(1): The Council shall not change the conditions of the site certificate except as provided for in OAR Chapter 345, Division 27.

(102) OAR 345-027-0020(2): Except as provided in OAR 345-027-0023(6), before beginning construction, the certificate holder shall submit to the Office of Energy a legal description of the site.

(103) OAR 345-027-0020(3): The certificate holder shall design, construct, operate and retire the facility:

(a) Substantially as described in the site certificate;

1 2 3		(b) In compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the time the site certificate is issued; and
4 5 6		(c) In compliance with all applicable permit requirements of other state agencies.
7	(104)	OAR 345-027-0020(4): The certificate holder shall begin and complete
8 9	(104)	construction of the facility by the dates specified in the site certificate.
10		construction of the facility by the dates specified in the site certificate.
	(105)	OAR 345-027-0020(5): Except as necessary for the initial survey or as otherwise
11	(103)	allowed for transmission lines or pipelines under this section, the certificate
12		holder shall not begin construction, as defined in OAR 345-001-0010, or create a
13		clearing on any part of the site until the certificate holder has construction rights
14		on all parts of the site. For the purpose of this rule, "construction rights" means
15 16		the legal right to engage in construction activities. For transmission lines or
		pipelines, if the certificate holder does not have construction rights on all parts of
17 18		the site, the certificate holder may nevertheless begin construction, as defined in
		OAR 345-001-0010, or create a clearing on a part of the site if:
19		OAK 545-001-0010, of create a clearing on a part of the site if.
20 21		(a) The certificate holder has construction rights on that part of the site; and
		(a) The certificate holder has construction rights on that part of the site, and
22 23		(b) The certificate holder would construct and operate part of the facility on
24		that part of the site even if a change in the planned route of the
		transmission line or pipeline occurs during the certificate holder's
25 26		negotiations to acquire construction rights on another part of the site.
27		negotiations to acquire construction rights on another part of the site.
	(106)	OAR 345-027-0020(6): If the Council requires mitigation based on an affirmative
28	(100)	finding under any standards of Division 22 or Division 24 of this chapter, the
29		certificate holder shall consult with affected state agencies and local governments
30		designated by the Council and shall develop specific mitigation plans consistent
31		with Council findings under the relevant standards. The certificate holder must
32		submit the mitigation plans to the Office and receive Office approval before
33		beginning construction or, as appropriate, operation of the facility.
34		beginning construction of, as appropriate, operation of the facility.
35	(107)	OAR 345-027-0020(7): The certificate holder shall prevent the development of
36	(107)	any conditions on the site that would preclude restoration of the site to a useful,
37		•
38		non-hazardous condition to the extent that prevention of such site conditions is
39		within the control of the certificate holder.
40	(100)	OAD 245 027 0020(8). Defens beginning construction of the facility, the
41	(108)	OAR 345-027-0020(8): Before beginning construction of the facility, the
42		certificate holder shall submit to the State of Oregon, through the Council, a bond
43		or letter of credit, satisfactory to the Council, in an amount specified in the site
44		certificate to restore the site to a useful, non-hazardous condition. The certificate
45		holder shall maintain a bond or letter of credit in effect at all times until the

