

THIRD REQUEST FOR AMENDMENT TO THE KLONDIKE III WIND PROJECT

Prepared for
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INTRODUCTION

Pursuant to OAR 345-027-0030 and OAR 345-027-0050(1), Klondike Wind Power III LLC (KWP), a wholly-owned subsidiary of PPM Energy, Inc., the holder of the Site Certificate for the Klondike III Wind Project, requests to amend the Site Certificate to:

1. Add and reconfigure the alignment of some turbine strings and roads; and add temporary disturbance resulting from crane paths, underground collector system installation, and staging areas, both within and outside of those areas currently authorized for temporary disturbance in the Site Certificate;
2. Add up to 43 turbines to the approved 165 for a total of up to 208 turbines;
3. Add up to 90 MW of peak generating capacity to the approved 285 MW for a total of up to 375 MW of peak generating capacity;
4. Authorize a maximum turbine sound power level up to 110 dBA for the additional turbines; the Site Certificate currently authorizes a single turbine to have this sound power level;
5. Modify Site Certificate Conditions 28, 31, 32, 48, 92 and 102 consistent with the above changes.

These proposed changes to the Klondike III Wind Project are described in greater detail in Section 1(c), below, and are further addressed below in accordance with the requirements set forth in each applicable OAR.

OAR 345-027-0050(1) requires that a request for an amendment must conform to the requirements of OAR 345-027-0060, which sets forth the required contents of a request to amend a site certificate. The discussion below provides the information required by OAR 345-027-0060.

SECTION 1 INFORMATION REQUIRED PURSUANT TO OAR 345-027-0060(1)

(a) Certificate Holder information

Name and mailing address of the Certificate Holder:

Klondike Wind Power III LLC
Attn: Jesse Gronner
1125 NW Couch St. Suite 700
Portland, OR 97209
(503) 796-7045

Name, mailing address, and telephone number of individual responsible for submitting the request:

Klondike Wind Power III LLC
Attn: Jesse Gronner
1125 NW Couch St. Suite 700
Portland, OR 97209
(503) 796-7045

(b) Description of the facility

The proposed facility, referred to as the Klondike III Wind Project, is located in northern Sherman County, and is generally described in the Application for Site Certificate dated May 2005, the First Request for Amendment dated July 2006, and the Second Request for Amendment dated April 2007. As currently permitted, the project will generate up to 285 MW of power with up to 165 turbines, and will connect to the grid at BPA's 230-kV Klondike Schoolhouse-John Day transmission line.

(c) Description and analysis of the proposed change

OAR 345-027-0060(1) (c) requires that an amendment request include "[a] detailed description of the proposed change and the certificate holder's analysis of the proposed change under the criteria of OAR 345-027-0050(1)." The Certificate Holder is requesting the following changes to the Site Certificate:

(i) Change of Project Configuration Outside of Site Boundary (micro-siting corridors)

The Certificate Holder requests to add and reconfigure some turbine corridors and access roads. Additional permanent impact in agricultural areas of approximately 20.88 acres will occur as a result of the new and reconfigured facilities, as shown on Figure 1. Throughout this amendment request, the expanded project area may be designated as KIIIa or Third Request for Amendment expanded site boundary.

Installation of underground collectors and moving cranes between turbine strings along crane paths will cause temporary disturbance to approximately 169 acres outside the existing approved micro-siting corridors. Following use, these areas will be restored to their existing condition.

(ii) Additional Turbines

Additional turbines generating up to 3.0 MW of power, may be used at the Klondike III project, within the expanded site described in this Third Request for Amendment. Maximum hub height for the proposed additional turbines is 100 meters, rotor diameter is up to 100 meters, and overall height, including blades, is 150 meters. This Third Amendment Request seeks up to 43 additional turbines to be added to the approved 165 for a total of up to 208 turbines. Figure 1 shows the potential layout of the additional and realigned turbine strings.

(iii) Increase in Generating Capacity

With the additional turbines and the proposed turbine type, the Certificate Holder requests an increase in peak generating capacity from 285 MW to 375 MW.

(iv) Increase in Maximum Sound Power Level for Additional Turbines

The Certificate Holder requests a maximum turbine sound power level up to 110 dBA for the additional turbines; the Site Certificate currently authorizes a single turbine to have this sound power level.

(v) Change to Site Certificate Conditions

The Certificate Holder's request for modification of certain Site Certificate conditions is summarized below. The specific language for the amended conditions is proffered in Attachment 1.

Pursuant to Condition **(28)** of the Amended Site Certificate, the Certificate Holder "shall construct a facility that includes up to 165 wind turbines substantially as described in the site certificate, subject to the following restrictions on turbine selection:

- (a) For any turbine string, the certificate holder may select any combination of GE 1.5-megawatt or Vestas V82 1.65-megawatt wind turbines.
- (b) For turbine strings K, L, M, N, R, S, U, V, W and X as identified in Table 1 of the Final Order on Amendment #1, in addition to the turbine types listed in (a), the certificate holder may select any turbine type such that the hub height does not exceed 80 meters, and rotor diameter does not exceed 92.5 meters, the peak generating capacity does not exceed 2.4 megawatts, and the maximum sound power level does not exceed 107 dBA . . ."

The Certificate Holder requests the ability to construct up to 208 turbines.

The Certificate Holder requests that condition 28 (b) be amended to allow turbines in strings N and U, Y, Z, AA and BB (as identified in Table A if this amendment request), to contain turbines (such that the hub height does not exceed 100 meters, the rotor diameter does not exceed 100 meters, the peak generating capacity does not exceed 3.0 megawatts, and the maximum sound power level does not exceed 110 dBA.

[Note: The certificate holder has requested a modification to condition 28(c) in Amendment Request #2.]

Pursuant to condition **(31)** of the Amended Site Certificate, the Certificate Holder is required to "provide to the Department a detailed map of the proposed facility, showing the final locations where facility components are proposed to be built in relation to the 300-foot and 900-foot corridors having centerlines defined by the

endpoints shown on Table 1 of the Final Order on Amendment #1.” Further, this condition states that “[t]he final site of the facility includes the final turbine site corridors and other facility components as described in the Final Order on Amendment #1.”

The Certificate Holder requests that this condition be amended to reference an additional table (Table A, attached) that identifies the endpoints of the newly added and modified strings labeled N, U, Y, Z, AA and BB.

Pursuant to condition **(32)** of the Amended Site Certificate, 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. The initial bond or letter of credit amount is \$1.089 million (2005 dollars) adjusted to the date of issuance as described in (b) or the amount determined as described in (a).

The certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter as described in (b). Notwithstanding the adjustments described in (a) and (b), the minimum bond or letter of credit amount is \$500,000.”

The Certificate Holder requests that this condition be amended to add the appropriate level of bond or letter of credit required to ensure retirement of the expanded site.

Pursuant to condition **(48)** of the Amended Site Certificate, “Before beginning construction, the certificate holder shall provide to the Department a map showing the final design locations of all components of the facility and areas that would be temporarily disturbed during construction and also showing the areas that Archaeological Investigations Northwest, Inc. (AINW) surveyed in 2005 and 2006 as described in the site certificate application and the Request for Amendment #1.”

The Certificate Holder requests that this condition be amended to reference the AINW cultural resource survey completed for the expanded site in 2007.

Pursuant to condition **(92)** of the Amended Site Certificate, “The certificate holder may construct turbines and other facility components within 900-foot corridors having centerlines defined by the endpoints shown on Table 1 of the Final Order on Amendment #1” Similar references to Table 1 of the Final Order appear in subsections **(d)** and **(e)** of this same condition.

The Certificate Holder requests that this condition be amended to reference an additional Table A, attached that identifies the centerline of the additional and modified strings labeled N, U, Y, Z, AA and BB, and other facilities proposed in this Third Request for Amendment.

Pursuant to condition **(102)(c)** the applicant is required to perform a noise analysis assuming “the following input parameters:

- (i) The maximum sound power level guaranteed by the manufacturer.
- (ii) Temperature of 52° F (11° C).
- (iii) Relative humidity of 70 percent.
- (iv) No ground effect.
- (v) No barrier effects.

The Certificate Holder requests that condition (102)(c)(iv) be amended to state “Ground absorption coefficient of one.”

The applicant also requests an additional condition that allows the size of the mitigation area to be adjusted upward or downward based on calculations of final micro-siting impacts.

(vi) Legal Basis for Amendment Request

Under OAR 345-027-0050(1), a site certificate amendment request is required if a Certificate Holder proposes to change the site boundary or otherwise to design, construct, operate, or retire a facility in a manner different from the description in the site certificate and the proposed change meets one of the four criteria, as discussed below.

“(a) Could result in a significant adverse impact that the Council did not evaluate and address in the final order granting a site certificate affecting any resource protected by applicable standards in divisions 22 and 24 of this chapter;”

The changes proposed by the applicant expand the site boundary and may have an adverse impact on Division 22 resources that the Council did not already evaluate and address in the final orders granting the Site Certificate or the Amended Site Certificate, including geology/seismic; soils; wetlands; land use; fish and wildlife habitat; threatened and endangered species; scenic and aesthetic values; historic, cultural, and archaeological resources; and noise.

The request for amendment is not expected to result in adverse impacts for the remaining Division 22 resources that the Council did not already evaluate and address in the final orders granting the Site Certificate or the Amended Site Certificate, including protected areas, recreation, public services, and waste minimization. Further, this Third Request for Amendment is not expected to result in adverse impacts with regard to applicable standards in Division 24 (OAR 345-024-0010, -0015) that the Council did not already evaluate and address in the final orders granting the Site Certificate or the Amended Site Certificate.

“(b) Could result in a significant adverse impact that the Council did not evaluate and address in the final order granting a site certificate affecting geographic areas or human, animal or plant populations;”

The requested amendment would increase both permanent and temporary impacts outside the site boundary currently authorized by the Site Certificate as amended. These changes may affect geographic areas, human, animal, or plant populations.

“(c) Could impair the certificate holder’s ability to comply with a site certificate condition; or”

The amendment requested by the Certificate Holder would potentially impair the Certificate Holder’s ability to comply with site certificate conditions 28, 31, 32, 48, and 92 and 102. The request to amend these conditions is discussed above and in Attachment 1.

“(d) Could require a new condition or change to a condition in the site certificate.”

As noted above, the Certificate Holder is requesting changes to several conditions in the current Site Certificate.

(d) Proposed changes to Site Certificate

OAR 345-027-0060 requires that a request to amend a site certificate must include “[t]he specific language of the site certificate, including affected conditions, that the certificate holder proposes to change, add or delete by an amendment.”

Attachment 1 to this Third Request for Amendment is a “redline” of the Site Certificate, showing the specific proposed changes.

(e) Relevant Division 22, 23, and 24 standards

OAR 345-027-0060(1)(e) requires that this Request to Amend the Site Certificate include “[a] list of the standards of Divisions 22, 23 and 24 of this chapter relevant to the proposed change.”

Division 22 - As discussed above, the Certificate Holder is requesting to expand the site boundary for a number of project elements. Therefore, all Division 22 standards for siting non-nuclear energy facilities are relevant to this amendment request.

Division 23 - The Division 23 standards apply only to non-generating facilities and are therefore not relevant to this amendment request.

Division 24 - OAR 345-024-0010 and 345-024-0015 applies to wind energy facilities and is potentially relevant to this amendment request.

(f) Analysis of compliance with ORS 469, Council rules, and applicable state and local laws, rules, and ordinances

OAR 345-027-0060(1)(f) requires that this Third Request for Amendment include:

“An analysis of whether the facility, with the proposed change, would comply with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances if the Council amends the site certificate as requested. For the purpose of this rule, a law, rule or ordinance is ‘applicable’ if the Council would apply or consider the law, rule or ordinance under OAR 345-027-0070(9).”

OAR 345-027-0070(9) provides:

“In making a decision to grant or deny issuance of an amended site certificate, the Council shall apply the applicable substantive criteria, as described in OAR 345-022-0030, in effect on the date the certificate holder submitted the request for amendment and all other state statutes, administrative rules, and local government ordinances in effect on the date the Council makes its decision.”

The Certificate Holder’s compliance with ORS 468, applicable Council rules (including those contained in OAR 345-022 and 345-024), and applicable state and local laws, rules, and ordinances is addressed in Attachment 2.

(g) Updated list of property owners

OAR 345-027-0060(1)(g) requires for an amendment to change the site boundary, “an updated list of the owners of property located within or adjacent to the site of the facility, as described in OAR 345-021-0010(1)(f).”

The list of property owners within or adjacent to the expanded site is attached.

SECTION 2 INFORMATION REQUIRED PURSUANT TO OAR 345-027-0060(2)

In a request to amend a site certificate, the Certificate Holder shall provide information described in applicable subsections of OAR 345-021-0010(1) in effect as of the date of the request.

Applicable subsections of OAR 345-021-0010(1) include:

- OAR 345-021-0010(1)(h)
- OAR 345-021-0010(1)(i)
- OAR 234-021-0010(1)(j)
- OAR 345-021-0010(1)(k)
- OAR 345-021-0010(1)(p)
- OAR 345-021-0010(1)(q)
- OAR 345-021-0010(1)(r)
- OAR 345-021-0010(1)(s)
- OAR 345-021-0010(1)(w)
- OAR 345-021-0010(1)(x)

Information related to the proposed changes is contained in exhibits included with this Third Request for Amendment as Attachment 3.

Third Request for Amendment to the Klondike III Wind Project

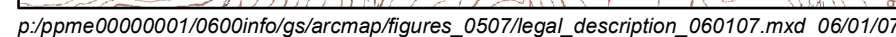
Table A

Point Number	Easting (Stateplane, OR North, NAD83, Int'l Ft)	Northing (Stateplane, OR North, NAD83, Int'l Ft)	Lon (NAD83)	Lat (NAD83)
1	8161593.704730	696658.186565	-120.658131	45.577434
2	8162059.807870	696214.099999	-120.656307	45.576218
3	8161948.023000	694239.233750	-120.656729	45.570801
4	8161780.345690	694071.556393	-120.657382	45.570341
5	8161519.513680	694015.750156	-120.658400	45.570186
6	8162190.223570	693903.879084	-120.655781	45.569883
7	8162227.485230	693531.262809	-120.655632	45.568861
8	8163308.072400	692487.937248	-120.651405	45.566005
9	8163047.241000	692115.320972	-120.652421	45.564982
10	8162729.889960	692236.871897	-120.653661	45.565314
11	8162786.409640	691351.457594	-120.653434	45.562886
12	8162767.778810	690960.210538	-120.653503	45.561812
13	8160606.604430	690922.948883	-120.661941	45.561699
14	8160622.551960	688466.241259	-120.661860	45.554961
15	8163214.918350	691612.288996	-120.651762	45.563603
16	8165730.078190	691519.134951	-120.641941	45.563360
17	8166043.964480	691706.022768	-120.640717	45.563874
18	8166103.723660	688909.301438	-120.640465	45.556204
19	8166326.264210	691612.288996	-120.639614	45.563619
20	8166587.095610	691854.489571	-120.638597	45.564284
21	8166955.730090	691739.350005	-120.637157	45.563970
22	8166941.269400	696596.057786	-120.637246	45.577290
23	8166475.310740	696139.576734	-120.639063	45.576036
24	8166456.679910	694146.079658	-120.639122	45.570568
25	8166326.264210	689022.605898	-120.639597	45.556516
26	8166475.629390	688427.265870	-120.639010	45.554884
27	8166809.218400	688743.812400	-120.637709	45.555754
28	8166821.106410	689431.981603	-120.637667	45.557641
29	8167301.900670	689457.869736	-120.635791	45.557714
30	8167289.701500	688612.536581	-120.635833	45.555396
31	8166810.339270	688545.371461	-120.637704	45.555209
32	8166587.095610	691165.149457	-120.638593	45.562393
33	8167369.589770	696120.945906	-120.635570	45.575989
34	8175623.040260	695934.637769	-120.603336	45.575512
35	8176142.931380	699625.785880	-120.601324	45.585637
36	8175753.455960	699567.646428	-120.602845	45.585476
37	8175701.342750	698919.519553	-120.603045	45.583698
38	8176200.148040	698945.019019	-120.601097	45.583770
39	8175642.479380	691031.016776	-120.603236	45.562063
40	8171170.275780	691071.995412	-120.620697	45.562158
41	8171226.168220	688407.789049	-120.620464	45.554851
42	8172543.431990	687777.570578	-120.615318	45.553128
43	8172791.156590	687532.140798	-120.614349	45.552456
44	8178324.508230	687792.972200	-120.592750	45.553191
45	8176479.540020	699235.111020	-120.600007	45.584566
46	8176535.529970	696101.097257	-120.599774	45.575971

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47	8178135.888200	696289.505316	-120.593524	45.576493
48	8177787.152330	696672.435190	-120.594888	45.577542
49	8177858.737910	695338.451747	-120.594602	45.573884
50	8178603.970460	693158.646533	-120.591682	45.567908
51	8177963.191580	690909.233166	-120.594174	45.561737
52	8179665.926800	691165.149457	-120.587527	45.562444
53	8179386.464620	690844.239479	-120.588617	45.561563
54	8179386.464620	689935.515758	-120.588613	45.559070
55	8179673.267120	689897.125520	-120.587493	45.558966
56	8178566.521250	687450.661901	-120.591803	45.552253
57	8179144.264040	687457.617534	-120.589548	45.552274
58	8179218.787310	687588.033235	-120.589258	45.552632
59	8179535.511150	687438.986753	-120.588021	45.552224
60	8179870.865770	687159.524523	-120.586710	45.551458
61	8179721.819280	687010.478041	-120.587292	45.551049
62	8180262.592880	687204.331266	-120.585181	45.551582
63	8179479.618660	685054.242573	-120.588229	45.545683
64	8179386.464620	684867.934436	-120.588591	45.545172
65	8178813.612850	682705.451960	-120.590818	45.539239
66	8179330.572180	682855.806578	-120.588801	45.539653
67	8179591.403580	682650.867613	-120.587782	45.539092
68	8180141.895380	682764.300553	-120.585634	45.539404
69	8179628.802700	681451.213289	-120.587631	45.535802
70	8179330.572180	687830.233809	-120.588822	45.553296
71	8189447.104000	687886.126245	-120.549330	45.553473
72	8190713.999350	686432.922800	-120.544381	45.549490
73	8191067.984800	687010.478041	-120.543000	45.551074
74	8191256.939990	687027.959520	-120.542263	45.551122
75	8191105.246410	684048.178668	-120.542849	45.542950
76	8190602.214430	683396.100163	-120.544810	45.541160
77	8190043.316540	681749.248069	-120.546988	45.536643
78	8191757.755910	684407.141618	-120.540302	45.543935
79	8191627.326130	682972.682093	-120.540809	45.540001
80	8190527.691210	687513.509970	-120.545110	45.552453
81	8190490.429560	688072.434383	-120.545257	45.553986
82	8189149.010990	689432.483782	-120.550497	45.557714
83	8189149.010990	690699.379136	-120.550500	45.561188
84	8188739.133100	691146.518676	-120.552102	45.562414
85	8188775.817980	690749.992304	-120.551957	45.561327
86	8191813.794830	691094.407389	-120.540097	45.562276
87	8191794.253470	690693.695719	-120.540172	45.561177
88	8193415.467320	691081.310825	-120.533843	45.562242
89	8193961.401060	691246.522512	-120.531712	45.562696
90	8195642.117890	691053.544932	-120.525149	45.562168
91	8199732.065530	691226.786113	-120.509180	45.562646
92	8200082.243590	693326.850157	-120.507814	45.568405
93	8200456.141150	689509.724298	-120.506353	45.557937
94	8195541.193410	686883.270545	-120.525538	45.550730
95	8177806.512450	691276.905940	-120.594788	45.562744
96	8176199.147940	696433.171316	-120.601089	45.576881

Figure 1
Project Layout and Description



**ENERGY FACILITY SITING COUNCIL
OF THE
STATE OF OREGON**

**Third Amended Site Certificate
for the
Klondike III Wind Project**

[\[DATE\]](#), 2007

The Oregon Energy Facility Siting Council

THIRD AMENDED SITE CERTIFICATE FOR THE KLONDIKE III WIND PROJECT

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I. INTRODUCTION

The Oregon Energy Facility Siting Council (Council) issues this site certificate for the Klondike III Wind Project (the facility) in the manner authorized under ORS Chapter 469. This site certificate is a binding agreement between the State of Oregon (State), acting through the Council, and Klondike Wind Power III LLC (certificate holder) authorizing the certificate holder to construct and operate the Klondike III Wind Project in Sherman County, Oregon.

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in the following documents related to the facility, which are incorporated herein by this reference: (a) the Council's Final Order on the Application and (b) the Council's Final Order on Amendment #1. In interpreting this site certificate, any ambiguity will be clarified by reference to the following, in order of priority: (1) Third Amended Site Certificate, (2) the Final Order on Amendment #3, (3) Second Amended Site Certificate [pending], (4) the Final Order on Amendment #2 [pending], (5) First Amended Site Certificate, (6) the Final Order on Amendment #1, (7) the initial Site Certificate, (8) the Final Order on the Application, and (9) the record of the proceedings that led to the Final Orders on the Application and Amendments #1, #2, and #3. [Amendment #1] [Amendment #2 (pending)] [Amendment #3]

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The definitions in ORS 469.300 and OAR 345-001-0010 apply to terms used in this site certificate, except where otherwise stated or where the context clearly indicates otherwise.