facility has been retired. The Council may specify different amounts for the bond 1 or letter of credit during construction and during operation of the facility. 2 3 (109) OAR 345-027-0020(9): The certificate holder shall retire the facility if the 4 certificate holder permanently ceases construction or operation of the facility. The 5 certificate holder shall retire the facility according to a final retirement plan 6 approved by the Council, as described in OAR 345-027-0110. The certificate 7 holder shall pay the actual cost to restore the site to a useful, non-hazardous 8 condition at the time of retirement, notwithstanding the Council's approval in the 9 site certificate of an estimated amount required to restore the site. 10 11 (110) OAR 345-027-0020(10): The Council shall include as conditions in the site 12 certificate all representations in the site certificate application and supporting 13 record the Council deems to be binding commitments made by the applicant. 14 15 (111) OAR 345-027-0020(11): Upon completion of construction, the certificate holder 16 shall restore vegetation to the extent practicable and shall landscape portions of 17 the site disturbed by construction in a manner compatible with the surroundings 18 and proposed use. Upon completion of construction, the certificate holder shall 19 dispose of all temporary structures not required for facility operation and all 20 timber, brush, refuse and flammable or combustible material resulting from 21 clearing of land and construction of the facility. 22 23 (112) OAR 345-027-0020(12): The certificate holder shall design, engineer and 24 construct the facility to avoid dangers to human safety presented by seismic 25 hazards affecting the site that are expected to result from all maximum probable 26 seismic events. As used in this rule "seismic hazard" includes ground shaking, 27 landslide, liquefaction, lateral spreading, tsunami inundation, fault displacement 28 and subsidence. 29 30 (113) OAR 345-027-0020(13): The certificate holder shall notify the Office, the State 31 Building Codes Division and the Department of Geology and Mineral Industries 32 promptly if site investigations or trenching reveal that conditions in the 33 foundation rocks differ significantly from those described in the application for a 34 site certificate. After the Office receives the notice, the Council may require the 35 certificate holder to consult with the Department of Geology and Mineral 36 Industries and the Building Codes Division and to propose mitigation actions. 37 38 (114) OAR 345-027-0020(14): The certificate holder shall notify the Office, the State 39 Building Codes Division and the Department of Geology and Mineral Industries 40 promptly if shear zones, artesian aquifers, deformations or clastic dikes are found 41 at or in the vicinity of the site. 42

(115) OAR 345-027-0020(15): Before any transfer of ownership of the facility or

ownership of the site certificate holder, the certificate holder shall inform the

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Office of the proposed new owners. The requirements of OAR 345-027-0100 apply to any transfer of ownership that requires a transfer of the site certificate.

- (116) OAR 345-027-0020(16): If the Council finds that the certificate holder has permanently ceased construction or operation of the facility without retiring the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110, the Council shall notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the Office within a reasonable time not to exceed 90 days. If the certificate holder does not submit a proposed final retirement plan by the specified date, the Council may direct the Office to prepare a proposed a final retirement plan for the Council's approval. Upon the Council's approval of the final retirement plan, the Council may draw on the bond or letter of credit described in section (8) to restore the site to a useful, non-hazardous condition according to the final retirement plan, in addition to any penalties the Council may impose under OAR Chapter 345, Division 29. If the amount of the bond or letter of credit is insufficient to pay the actual cost of retirement, the certificate holder shall pay any additional cost necessary to restore the site to a useful, non-hazardous condition. After completion of site restoration, the Council shall issue an order to terminate the site certificate if the Council finds that the facility has been retired according to the approved final retirement plan.
- (117) OAR 345-027-0023(4): If the energy facility or related or supporting facility is a transmission line, the certificate holder shall restore the reception of radio and television at residences and commercial establishments in the primary reception area to the level present prior to operations of the transmission line, at no cost to residents experiencing interference resulting from the transmission line.
- (118) OAR 345-027-0023(5): If the facility includes any high voltage transmission line under Council jurisdiction:
 - (a) The certificate holder shall design, construct and operate the transmission line in accordance with the requirements of the National Electrical Safety Code (American National Standards Institute, Section C2, 1997 Edition); and
 - (b) The certificate holder shall develop and implement a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a permanent nature that could become inadvertently charged with electricity are grounded or bonded throughout the life of the line.
- (119) OAR 345-027-0023(6): If the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a pipeline or transmission line, the Council shall specify an approved corridor in the site certificate and shall allow the certificate holder to construct the pipeline or

transmission line anywhere within the corridor, subject to the conditions of the 1 site certificate. If the applicant has analyzed more than one corridor in its 2 application for a site certificate, the Council may, subject to the Council's 3 standards, approve more than one corridor. Before beginning operation of the 4 facility, the certificate holder shall submit to the Office a legal description of the 5 permanent right-of-way where the applicant has built the pipeline or transmission 6 line within an approved corridor. The site of the pipeline or transmission line 7 subject to the site certificate is the area within the permanent right-of-way. 8 9 (120) OAR 345-027-0028: The following general monitoring conditions apply: 10 11 (a) 12 13 14 15 16 17 18 operation of the facility. 19 20 (b) 21 22 agencies and local governments. 23 24 25 (c) 26 27