II. SITE CERTIFICATION

1. 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).
2. 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).
3. This site certificate does not address, and is not binding with respect to, matters that were not addressed in the Council's Final Orders on the Application and Amendments #1, #2, and #3. Such 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. 469.503(3). [Amendment #1] [Amendment #2 (pending)] [Amendment #3]
4. 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 executed. ORS 469.401(2). In addition, upon a clear showing of a significant threat to public health, safety or the

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KLONDIKE III WIND PROJECT

THIRD AMENDMENT SITE CERTIFICATE - [MONTH] 2007

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1 environment that requires application of later-adopted laws or rules, the Council may require
2 compliance with such later-adopted laws or rules. ORS 469.401(2).

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- 1 5. For a permit, license or other approval addressed in and governed by this site certificate, the
2 certificate holder shall comply with applicable state and federal laws adopted in the future to
3 the extent that such compliance is required under the respective state agency statutes and
4 rules. ORS 469.401(2).
- 5 6. Subject to the conditions herein, this site certificate binds the State and all counties, cities and
6 political subdivisions in Oregon as to the approval of the site and the construction, operation
7 and retirement of the facility as to matters that are addressed in and governed by this site
8 certificate. ORS 469.401(3).
- 9 7. Each affected state agency, county, city and political subdivision in Oregon with authority to
10 issue a permit, license or other approval addressed in or governed by this site certificate shall,
11 upon submission of the proper application and payment of the proper fees, but without
12 hearings or other proceedings, issue such permit, license or other approval subject only to
13 conditions set forth in this site certificate. ORS 469.401(3).
- 14 8. After issuance of this site certificate, each state agency or local government agency that issues
15 a permit, license or other approval for the facility shall continue to exercise enforcement
16 authority over such permit, license or other approval. ORS 469.401(3).
- 17 9. After issuance of this site certificate, the Council shall have continuing authority over the site
18 and may inspect, or direct the Oregon Department of Energy (Department) to inspect, or
19 request another state agency or local government to inspect, the site at any time in order to
20 ensure that the facility is being operated consistently with the terms and conditions of this
21 site certificate. ORS 469.430.

22 III. DESCRIPTION

23 1. The Facility

24 (a) The Energy Facility

25 The energy facility is an electric power generating plant with an average electric generating
26 capacity of approximately 125 megawatts and a peak generating capacity of not more than 375
27 megawatts that produces power from wind energy. The facility consists of not more than 208
28 wind turbines, each with a peak generating capacity of not more than 3.0 megawatts. Turbines
29 are mounted on tubular steel towers. The turbine towers are about 328 feet tall at the turbine hub
30 and have an overall height of not more than 492 feet including the radius swept by the turbine
31 blades. The energy facility is described further in the Final Order on Amendment #1. ^{Amendment}
32 #1] Amendment #3]

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33 (b) Related or Supporting Facilities

34 The facility includes the following related or supporting facilities described below and in
35 greater detail in the Final Order on the Amendment #1:

- 36 • Power collection system
- 37 • Substations and interconnection system
- 38 • Meteorological towers
- 39 • Operations and maintenance building
- 40 • Control system
- 41 • Access roads

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- Temporary construction areas

[Amendment #1]

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Power Collection System

A power collection system operating at 34.5 kilovolts (kV) transports power from each turbine to a collector substation. Most of the collection system is in underground segments but may include aboveground segments, not exceeding 12 miles in combined length, mounted on monopole support structures. Power from the eastern section of the facility is transmitted to a substation near Schoolhouse underground and aboveground 34.5-kV collector lines. [Amendment #1]

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Substations and Interconnection System

The facility includes one substation located near existing Klondike I and II “Schoolhouse” facilities. The power generated by the facility interconnects with the regional transmission grid at that location. [Amendment #1]

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Meteorological Towers

The facility includes three permanent meteorological (met) towers. The met towers are non-guyed steel towers approximately 80 meters in height.

Operations and Maintenance Building

The facility includes ~~two~~ operations and maintenance (O&M) buildings, ~~one~~ of approximately 5,000 square feet ~~and one of approximately 15,000 square feet.~~ [Amendment #3]

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Control System

A fiber optic communications network links the wind turbines to a central computer at the O&M building. A “supervisory, control and data acquisition” (SCADA) system collects operating and performance data from each wind turbine and the project as a whole and provides remote operation of the wind turbines.

Access Roads

The facility includes access roads to provide access to the turbine strings. Access roads connect to graveled turbine turn-out and pad areas at the base of each wind turbine. The roads are approximately 20 feet wide and constructed with crushed gravel.

Temporary Construction Areas

During construction, the facility includes temporary laydown areas used to stage construction and store supplies and equipment during construction and temporary crane paths for efficient movement of cranes between turbine strings. [Amendment #1]

2. Location of the Proposed Facility

The facility is located approximately 4 miles east of Wasco, in Sherman County, Oregon, about 5 miles south of the Columbia River. The site is in Townships 1 and 2 North and Ranges 17, 18 and 19 East Sections. The facility is located on land subject to lease agreements with several landowners.

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IV. CONDITIONS REQUIRED BY COUNCIL RULES

This section lists conditions required by OAR 345-027-0020 (Mandatory Conditions in Site Certificates), OAR 345-027-0023 (Site Specific Conditions), OAR 345-027-0028 (Monitoring Conditions) and OAR Chapter 345, Division 26 (Construction and Operation Rules for Facilities). These conditions should be read together with the specific facility conditions listed in Section V to ensure compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect the public health and safety. In these conditions, "Office of Energy" means the Oregon Department of Energy, and the other definitions in OAR 345-001-0010 apply.

The obligation of the certificate holder to report information to the Department or the Council under the conditions listed in this section and in Section V is subject to the provisions of OAR 345-001-0040, which addresses information that may be exempt under the Oregon Public Records Law. To the extent permitted by law, the Department and the Council will not publicly disclose information that may be exempt from public disclosure under ORS 192.502 et seq. or ORS 469.560 if the certificate holder has clearly labeled such information and stated the basis for the exemption at the time of submitting the information to the Department or the Council. If the Council or the Department receives a request for the disclosure of the information, the Council or the Department, as appropriate, will make a reasonable attempt to notify the certificate holder and will refer the matter to the Attorney General for a determination of whether the exemption is applicable, pursuant to ORS 192.450.

In addition to these conditions, the site certificate holder is subject to all conditions and requirements contained in the rules of the Council and in local ordinances and state law in effect on the date the certificate is executed. Under ORS 469.401(2), upon a clear showing of a significant threat to the 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.

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.

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

(2) ~~OAR 345-027-0020(2):~~ The certificate holder shall submit a legal description of the site to the Department of Energy within 90 days after beginning operation of the facility. The legal description required by this rule means a description of metes and bounds or a description of the site by reference to a map and geographic data that clearly and specifically identifies the outer boundaries that contain all parts of the facility.

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

(a) Substantially as described in the site certificate;

(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

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Deleted: 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

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1 (c) In compliance with all applicable permit requirements of other state agencies.

2
3 (4) ~~OAR 345-027-0020(4)~~: The certificate holder shall begin and complete construction of the
4 facility by the dates specified in the site certificate. (See conditions (26) and (27).)

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- 1 (5) OAR 345-027-0020(5): Except as necessary for the initial survey or as otherwise allowed for
2 wind energy facilities, transmission lines or pipelines under this section, the certificate
3 holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing
4 on any part of the site until the certificate holder has construction rights on all parts of the
5 site. For the purpose of this rule, “construction rights” means the legal right to engage in
6 construction activities. For wind energy facilities, transmission lines or pipelines, if the
7 certificate holder does not have construction rights on all parts of the site, the certificate
8 holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a
9 clearing on a part of the site if the certificate holder has construction rights on that part of
10 the site, and:
11 (a) The certificate holder would construct and operate part of the facility on that part of
12 the site even if a change in the planned route of a transmission line or pipeline occurs
13 during the certificate holder’s negotiations to acquire construction rights on another part of
14 the site; or,
15 (b) The certificate holder would construct and operate part of a wind energy facility on
16 that part of the site even if other parts of the facility were modified by amendment of the
17 site certificate or were not built. [Amendment #3].
18 (6) OAR 345-027-0020(6): If the Council requires mitigation based on an affirmative finding
19 under any standards of Division 22 or Division 24 of this chapter, the certificate holder
20 shall consult with affected state agencies and local governments designated by the Council
21 and shall develop specific mitigation plans consistent with Council findings under the
22 relevant standards. The certificate holder must submit the mitigation plans to the Office and
23 receive Office approval before beginning construction or, as appropriate, operation of the
24 facility.
25 (7) OAR 345-027-0020(7): The certificate holder shall prevent the development of any
26 conditions on the site that would preclude restoration of the site to a useful, non-hazardous
27 condition to the extent that prevention of such site conditions is within the control of the
28 certificate holder.
29 (8) OAR 345-027-0020(8): Before beginning construction of the facility, the certificate holder
30 shall submit to the State of Oregon, through the Council, a bond or letter of credit in a form
31 and amount, satisfactory to the Council, to restore the site to a useful, non-hazardous
32 condition. The certificate holder shall maintain a bond or letter of credit in effect at all times
33 until the facility has been retired. The Council may specify different amounts for the bond
34 or letter of credit during construction and during operation of the facility. (See Condition
35 (32).)
36 (9) OAR 345-027-0020(9): The certificate holder shall retire the facility if the certificate holder
37 permanently ceases construction or operation of the facility. The certificate holder shall
38 retire the facility according to a final retirement plan approved by the Council, as described
39 in OAR 345-027-0110. The certificate holder shall pay the actual cost to restore the site to a
40 useful, non-hazardous condition at the time of retirement, notwithstanding the Council’s
41 approval in the site certificate of an estimated amount required to restore the site.
42 (10) OAR 345-027-0020(10): The Council shall include as conditions in the site certificate all
43 representations in the site certificate application and supporting record the Council deems to
44 be binding commitments made by the applicant.

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1 | (11) OAR 345-027-0020(11): Upon completion of construction, the certificate holder shall
2 | ~~restore vegetation to the extent practicable and shall landscape~~ all areas ~~disturbed by~~
3 | ~~construction in a manner compatible with the surroundings and proposed use. Upon~~
4 | ~~completion of construction, the certificate holder shall~~ remove all temporary structures

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not required for facility operation and ~~dispose of~~ timber, brush, refuse and flammable or combustible material resulting from clearing of land and construction of the facility.