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- The certificate holder shall consult with affected state agencies, local governments and tribes and shall develop specific monitoring programs for impacts to resources protected by the standards of divisions 22 and 24 of this chapter and resources addressed by applicable statutes, administrative rules and local ordinances. The certificate holder must submit the monitoring programs to the Office of Energy and receive Office approval before beginning construction or, as appropriate,
- The certificate holder shall implement the approved monitoring programs described in section (a) and monitoring programs required by permitting
- For each monitoring program described in sections (a) and (b), the certificate holder shall have quality assurance measures approved by the Office before beginning construction or, as appropriate, before beginning commercial operation.
- (d) If the certificate holder becomes aware of a significant environmental change or impact attributable to the facility, the certificate holder shall, as soon as possible, submit a written report to the Office describing the impact on the facility and any affected site certificate conditions.
- (121) OAR 345-026-0048: Following receipt of the site certificate, the certificate holder shall implement a plan that verifies compliance with all site certificate terms and conditions and applicable statutes and rules. As a part of the compliance plan, to verify compliance with the requirement to begin construction by the date specified in the site certificate, the certificate holder shall report promptly to the Office of Energy when construction begins. Construction is defined in OAR 345-001-0010. In reporting the beginning of construction, the certificate holder shall describe all work on the site performed before beginning construction, including work performed before the Council issued the site certificate, and shall state the cost of that work. For the purpose of this exhibit, "work on the site" means any work within a site or corridor, other than surveying, exploration or other activities to define or characterize the site or corridor. The certificate holder shall document

1 2		the con	-	e plan and maintain it for inspection by the Department or the
3 4 5	(122)		345-026 ements:	-0080: The certificate holder shall report according to the following
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7		(a)		al reporting obligation for non-nuclear facilities under construction
8			or open	•
9			(i)	Within six months after beginning construction, and every six
10				months thereafter during construction of the energy facility and
11				related or supporting facilities, the certificate holder shall submit a
12				semiannual construction progress report to the Council. In each
13				construction progress report, the certificate holder shall describe
14				any significant changes to major milestones for construction. The certificate holder shall include such information related to
15 16				construction as specified in the site certificate. When the reporting
16 17				date coincides, the certificate holder may include the construction
18				progress report within the annual report described in this rule;
19			(ii)	The certificate holder shall, within 120 days after the end of each
20			(11)	calendar year after beginning construction, submit an annual report
21				to the Council addressing the subjects listed in this rule. The
22				Council secretary and the certificate holder may, by mutual
23				agreement, change the reporting date.
24			(iii)	To the extent that information required by this rule is contained in
25			()	reports the certificate holder submits to other state, federal or local
26				agencies, the certificate holder may submit excerpts from such
27				other reports to satisfy this rule. The Council reserves the right to
28				request full copies of such excerpted reports.
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30		(b)	In the	annual report, the certificate holder shall include the following
31			inform	ation for the calendar year preceding the date of the report:
32			(i)	Facility Status: An overview of site conditions, the status of
33				facilities under construction, and a summary of the operating
34				experience of facilities that are in operation. In this section of the
35				annual report, the certificate holder shall describe any unusual
36				events, such as earthquakes, extraordinary windstorms, major
37				accidents or the like that occurred during the year and that had a
38				significant adverse impact on the facility;
39			(ii)	Reliability and Efficiency of Power Production: For electric power
40				plants,
41				(A) The plant availability and capacity factors for the reporting
42				year. If equipment failures or plant breakdowns had a
43				significant impact on those factors, the certificate holder
44				shall describe them and its plans to minimize or eliminate
45				their recurrence:

1			(B)	The efficiency with which the power plant converts fuel
2				into electric energy. If the fuel chargeable to power heat
3				rate was evaluated when the facility was sited, the
4				certificate holder shall calculate efficiency using the same
5				formula and assumptions, but using actual data; and
6			(C)	The facility's annual hours of operation by fuel type and,
7			` '	every five years after beginning operation, a summary of
8				the annual hours of operation by fuel type as described in
9				OAR 345-024-0590(5);
10		(iii)	Statu	s of Surety Information: Documentation demonstrating that
11		,		s or letters of credit as described in the site certificate are in
12			full f	orce and effect and will remain in full force and effect for the
13			term	of the next reporting period;
14		(iv)		stry Trends: A discussion of any significant industry trends
15		` /		may affect the operations of the facility;
16		(v)		itoring Report: A list and description of all significant
17		, ,		toring and mitigation activities performed during the previous
18				in accordance with site certificate terms and conditions, a
19			-	nary of the results of those activities, and a discussion of any
20				ficant changes to any monitoring or mitigation program,
21				ding the reason for any such changes;
22		(vi)		pliance Report: A description of all instances of
23		` /	-	ompliance with a site certificate condition. For ease of review,
24				ertificate holder shall, in this section of the report, use
25				pered subparagraphs corresponding to the applicable sections
26				e site certificate;
27		(vii)		ity Modification Report: A summary of changes to the facility
28		` ,		he certificate holder has determined do not require a site
29				ficate amendment in accordance with OAR 345-027-0050; and
30		(viii)		generating Facility Carbon Dioxide Emissions: For
31		, ,	_	enerating facilities that emit carbon dioxide, a report of the
32			_	al fuel use by fuel type and annual hours of operation of the
33				on dioxide emitting equipment as described in OAR 345-024-
34			0630	
35				
36	(123)	OAR 345-026	5-0100	: The certificate holder shall promptly notify the Office of
37	(- /	•		ges in major milestones for construction, decommissioning,
38				ent schedules. Major milestones are those identified by the
39		-		its construction, retirement or decommissioning plan.
40				
41	(124)	OAR 345-026	5-0105	: The certificate holder and the Office of Energy shall
42	()	•		all correspondence or summaries of correspondence related to
43				tutes, rules and local ordinances on which the Council
44		-		nce, except for material withheld from public disclosure under
45			-	or under Council rules. The certificate holder may submit
46				n place of full reports: however, the certificate holder shall

1		provide full copies of abstracted reports and any summarized correspondence at
2		the request of the Office of Energy.
3		
4	(125)	OAR 345-026-0170: The certificate holder shall notify the Office of Energy

(125) OAR 345-026-0170: The certificate holder shall notify the Office of Energy within 72 hours of any occurrence involving the facility if:

(a) There is an attempt by anyone to interfere with its safe operation;

(b) A natural event such as an earthquake, flood, tsunami or tornado, or a human-caused event such as a fire or explosion affects or threatens to affect the public health and safety or the environment; or

(c) There is any fatal injury at the facility.

VI. SUCCESSORS AND ASSIGNS

To transfer this site certificate, or any portion thereof, or to assign or dispose of it in any other manner, directly or indirectly, the certificate holder shall comply with OAR 345-027-0100.

VII. SEVERABILITY AND CONSTRUCTION

If any provision of this agreement and certificate is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the agreement and certificate did not contain the particular provision held to be invalid. In the event of a conflict between the conditions contained in this site certificate and the Council's final order, the conditions contained in this site certificate shall control.

VIII. GOVERNING LAW AND FORUM

This site certificate shall be governed by the laws of the State of Oregon. Any litigation or arbitration arising out of this agreement shall be conducted in an appropriate forum in Oregon.

IX. EXECUTION

This site certificate may be executed in counterparts and will become effective upon receipt by the Oregon Department of Energy of a facsimile transmission of the signature page of this site certificate with the signatures of the Chair of the Energy Facility Siting Council and the notarized signature of the person duly authorized to sign on behalf of Orion Sherman County Wind Farm LLC. Such facsimile signature pages shall be replaced as soon as reasonably possible, but no longer than 30 days after receipt by the Oregon Department of Energy of the facsimile signature pages, with signature pages containing original signatures of the authorized signers.

ENERGY FACILITY SITING COUNCIL	ORION SHERMAN COUNTY WIND FARM LLC
By: Hans Neukomm, Chair	By:
Hans Neukomm, Chair	Print:
Date:	Date:
STATE OF	_)
County of) ss.)
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