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- (12) OAR 345-027-0020(12): The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety presented by seismic hazards affecting the site that are expected to result from all maximum probable seismic events. As used in this rule “seismic hazard” includes ground shaking, landslide, liquefaction, lateral spreading, tsunami inundation, fault displacement and subsidence.

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- (13) OAR 345-027-0020(13): The certificate holder shall notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if site investigations or trenching reveal that conditions in the foundation rocks differ significantly from those described in the application for a site certificate. After the Department receives the notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division and to propose mitigation actions.

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- (14) OAR 345-027-0020(14): The certificate holder shall notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site.

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- (15) 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 Department 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.

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- (16) 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 Department 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.

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- (17) OAR 345-027-0023(4):

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1 If the facility includes any transmission line under Council jurisdiction:

2 (a) The certificate holder shall design, construct and operate the transmission line in
3 accordance with the requirements of the National Electrical Safety Code (American
4 National Standards Institute, Section C2, 1997 Edition); and

5 (b) The certificate holder shall develop and implement a program that provides
6 reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or
7 structures of a permanent nature that could become inadvertently charged with electricity
8 are grounded or bonded throughout the life of the line.

9 (18) OAR 345-027-0023(5): If the proposed energy facility is a pipeline or a transmission line or
10 has, as a related or supporting facility, a pipeline or transmission line, the Council shall
11 specify an approved corridor in the site certificate and shall allow the certificate holder to
12 construct the pipeline or transmission line anywhere within the corridor, subject to the
13 conditions of the site certificate. If the applicant has analyzed more than one corridor in its
14 application for a site certificate, the Council may, subject to the Council's standards,
15 approve more than one corridor.

16 (19) OAR 345-027-0028: The following general monitoring conditions apply:

17 (1) The certificate holder shall consult with affected state agencies, local governments
18 and tribes and shall develop specific monitoring programs for impacts to resources
19 protected by the standards of divisions 22 and 24 of this chapter and resources addressed by
20 applicable statutes, administrative rules and local ordinances. The certificate holder must
21 submit the monitoring programs to the Department of Energy and receive Department
22 approval before beginning construction or, as appropriate, operation of the facility.

23 (2) The certificate holder shall implement the approved monitoring programs described in
24 section (1) and monitoring programs required by permitting agencies and local
25 governments.

26 (3) For each monitoring program described in sections (1) and (2), the certificate holder
27 shall have quality assurance measures approved by the Department before beginning
28 construction or, as appropriate, before beginning commercial operation.

29 (4) If the certificate holder becomes aware of a significant environmental change or
30 impact attributable to the facility, the certificate holder shall, as soon as possible, submit a
31 written report to the Department describing the impact on the facility and any affected site
32 certificate conditions.

33
34 (20) OAR 345-026-0048: Following receipt of the site certificate or amended site certificate, the
35 certificate holder shall implement a plan that verifies compliance with all site certificate
36 terms and conditions and applicable statutes and rules. As a part of the compliance plan, to
37 verify compliance with the requirement to begin construction by the date specified in the
38 site certificate, the certificate holder shall report promptly to the Department of Energy
39 when construction begins. Construction is defined in OAR 345-001-0010. In reporting the
40 beginning of construction, the certificate holder shall describe all work on the site
41 performed before beginning construction, including work performed before the Council
42 issued the site certificate, and

Deleted: (18) OAR 345-027-0023(5):

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the facility, the certificate holder shall
submit to the Office a legal description of
the permanent right-of-way where the
applicant has built the pipeline or
transmission line within an approved
corridor. The site of the pipeline or
transmission line subject to the site
certificate is the area within the
permanent right-of-way.

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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 the compliance plan and maintain it for inspection by the Department or the Council.

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(2) OAR 345-026-0080: The certificate holder shall report according to the following requirements:

(1) General reporting obligation for energy facilities under construction or operating:

(a) Within six months after beginning construction, and every six months thereafter during construction of the energy facility and related or supporting facilities, the certificate holder shall submit a semiannual construction progress report to the Department of Energy. In each construction progress report, the certificate holder shall describe any significant changes to major milestones for construction. The certificate holder shall include such information related to construction as specified in the site certificate. When the reporting date coincides, the certificate holder may include the construction progress report within the annual report described in this rule;

(b) By April 30 of each year, after beginning construction, the certificate holder shall submit an annual report to the Department, addressing the subjects listed in this rule. The Council secretary and the certificate holder may, by mutual agreement, change the reporting date.

(c) To the extent that information required by this rule is contained in reports the certificate holder submits to other state, federal or local agencies, the certificate holder may submit excerpts from such other reports to satisfy this rule. The Council reserves the right to request full copies of such excerpted reports.

(2) In the annual report, the certificate holder shall include the following information for the calendar year preceding the date of the report:

(a) Facility Status: An overview of site conditions, the status of facilities under construction, and a summary of the operating experience of facilities that are in operation. In this section of the annual report, the certificate holder shall describe any unusual events, such as earthquakes, extraordinary windstorms, major accidents or the like that occurred during the year and that had a significant adverse impact on the facility;

(b) Reliability and Efficiency of Power Production: For electric power plants, the plant availability and capacity factors for the reporting year. The certificate holder shall describe any equipment failures or plant breakdowns that had a significant impact on those factors and shall describe any actions to prevent the recurrence of such problems.

(c) [not applicable here]

(d) Status of Surety Information: Documentation demonstrating that bonds or letters of credit as described in the site certificate are in full force and effect and will remain in full force and effect for the term of the next reporting period;

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Deleted: <#>(B) The efficiency with which the power plant converts fuel into electric energy. If the fuel chargeable to power heat rate was evaluated when the facility was sited, the certificate holder shall calculate efficiency using the same formula and assumptions, but using actual data; and ¶
<#>(C) The facility’s annual hours of operation by fuel type and, every five years after beginning operation, a summary of the annual hours of operation by fuel type as described in OAR 345-024-0590(5); ¶

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(e) Monitoring Report: A list and description of all significant monitoring and mitigation activities performed during the previous year in accordance with site certificate terms and conditions, a summary of the results of those activities, and a discussion of any significant changes to any monitoring or mitigation program, including the reason for any such changes;

Deleted: <#>(iv) Industry Trends: A discussion of any significant industry trends that may affect the operations of the facility; ¶

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(f) Compliance Report: A description of all instances of noncompliance with a site certificate condition. For ease of review, the certificate holder shall, in this section of the report, use numbered subparagraphs corresponding to the applicable sections of the site certificate;

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(g) Facility Modification Report: A summary of changes to the facility that the certificate holder has determined do not require a site certificate amendment in accordance with OAR 345-027-0050; and

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(h) Nongenerating Facility Carbon Dioxide Emissions: For nongenerating facilities that emit carbon dioxide, a report of the annual fuel use by fuel type and annual hours of operation of the carbon dioxide emitting equipment as described in OAR 345-024-0630(4).

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(22) OAR 345-026-0105: The certificate holder and the Department of Energy shall exchange copies of all correspondence or summaries of correspondence related to compliance with statutes, rules and local ordinances on which the Council determined compliance, except for material withheld from public disclosure under state or federal law or under Council rules. The certificate holder may submit abstracts of reports in place of full reports; however, the certificate holder shall provide full copies of abstracted reports and any summarized correspondence at the request of the Department.

Deleted: <#>(23) OAR 345-026-0100: The certificate holder shall promptly notify the Office of Energy of any changes in major milestones for construction, decommissioning, operation or retirement schedules. Major milestones are those identified by the certificate holder in its construction, retirement or decommissioning plan. ¶

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(23) OAR 345-026-0170: The certificate holder shall notify the Department 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.

V. 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). The certificate holder must comply with these conditions in addition to the conditions listed in Section IV. 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. For conditions that require subsequent review and approval of a future action, ORS 469.402 authorizes the Council to delegate the future review

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and approval to the Department if, in the Council's discretion, the delegation is warranted under the circumstances of the case.

1. Certificate Administration Conditions

(24) The certificate holder shall begin construction of the facility within three years after the effective date of the site certificate. Under OAR 345-015-0085(9), an amended site certificate is effective upon execution by the Council Chair and the applicant. The Council may grant an extension of the deadline to begin construction in accordance with OAR 345-027-0030 or any successor rule in effect at the time the request for extension is submitted.

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(25) The certificate holder shall complete construction of the facility within five years after the effective date of the site certificate. Construction is complete when: 1) the facility is substantially complete as defined by the certificate holder's construction contract documents, 2) acceptance testing has been satisfactorily completed and 3) the energy facility is ready to begin continuous operation consistent with the site certificate. The certificate holder shall promptly notify the Department of the date of completion of construction. The Council may grant an extension of the deadline for completing construction in accordance with OAR 345-027-0030 or any successor rule in effect at the time the request for extension is submitted.

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(26) The certificate holder shall construct a facility that includes up to 208 wind turbines substantially as described in the site certificate, subject to the following restrictions on turbine selection:

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(a) For any turbine string, the certificate holder may select any combination of GE 1.5-megawatt or Vestas V82 1.65-megawatt wind turbines.

(b) For turbine strings K, L, M, R, S, V, W and X as identified in Table 1 of the Final Order on Amendment #1, in addition to the turbine types listed in (a), the certificate holder may select any turbine type such that the hub height does not exceed 80 meters, the rotor diameter does not exceed 92.5 meters, the peak generating capacity does not exceed 2.4 megawatts and the maximum sound power level does not exceed 107 dBA.

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(c) Notwithstanding the restriction described in (b) and in addition to the turbine types listed in (a), the certificate holder may select any turbine type for location K-02 (as shown on Figure B-1 as described in the Final Order on Amendment #1) and for turbine strings N, U, Y, Z, AA, and BB (as identified in Table A of the Final Order on Amendment #3), such that the hub height does not exceed 100 meters, the rotor diameter does not exceed 100 meters, the peak generating capacity does not exceed 3.0 megawatts, and the maximum sound power level does not exceed 110 dBA.

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(d) Before beginning construction, the certificate holder shall identify all turbine types selected for the project and provide evidence satisfactory to the Department that the selected turbine types comply with this condition.

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[Amendment #1] [Amendment #3]

Deleted: (e) For new turbine strings Y, Z, AA, BB and modified strings N and U, any of the above-mentioned turbine types.

(27) 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 the necessary state and local permits or approvals.

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1 | (28) Before beginning construction, the certificate holder shall notify the Department in advance
2 | of any work on the site that does not meet the definition of “construction” in OAR 345-001-

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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.

(29) Before beginning construction 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 in relation to the 300-foot and 900-foot corridors having centerlines defined by the endpoints shown on Table 1 of the Final Order on Amendment #1 and Table A of the Final Order on Amendment #3. In accordance with Condition (2), the certificate holder must submit a legal description of the site to the Department. For the purposes of this site certificate, the term "legal description" means a description of metes and bounds or a description of the site by reference to a map and geographic data that clearly and specifically identifies the outer boundaries that contain all parts of the facility. Notwithstanding OAR 345-027-0020(2), for the purposes of this site certificate, construction of parts of a wind facility within micrositing corridors is comparable to construction of pipelines or transmission lines within Council-approved corridors as described in OAR 345-027-0023(5). Before beginning operation of the facility, the certificate holder shall submit to the Department a legal description for those parts of the facility constructed within micrositing corridors. The final site of the facility includes the final turbine site corridors and other facility components as described in the Final Order on Amendment #1 and the Final Order on Amendment #3 and in this site certificate. [Amendment #1] [Amendment #3]

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(30) Before beginning construction, 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. The initial bond or letter of credit amount is \$1.089 million (2005 dollars) adjusted to the date of issuance as described in (b) or the amount determined as described in (a). The certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter as described in (b). Notwithstanding the adjustments described in (a) and (b), the minimum bond or letter of credit amount is \$500,000. In addition, the certificate holder shall submit a further bond or letter of credit naming the State of Oregon, acting by and through the Council, as beneficiary or payee, for the expansion of the project described in the Final Order on Amendment #3. The initial bond or letter of credit amount is \$1,625,000 (2007 dollars) adjusted to the date of issuance as described in (b) or the amount determined as described in (a). The certificate holder shall adjust the amount of this further bond or letter of credit on an annual basis thereafter as described in (b).

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(a) The certificate holder may adjust the amounts of the initial bonds or letters of credit based on the final design configuration of the facility by applying the unit costs and general costs shown in Table 3 of the Final Order on Amendment #1 and Table A of the Final Order on Amendment #3 to the final design and calculating the financial assurance amount as described in that order, adjusted to the date of issuance as described in (b) and subject to approval by the Department.

(b) The certificate holder shall adjust the amount of the bonds or letters of credit, using the following calculation and subject to approval by the Department:

(i) Adjust the gross cost component of the initial bonds or letters of credit amount to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-

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Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency (the "Index") and using the annual average index value for 2005 and 2007 dollars, and the quarterly index value for the date of issuance of the new bonds or letters of credit. If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust 2005 and 2007 dollars to present value.

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(ii) Adjust the estimated scrap value by an index factor 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 denominator, multiply the estimated scrap value of \$149 per ton (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.

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(iii) Multiply the adjusted scrap value (ii) per ton by the number of tons used to calculate the scrap value component of the initial bond or letter of credit amount and subtract the resulting value from the adjusted gross cost (i).

(iv) Add 1 percent of the subtotal (iii) for the adjusted performance 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.

(v) Add the subtotal (iii) to the sum of percentages (iv) and round the resulting total to the nearest \$1,000 to determine the adjusted financial assurance amount for the reporting year.

(c) The certificate holder shall use a form of bond or letter of credit approved by the Council.

(d) The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.

(e) The certificate holder shall describe the status of the bonds or letters of credit in the annual report submitted to the Council under Condition (22).

(f) The bonds or letters of credit shall not be subject to revocation or reduction before retirement of the facility site.

[Amendment #1] [Amendment #3]

(31) If the certificate holder elects to use a bond to meet the requirements of Condition (30), the certificate holder shall ensure that the surety is obligated to comply with the requirements of applicable statutes, Council rules and this site certificate when the surety exercises any legal or contractual right it may have to assume construction, operation or retirement of the energy facility. The certificate holder shall also ensure that the surety is obligated to notify the Council that it is exercising such rights and to obtain any Council approvals required by applicable statutes, Council rules and this site certificate before the surety commences any activity to complete construction, operate or retire the energy facility.

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(32) Before beginning construction, 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

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1 contractors that have substantial experience in the design and construction of similar
2 facilities. The certificate holder shall report to the Department any change of major
3 construction contractors.

4
5 (33) The certificate holder shall contractually require all construction contractors and
6 subcontractors involved in the construction of the facility to comply with all applicable laws
7 and regulations and with the terms and conditions of the site certificate. Such contractual
8 provisions shall not operate to relieve the certificate holder of responsibility under the site
9 certificate.

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11 (34) During construction, the certificate holder shall have an on-site assistant construction
12 manager who is qualified in environmental compliance to ensure compliance with all
13 construction-related site certificate conditions. During operation, the certificate holder shall

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1 have a project manager who is qualified in environmental compliance to ensure compliance with
2 all ongoing site certificate conditions. The certificate holder shall notify the Department of the
3 name, telephone number, fax number and e-mail address of these managers and shall keep the
4 Department informed of any change in this information.

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

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9 (36) Notwithstanding OAR 345-027-0050(2), an amendment of the site certificate is required if
10 the proposed change would increase the electrical generation capacity of the facility and would
11 increase the number of wind turbines or the dimensions of existing wind turbines.

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12 2. Land Use Conditions

13 (37) The certificate holder shall construct the public road improvements described in the site
14 certificate application to meet or exceed road standards for the road classifications in the
15 County's Transportation System Plan and Zoning Ordinance because roads will require a
16 more substantial section to bear the weight of the vehicles and turbine components than
17 would usually be constructed by the County.

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18 (38) The certificate holder shall cooperate with the Sherman County Road Department to ensure
19 that any unusual damage or wear caused by construction of the facility is repaired by the
20 certificate holder. Upon completion of construction, the certificate holder shall restore the
21 county roads to at least their pre-project condition, to the satisfaction of the county public
22 works department.

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23 (39) The certificate holder shall ensure that no equipment or machinery is parked or stored on
24 any county road except while in use.

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25 (40) The certificate holder shall not locate any aboveground facility structure (including wind
26 turbines, O&M building, substations and meteorological towers but not including
27 aboveground transmission lines and junction boxes) within 30 feet from any property line
28 or within 50 feet from the right-of-way of any arterial or major collector road or street and
29 shall not allow any architectural feature, as described in Sherman County Zoning Ordinance
30 Section 4.2, to project into these required setbacks by more than 2 feet.

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31 (41) The certificate holder shall locate aboveground transmission lines, junction boxes, access
32 roads and temporary construction laydown and staging areas to minimize disturbance with
33 farming practices and, wherever feasible, shall place turbines and transmission
34 interconnection lines along the margins of cultivated areas to reduce the potential for
35 conflict with farm operations. The certificate holder shall place aboveground transmission
36 lines and junction boxes along public road rights-of-way to the extent practicable. The
37 certificate holder shall place underground transmission lines and supervisory, control and
38 data acquisition (SCADA) system cables at least 36 inches below the surface of the ground.
39 [Amendment #1]

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40 (42) The certificate holder shall include traffic control procedures in contract specifications for
41 construction of the facility. The certificate holder shall require flaggers to be at appropriate
42 locations at appropriate times during construction to direct traffic and to ensure minimal

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conflicts between harvest and construction vehicles. The certificate holder shall submit a final transportation plan to Sherman County before beginning construction.

(43) Before beginning construction of the facility, the certificate holder shall record Farm Management Easements on the properties on which the certificate holder locates wind power generation facilities. The certificate holder shall record these easements in the real property records of Sherman County and shall file copies of the recorded easements with the Sherman County Planning Director.

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(44) The certificate holder shall remove from Special Farm Assessment the properties on which it locates the facility and shall pay all property taxes due and payable after the Special Farm Assessment is removed from such properties.

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(45) During operation, the certificate holder shall avoid impact on cultivated land to the extent reasonably possible when performing facility repair and maintenance activities.

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3. Cultural Resource Conditions

(46) Before beginning construction, the certificate holder shall provide to the Department a map showing the final design locations of all components of the facility and areas that would be temporarily disturbed during construction and also showing the areas that Archaeological Investigations Northwest, Inc. (AINW) surveyed in 2005, 2006, and 2007 as described in the site certificate application and the Request for Amendments #1, #2, and #3. If the final design of the facility could result in ground disturbance at specific resource sites or within high-probability areas identified by AINW in the June 2006 or May 2007 reports, the certificate holder shall hire qualified personnel to conduct the resurvey or test excavations recommended by AINW in that report. In addition, the certificate holder shall hire qualified personnel to conduct field investigation of all areas of permanent or temporary disturbance that AINW did not previously survey. The certificate holder shall provide a written report of the surveys, excavations and field investigation to the Department and to the State Historic Preservation Office (SHPO). If any historic, cultural or archaeological resources are found and are determined significant by the SHPO, 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 the areas where the resources were found and shall implement other appropriate measures to protect the resources. [Amendment #1] [Amendment #3]

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

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(48) 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.

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(49) 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 the State Historic Preservation Office (SHPO) of the discovery. The certificate holder shall consult with the Department and with SHPO to determine appropriate mitigation measures.

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(50) To offset adverse visual effects to the setting of the Oregon Trail alignment, the certificate holder shall:

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(a) Document the pre-construction setting of the Oregon Trail alignment from the John Day River canyon to Biggs through photographs and videotape; and

(b) Enhance the existing Oregon Trail historical marker off I-84 at Biggs with an additional educational and interpretive display in cooperation with the Sherman County Development League and the Sherman County Historical Society.

4. Geotechnical Conditions

(51) Before beginning construction, 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 shall submit a geologic report meeting the guidance contained in the DOGAMI Open File 00-04 (2000) "Guidelines for Engineering Geologic Reports and Site-Specific Seismic Hazard Reports."

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(52) Before beginning construction, the certificate holder shall submit a description of site-specific geotechnical work that will be performed before construction. 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.

Deleted: in general accordance with the site-specific seismic hazard report and the engineering geologic report guidelines that have been adopted by the Oregon Board of Geologist Examiners. The guidelines are available through the Board and in the DOGAMI publication O-00-04 (2000).

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(53) 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.

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5. Hazardous Materials, Fire Protection & Public Safety Conditions

(54) The certificate holder shall notify the Department within 72 hours of any accidents including mechanical failures on the site associated with construction or operation of the facility that may result in public health and safety concerns.

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(55) Before beginning construction, the certificate holder shall submit a Notice of Proposed Construction or Alteration to the Federal Aviation Administration (FAA) identifying the proposed final locations of the turbines and related or supporting facilities. The certificate holder shall notify the Department of the FAA's response as soon as it has been received.

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(56) To protect the public from electrical hazards, the certificate holder shall enclose the facility substations with appropriate fencing and locked gates.

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(57) The certificate holder shall not locate turbine towers within 450 feet of any residence or public road.

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- 1 | (58) The certificate holder shall construct turbine towers that are smooth steel structures with no
2 | exterior ladders or access to the turbine blades and shall install locked access doors
3 | accessible only to authorized personnel. Deleted: 60
- 4 | (59) The certificate holder shall follow manufacturers' recommended handling instructions and
5 | procedures to prevent damage to towers or blades that could lead to failure. Deleted: 61
- 6 | (60) The certificate holder shall have an operational safety monitoring program and shall inspect
7 | turbine blades on a regular basis for signs of wear. The certificate holder shall repair turbine
8 | blades as necessary to protect public safety. Deleted: 2
- 9 | (61) The certificate holder shall install and maintain self-monitoring devices on each turbine,
10 | connected to a fault annunciation panel or supervisory, control and data acquisition
11 | (SCADA) system at the operations and maintenance building, to alert operators to
12 | potentially dangerous conditions, and the certificate holder shall immediately remedy any
13 | dangerous conditions. The certificate holder shall maintain automatic equipment protection
14 | features in each turbine that would shut down the turbine and reduce the chance of a
15 | mechanical problem causing a fire. Deleted: 3
- 16 | (62) The certificate holder shall install generator step-up transformers at the base of each tower
17 | in locked cabinets designed to protect the public from electrical hazards and to avoid
18 | creation of artificial habitat for raptor prey. Deleted: 4
- 19 | (63) The certificate holder shall construct turbines on concrete foundations and shall cover the
20 | ground within a minimum 10-foot radius with non-flammable material. The certificate
21 | holder shall maintain the non-flammable pad area covering during operation of the facility. Deleted: 5
- 22 | (64) During construction and operation of the facility, the certificate holder shall develop and
23 | implement fire management plans in consultation with local fire control authorities to
24 | minimize the risk of fire and to respond appropriately to any fires that occur on the facility
25 | site. In developing the fire management plans, the certificate holder should take into
26 | account the dry nature of the region and should address risks on a seasonal basis. Deleted: 6
- 27 | (65) During construction and operation of the facility, the certificate holder shall ensure that
28 | service vehicles are equipped with a shovel and portable fire extinguisher of a 4A50BC or
29 | equivalent rating. Deleted: 7
- 30 | (66) During construction, the certificate holder shall ensure that construction vehicles and
31 | equipment are operated on graveled areas to the extent possible and that open flames, such
32 | as cutting torches, are kept away from dry grass areas. Deleted: 8
- 33 | (67) Upon the beginning of operation of the facility, the certificate holder shall provide to the
34 | North Sherman County Rural Fire Protection District and to the Moro Rural Fire Protection
35 | District copies of the approved site plan indicating the identification number assigned to
36 | each turbine and the location of all facility structures. During operation of the facility, the
37 | certificate holder shall provide to the North Sherman County Rural Fire Protection District
38 | and to the Moro Rural Fire Protection District the names and telephone numbers of facility
39 | personnel available to respond on a 24-hour basis in case of an emergency on the facility
40 | site. Deleted: 9
- 41 | (68) During operation, the certificate holder shall ensure that all on-site employees receive
42 | annual fire prevention and response training by qualified instructors or members of the Deleted: 70
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1 local fire department and that all employees are instructed to keep vehicles on roads and off
2 dry grassland, except when off-road operation is required for emergency purposes.

3 (69) During construction, the certificate holder shall require that all on-site construction
4 contractors develop and implement a site health and safety plan that informs workers and
5 others on-site what to do in case of an emergency and that includes the locations of fire
6 extinguishers and nearby hospitals, important telephone numbers and first aid techniques.

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7 (70) During operation, the certificate holder shall develop and implement a site health and safety
8 plan that informs employees and others on-site what to do in case of an emergency and that
9 includes the locations of fire extinguishers and nearby hospitals, important telephone
10 numbers and first aid techniques.

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11 (71) The certificate holder shall use hazardous materials in a manner that protects public health,
12 safety and the environment and shall comply with all applicable local, state and federal
13 environmental laws and regulations.

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14 (72) If a spill or release of hazardous materials occurs during construction or operation of the
15 facility, the certificate holder shall notify the Department within 72 hours and shall clean up
16 the spill or release and dispose of any contaminated soil or other materials according to
17 applicable regulations. The certificate holder shall make sure that spill kits containing items
18 such as absorbent pads are located on equipment and storage facilities to respond to
19 accidental spills and shall instruct employees handling hazardous materials in the proper
20 handling, storage and cleanup of these materials.

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21 (73) Before beginning construction, the certificate holder shall cooperate with the Oregon
22 Department of Transportation to implement public safety improvements to the shoulders of
23 State Highway 206 by bearing the cost of constructing two viewpoint turn-offs (one on each
24 side of the highway) within the highway right-of-way in suitable locations from where the
25 public may safely view the wind turbines without entering private property or interfering
26 with facility operations.

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27 6. Water, Soils, Streams & Wetlands Conditions

28 (74) The certificate holder shall conduct all construction work in compliance with an Erosion and
29 Sediment Control Plan (ESCP) satisfactory to the Oregon Department of Environmental
30 Quality and as required under the National Pollutant Discharge Elimination System
31 (NPDES) Storm Water Discharge General Permit #1200-C. The certificate holder shall
32 include in the ESCP any procedures necessary to meet local erosion and sediment control
33 requirements and storm water management requirements.

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34 (75) During construction, the certificate holder shall limit truck traffic to designated existing and
35 improved road surfaces to avoid soil compaction, to the extent possible.

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36 (76) The certificate holder shall cover turbine pad areas with gravel or other non-erosive material
37 immediately following exposure during construction and shall maintain the pad area
38 covering during operation of the facility.

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39 (77) During construction, the certificate holder shall avoid impacts to waters of the state in the
40 following manner:

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(a) The certificate holder shall bore under the intermittent drainage channel identified in Appendix J-1 of the site certificate application in any location where the underground collector system would cross the channel.

(b) The certificate holder shall locate transmission line support structures outside of the drainage channel and the wetland identified in Appendix J-1 of the site certificate application in any location where an aboveground transmission line crosses over the channel or the wetland area.

(c) After the final turbine design locations have been identified, if construction would occur in any locations not previously investigated as described in Appendix J-1 of the application, the certificate holder shall conduct a pre-construction investigation to determine whether any jurisdictional waters of the state exist in those locations. The certificate holder shall submit a written report on the pre-construction investigation to the Department of Energy and to the Department of State Lands for approval before beginning construction and shall ensure that construction of the facility would have no impact on any jurisdictional water identified in the pre-construction investigation.

(78) During construction, the certificate holder shall ensure that the wash down of concrete trucks occurs only at a contractor-owned batch plant or at tower foundation locations. If such wash down occurs at tower foundation locations, then the certificate holder shall ensure that wash down wastewater does not run off the construction site into otherwise undisturbed areas and that the wastewater is disposed of on backfill piles and buried underground with the backfill over the tower foundation.

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(79) The certificate holder shall restore areas that are temporarily disturbed during construction according to the methods, monitoring procedures and success criteria described in the Revegetation Plan that is incorporated in the Final Order on the Application as Attachment B and as amended from time to time. During operation, 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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(80) During facility operation, the certificate holder shall routinely inspect and maintain all roads, pads and trenched areas and, as necessary, maintain or repair erosion control measures.

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(81) During operation, the certificate holder shall not use any water or chemicals for washing turbine blades unless the certificate holder demonstrates to the satisfaction of the Department before any blade-washing begins that:

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(a) Oregon Department of Environmental Quality (DEQ) regulations do not require a permit for the proposed blade-washing activity or, if a permit is required, that the proposed blade-washing activity is authorized under a general permit issued by DEQ; and

(b) In conducting blade-washing activities, the certificate will use water only from its approved on-site well and that the use of water will not exceed 5,000 gallons per day.

7. Transmission Line & EMF Conditions

(82) The certificate holder shall install the 34.5-kV collector system underground to the extent practical. Where geotechnical conditions or other engineering considerations require, the certificate holder may install segments of the collector system aboveground in developed or agricultural areas that are Category 6 habitat, but the total length of aboveground segments

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1 must not exceed 12 miles. The certificate holder shall construct aboveground segments of
2 the collector system using single or double circuit monopole design as described in the site
3 certificate application and shall not locate any aboveground segments within 200 feet of any
4 existing residence. [Amendment #1]

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

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9 (84) Before beginning construction, the certificate holder shall obtain a permit, substantially in
10 the form of the draft permit incorporated in the Final Order on the Application as
11 Attachment D, from the Oregon Department of Transportation authorizing the location,
12 installation, construction, maintenance and use of buried cables within the right-of-way of
13 State Highway 206.

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14 (85) To protect public safety, the certificate holder shall design and maintain the transmission
15 lines so that:

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16 (a) Alternating current electric fields during operation do not exceed 9 kV per meter at
17 one meter above the ground surface in areas accessible to the public.

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18 (b) Induced voltages during operation are as low as reasonably achievable.

19 (86) The certificate holder shall take reasonable steps to reduce or manage human exposure to
20 electromagnetic fields, including but not limited to:

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21 (a) Constructing aboveground segments of the 34.5-kV transmission line to ensure that
22 conductors have a minimum clearance of 25 feet from the ground at mid-span under
23 maximum sag conditions.

24 (b) Constructing underground segments of the 34.5-kV transmission line at least 36-
25 inches below the surface of the ground.

26 (c) Providing to landowners a map of underground and overhead transmission lines on
27 their property and advising landowners of possible health risks.

28 [Amendment #1]

29 8. Plants, Wildlife & Habitat Protection Conditions

30 (87) During construction and operation of the facility, the certificate holder shall implement a
31 plan to control the introduction and spread of noxious weeds. The certificate shall develop
32 the weed control plan in consultation with the Sherman County Weed Control Manager.

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33 (88) The certificate holder shall design all aboveground transmission line support structures
34 following the practices suggested by the Avian Powerline Interaction Committee (APLIC
35 1996, referenced in the site certificate application, p. P-33) and shall install anti-perching
36 devices on transmission pole tops and cross arms where the poles are located within ½ mile
37 of turbines.

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38 (89) If construction begins after 2006, the certificate holder shall review the ONHIC and
39 USFWS databases and consult with Frank Isaacs, Oregon State University Cooperative
40 Wildlife Unit (or other expert designated by ODFW) on an annual basis before beginning
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1 construction to determine whether bald eagles or peregrine falcons have been observed in or
2 near the site of the facility. The certificate holder shall report the results of the database

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review and consultation to the Department and to ODFW and, if there have been new observations of bald eagles or peregrine falcons in the area, the certificate holder shall implement appropriate measures to protect the species from adverse impact, as approved by the Department and ODFW.

- (90) The certificate holder may construct turbines and other facility components within 900-foot corridors having centerlines defined by the endpoints shown on Table 1 of the Final Order on Amendment #1 and on Table 1 of the Final Order on Amendment #3, subject to the following requirements addressing potential habitat impact and subject to the requirements of Condition 100:

(a) The certificate holder shall not construct any facility components within areas of Category 1 habitat and shall avoid temporary disturbance of Category 1 habitat.

(b) The certificate holder shall design and construct facility components that are the minimum size needed for safe operation of the energy facility.

(c) To the extent possible, the certificate holder shall construct facility components in the locations shown on Figure 1 of the site certificate application.

(d) If the certificate holder must change the layout of facility components from what is shown on Figure 1 due to microsite considerations, the certificate holder shall, to the extent possible, construct facility components within 300-foot corridors having centerlines defined by the endpoints shown on Table 1 of the Final Order on Amendment #1 and on Table A of the Final Order on Amendment #3.

(e) The certificate holder may construct facility components outside the 300-foot corridors if necessary due to microsite considerations, except that the certificate holder shall not construct any facility components outside 900-foot corridors having centerlines defined by the endpoints shown on Table 1 of the Final Order on Amendment #1 and on Table A of the Final Order on Amendment #3 or cause any temporary disturbance outside those 900-foot corridors.

[Amendment #1] [Amendment#3]

- (91) The certificate holder shall implement measures to mitigate impacts to sensitive wildlife habitat during construction including, but not limited to, the following:

(a) Preparing maps to show sensitive areas, such as nesting or denning areas for sensitive wildlife species, that are off limits to construction personnel.

(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.

(c) Avoiding unnecessary road construction, temporary disturbance and vehicle use.

- (92) During construction, the certificate holder shall protect the area within a 1300-foot buffer around 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

1 During the year in which construction occurs, the certificate holder shall use a protocol
2 approved by the Oregon Department of Fish and Wildlife (ODFW) to determine whether
3 there are any active nests of these species within a half-mile of any areas that would be
4 disturbed during construction. If a nest is occupied by any of these species after the
5 beginning of the sensitive period, the certificate holder shall not engage in high-impact

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1 construction activities (activities that involve blasting, grading or other major ground
2 disturbance) or allow high levels of construction traffic within 1300 feet of the nest site. In
3 addition, the certificate holder will flag the boundaries of the 1300-foot buffer area and
4 shall instruct construction personnel to avoid any unnecessary activity within the buffer
5 area. The certificate holder shall hire an independent biological monitor to observe the
6 active nest sites during the sensitive period for signs of disturbance and to notify the
7 Department of any non-compliance with this condition. If the monitor observes nest site
8 abandonment or other adverse impact to nesting activity, the certificate holder shall
9 implement appropriate mitigation, in consultation with ODFW and subject to the approval
10 of the Department, unless the adverse impact is clearly shown to have a cause other than
11 construction activity. The certificate holder may begin or resume high-impact construction
12 activities before the ending day of the sensitive period if any known nest site is not
13 occupied by the early release date. If a nest site is occupied, then the certificate holder may
14 begin or resume high-impact construction before the ending day of the sensitive period
15 with the approval of ODFW, after the young are fledged. The certificate holder shall use a
16 protocol approved by ODFW to determine when the young are fledged (the young are
17 independent of the core nest site).

18 (93) The certificate holder shall conduct wildlife monitoring as described in the Wildlife
19 Monitoring and Mitigation Plan that is incorporated in the Final Order on the Application as
20 Attachment A and as amended from time to time.

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21 (94) To mitigate for potential adverse impacts to bat species, the certificate holder shall
22 contribute \$10,000 per year for three years, beginning in the first year of operation, to fund
23 research toward better understanding wind facility impacts to bats and to develop mitigation
24 solutions. In consultation with the Oregon Department of Energy and the Oregon
25 Department of Fish and Wildlife, the certificate holder shall select an appropriate bat
26 conservation organization to receive this funding.

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27 (95) Before beginning construction of the facility, the certificate holder shall acquire the legal
28 right to create, maintain and protect a habitat mitigation area for the life of the facility by
29 means of an outright purchase, conservation easement or similar conveyance and shall
30 provide a copy of the documentation to the Department. Within the habitat mitigation area,
31 the certificate holder shall improve the habitat quality as described in the Habitat Mitigation
32 Plan that is incorporated in the Final Order on the Application as Attachment C and as
33 amended from time to time.

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34 9. Visual Effects Conditions

35 (96) To reduce the visual impact of the facility, the certificate holder shall:
36 (a) Mount nacelles on smooth, hollow steel towers, approximately 20 feet in diameter at
37 the base.
38 (b) Paint all towers uniformly in a neutral white or light gray color.
39 (c) Paint the substation buildings in a neutral color to blend with the surrounding
40 landscape.
41 (d) Not allow any advertising to be used on any part of the facility or on any signs posted
42 at the facility, except that the turbine manufacturer's logo may appear on turbine nacelles.

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(e) Use only those signs required for facility safety or required by law, except that the certificate holder may erect a sign near the operations and maintenance building to identify the wind energy facility.

(f) Maintain any signs allowed under this condition in good repair.

(97) The certificate holder shall design and construct the operation and maintenance building to be generally consistent with the character of similar buildings used by commercial farmers or ranchers in the area and shall paint the building in a neutral color to blend with the surrounding landscape.

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(98) The certificate holder shall not use exterior nighttime lighting except:

(a) The minimum turbine tower lighting required by the Federal Aviation Administration.

(b) Security lighting at the operations and maintenance building and at the substations, provided that such lighting is shielded or downward-directed to reduce glare.

(c) Minimum lighting necessary for repairs or emergencies.

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10. Noise Control Conditions

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1	(99) To reduce noise impacts at nearby residential areas, the certificate holder shall:	Deleted: 101
2	(a) Confine the noisiest operation of heavy construction equipment to the daylight hours.	
3	(b) Require contractors to install and maintain exhaust mufflers on all combustion engine-	
4	powered equipment; and	
5	(c) Establish a complaint response system at the construction manager's office to address	
6	noise complaints.	
7	(100) Before beginning construction, the certificate holder shall present information	Deleted: 2
8	demonstrating to the satisfaction of the Department that the requirements of (a), (b) or (c)	
9	have been met at property R5 (as shown on the Noise Buffer and Receptor Locations map	
10	in the Application Supplement, Tab X, Item vi). <u>In addition, the certificate holder shall</u>	Formatted: Not Highlight
11	<u>present information demonstrating to the satisfaction of the Department the requirements of</u>	
12	<u>(a) or (c) have been met at properties R-1, R-8, R-9, and R-10 (as shown on Figure 1 of</u>	
13	<u>Exhibit X of the Third Request for Amendment):</u>	Formatted: Not Highlight
14	(a) The certificate holder has obtained a legally effective easement or real covenant	
15	pursuant to which the owner of the property authorizes the certificate holder's operation of	
16	the facility to increase ambient statistical noise levels L_{10} and L_{50} by more than 10 dBA at	
17	the appropriate measurement point. A legally effective easement or real covenant shall:	
18	include a legal description of the burdened property (the noise sensitive property); be	
19	recorded in the real property records of the county; expressly benefit the certificate holder;	
20	expressly run with the land and bind all future owners, lessees or holders of any interest in	
21	the burdened property; and not be subject to revocation without the certificate holder's	
22	written approval.	
23	(b) If the certificate holder has not obtained a legally effective easement or real covenant	
24	as described in (a) and has not met the requirements of (c), the certificate holder shall not	
25	construct turbines F-05, F-06, F-07, F-08 and J-01 as shown on Figure B-1 described in the	
26	Final Order on Amendment #1, shall construct turbines F-01, F-02, F-03 and F-04 within	
27	the approved micrositing corridor at least 7,990 feet away from R5 and shall construct	
28	turbines J-02 through J-13 in the locations specified in Table 7 of the Final Order on	
29	Amendment #1.	
30	(c) If the certificate holder has not obtained a legally effective easement or real covenant as	
31	described in (a), the certificate holder may <u>prepare a pre-construction noise analysis report,</u>	
32	<u>using the CadnaA model and the final turbine locations,</u> in accordance with OAR 340-035-	Deleted: , instead of meeting the
33	0035(1)(b)(B)(iii)(IV), <u>demonstrating that the total noise generated by the facility would</u>	Deleted: identify the final design
34	meet the ambient degradation test at the appropriate measurement point when all turbines	locations of all turbines to be built in the
35	are placed in their final design locations. The certificate holder shall perform the noise	F and J strings and perform a noise
36	analysis using the Sound Propagation Model for Outdoor Noise Sources (SPM 9613,	analysis
37	Version 2) and shall assume the following input parameters:	Deleted: ¶
38	(i) The maximum sound power level guaranteed by the manufacturer.	<#>Section Break (Next Page)
39	(ii) Temperature of 52° F (11° C).	
40	(iii) Relative humidity of 70 percent.	
41	<u>(iv) Ground absorption coefficient of 1.</u>	Formatted: Highlight
42	(v) No barrier effects.	Deleted: No ground effect.
43	[Amendment #1]	Deleted:
44	11. Waste Management Conditions	Deleted: SECOND
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- 1 (101) The certificate holder shall provide portable toilets for on-site sewage handling during
2 construction and shall ensure that they are pumped and cleaned regularly by a licensed
3 contractor who is qualified to pump and clean portable toilet facilities.
- 4 (102) During operation, the certificate holder shall discharge sanitary wastewater generated at
5 ~~two~~ O&M buildings to a licensed on-site septic system in compliance with county permit
6 requirements. The certificate holder shall design the septic system design with a capacity
7 that is less than 2,500 gallons per day. ~~[Amendment #3]~~
- 8 (103) The certificate holder shall implement a waste management plan during construction that
9 includes but is not limited to the following measures:
10 (a) Training employees to minimize and recycle solid waste.
11 (b) Minimizing the generation of wastes from construction through detailed estimating of
12 materials needs and through efficient construction practices.
13 (c) Recycling steel and other metal scrap.
14 (d) Recycling wood waste.
15 (e) Recycling packaging wastes such as paper and cardboard.
16 (f) Collecting non-recyclable waste for transport to a landfill by a licensed waste hauler.
17 (g) Segregating all hazardous wastes such as used oil, oily rags and oil-absorbent
18 materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for
19 disposal by a licensed firm specializing in the proper recycling or disposal of hazardous
20 wastes.
- 21 (104) The certificate holder may dispose of waste concrete on site with the permission of the
22 landowner and in accordance with OAR 340-093-0080 and other applicable regulations.
23 The certificate holder shall dispose of waste concrete on site by placing the material in an
24 excavated hole, covering it with at least three feet of topsoil and grading the area to match
25 existing contours. If the waste concrete is not disposed of on site, the certificate holder shall
26 arrange for proper disposal in a landfill.
- 27 (105) The certificate holder shall implement a waste management plan during operation that
28 includes but is not limited to the following measures:
29 (a) Training employees to minimize and recycle solid waste.
30 (b) Recycling paper products, metals, glass and plastics.
31 (c) Collecting non-recyclable waste for transport to a landfill by a licensed waste hauler.

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(d) 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.

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.

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 signature by the Chair of the Energy Facility Siting Council and the authorized representative of the certificate holder.

IN WITNESS WHEREOF, this site certificate has been executed by the State of Oregon, acting by and through its Energy Facility Siting Council, and by Klondike Wind Power III LLC.

ENERGY FACILITY SITING COUNCIL

KLONDIKE WIND POWER III LLC

By: _____
David Ripma, Chair
Oregon Energy Facility Siting Council

By: _____
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Date:

Date:

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ATTACHMENT 2

COMPLIANCE WITH APPLICABLE STANDARDS

This attachment provides an analysis of compliance with ORS 469, applicable Council rules, and applicable state and local laws, rules, and ordinances.

Division 22 Standards

1) OAR 345-022-0000, GENERAL STANDARD OF REVIEW

This standard requires that to amend a site certificate, the Council must determine that the preponderance of evidence on record supports compliance with requirements in ORS 469, standards adopted by the Council applicable to the amended project, and other applicable Oregon statutes and administrative rules.

Response: This Attachment 2 analyzes compliance with applicable Council rules and applicable state and local laws, rules, and ordinances. Further, Attachment 3 includes exhibits specific to those siting standards that are at issue with this Third Amendment Request. Based on the information provided below and in Attachment 3, and the information provided in the original ASC and First Request for Amendment, the Council should find that the amended project satisfies OAR 345-022-0000.

2) OAR 345-022-0010, ORGANIZATIONAL EXPERTISE

This standard has four paragraphs. The first two provisions (-0010(1) and (2)) relate to applicant qualifications and capability, and the final two provisions (-0010(3) and (4)) relate to third-party permits.

Response: The information regarding the Certificate Holder's organizational expertise remains the same. Since the Council determined that the Certificate Holder has the operational expertise to operate the permitted project, and since the construction and operational requirements of the project as amended are the same as the currently permitted project, the Council can find that the Certificate Holder has the operational expertise to construct and operate the amended facility.

The Certificate Holder does not have a certified ISO 9000 or ISO 14000 program.

The Certificate Holder will not rely on any additional third party to obtain any of the necessary permits or approvals to site or operate the facility, as amended.

3) OAR 345-022-0020, STRUCTURAL STANDARD

This standard requires the Council to find:

“(a) The applicant, through appropriate site-specific study, has adequately characterized the site as to Maximum Considered Earthquake Ground Motion identified at International Building Code (2003 edition) Section 1615 and maximum probable ground motion, taking into account ground failure and amplification for the site specific soil profile under the maximum credible and maximum probable seismic events; and

“(b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety presented by seismic hazards affecting the site that are expected to result from maximum probable ground motion events. As used in this rule ‘seismic hazard’ includes ground shaking, ground failure, landslide, liquefaction, lateral spreading, tsunami inundation, fault displacement, and subsidence;

“(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility; and

“(d) The applicant can design, engineer, and construct the facility to avoid dangers to human safety presented by the hazards identified in subsection (c).”

Response: Exhibit H of this Third Request for Amendment describes the site-specific study completed for the entire expanded site boundary area proposed as Amendment 3, in accordance with the most current Department of Energy rules related to geology and seismicity. (See Exhibit H)

Although the Certificate Holder is requesting a change in the site boundary, the amended site boundary remains within the analysis area of Exhibit H of the ASC. Exhibit H of this Third Request for Amendment demonstrates that the newly adopted Geology and Seismic criteria are met for this expanded area. The Council concluded that the structural standard was met, and included mitigation requirements in the conditions of the Site Certificate. The Certificate Holder is not requesting a change to these conditions. Therefore, the Council can rely on its previous findings to determine that the amended project is in compliance with this structural standard.

4) OAR 345-022-0022, SOIL PROTECTION

This standard requires the Council to find “that the design, construction, and operation of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to soils including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills.”

Response: The Certificate Holder is requesting a change to the site boundary; therefore an amended application for a 1200-C permit is included with this Third Request for Amendment (see Exhibit I, Attachment 3), and it demonstrates compliance with DEQ

erosion control standards within the expanded site boundary that is the subject of this amendment.

The Certificate Holder intends to utilize the same erosion control measures, best management practices, and follow the requirements in the currently issued 1200-C permit in areas outside the permitted site boundary that will be disturbed. Therefore, the Council can rely on the Site Certificate findings with regard to soil for the amended project.

5) OAR 345-022-0030, LAND USE

This standard requires that the facility be in compliance with “the statewide planning goals adopted by the Land Conservation and Development Commission.” OAR 345-022-0030(1). A facility may show compliance either by securing necessary local approvals or demonstrating to the Council that the proposal can meet all applicable land use criteria.

Response: The Certificate Holder elected to demonstrate to the Council that the proposed facility can meet all applicable land use criteria. The Council identified all aspects of facility construction, operation, and retirement that would implicate local or statewide land use review requirements and then found that the proposed facility would meet all applicable criteria. The amended project, as requested in this Third Request for Amendment, also meets all applicable land use criteria. Although the Certificate Holder is requesting a change in the site boundary (an addition of approximately 137 acres in agricultural land that would be temporarily disturbed and 21 that would be permanently impacted) the amended site boundary does not trigger new land use concerns or issues that were not previously analyzed in Exhibit K of the ASC and the First and Second Requests for Amendment. The Council concluded that the land use standard was met, and included mitigation requirements in the conditions of the Site Certificate. The Certificate Holder is not requesting a change to these conditions. Therefore, the Council can rely on its earlier findings, as well as the discussion set forth in Exhibit K, Attachment 3, to determine that the amended project is in compliance with the land use standard.

6) OAR 345-022-0040, PROTECTED AREAS

This standard prohibits the siting of an energy facility in any of the listed protected areas. OAR 345-022-0040(1). The standard permits the siting of a facility outside the listed protected areas so long as the Council finds, “taking into account mitigation, the design, construction, and operation of the facility are not likely to result in significant adverse impact” to any of the listed protected areas.

Response: The proposed expanded site boundary does not lie within a protected area as defined in OAR 345-022-0040(1)(a) through (p). The ASC Exhibit L described the potential impacts to protected areas within 10 miles of the permitted site boundary. Based on the visual analysis performed for Exhibit R of this Amendment 3, the additional turbines and associated facilities will not result in changes to visual impacts to protected areas. The Council previously concluded that the protected area standard was met, and included mitigation requirements in the conditions of the Site Certificate. The certificate

holder is not requesting a change to these conditions. Therefore, the Council can rely on its earlier findings to determine that the amended project is in compliance with the standard for protected areas.

Sections (2) and (3) of OAR 345-022-0040 do not apply to this request for amendment.

7) OAR 345-022-0050, RETIREMENT AND FINANCIAL ASSURANCE

OAR 345-022-0050 requires the Council to find that “the site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility,” and that “the applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.”

Response: Based on Exhibit W of the ASC, the Council found that the permitted site could be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility. The requested amendment does not seek to change the type of land to be restored or facilities to be removed. It does not propose to operate in a different manner or use hazardous materials or generate hazardous waste not considered by the Council for the permitted project. Therefore, the Council may rely on its findings and determination of compliance with the standard for retirement.

Pursuant to the analysis contained in Exhibit W, Attachment 3, the Certificate Holder has determined that an additional bond or letter of credit, in the amount of \$1,625,000 would be provided to ensure the costs of retiring the facilities in the expanded site boundary that is the subject of this Third Amendment Request.

8) OAR 345-022-0060, FISH AND WILDLIFE HABITAT

For this standard, the Council must find that “the design, construction and operation of the facility, taking into account mitigation, are consistent with the fish and wildlife mitigation goals and standards of OAR 635-415-0025 in effect as of September 1, 2000.” OAR 345-022-0060. As revised, OAR 635-415-0025 describes six categories of habitat, in order of their value. The rule then establishes mitigation goals and corresponding implementation standards for each habitat category.

Response: The amended project includes approximately 24 acres of temporary impact and 3.25 acres of permanent impact in category 2, 3 and 4 habitats. To prevent any significant adverse impact, these impacts will be mitigated in accordance with ODFW habitat mitigation policies by enhancement of degraded habitat adjacent to the project, using the same means and methods as described for the mitigation in the First Amended Site Certificate. An analysis of the amended project’s compliance with the fish and wildlife habitat standard is included in Exhibit P, Attachment 3. Based on the analysis, the Council can determine that the amended project meets the fish and wildlife habitat standard.

9) OAR 345-022-0070, THREATENED AND ENDANGERED SPECIES

This standard requires that the Council find that the design, construction and operation of the proposed facility, taking into account mitigation, are consistent with any applicable conservation program adopted by Oregon Department of Agriculture (“ODA”) for plant species pursuant to ORS 564.105(3). If ODA has not adopted a protection and conservation program, then the Council must find that the design, construction, operation, and retirement of the proposed facility are not likely to cause a significant reduction in the likelihood of survival or recovery of the plant species. For wildlife species listed as threatened or endangered under ORS 496.172(2), the Council must determine that the design, construction and operation of the proposed facility “taking into account mitigation, are not likely to cause a significant reduction in the likelihood or survival or recovery of the species.”

Response: The amended project includes an expansion of the project boundary primarily within agricultural land. However, approximately 24 acres of temporary impact and 3.25 acres of permanent impact will occur in habitat categories 2, 3 and 4. These habitats are not important for threatened or endangered species, and no individual listed plants or wildlife were observed or would be expected to be observed in these areas. However, the impacts to these non-agricultural lands will be mitigated in accordance with ODFW habitat mitigation policies. An analysis of the amended project’s compliance with the threatened and endangered species standard is included in Exhibit Q, Attachment 3. Based on the analysis, the Council can determine that the amended project meets the threatened and endangered species standard.

10) OAR 345-022-0080, SCENIC RESOURCES

This standard requires that the Council find that “the design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic resources identified as significant or important in local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area described in the project order.”

Response: The amended project expands the site boundary within which turbines would be installed. An analysis of the amended project’s compliance with the scenic resources standard assumes the worst-case turbine (3.0 MW) will be located in these areas; the analysis is included in Exhibit R, Attachment 3, and concludes that the turbines would not be visible from the John Day River. Based on the analysis, the Council can determine that the amended project meets the scenic resource standard.

11) OAR 345-022-0090, HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES

This standard requires that the Council find that:

“The construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:

“(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;

“(b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and,

“(c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).”

While the Council may issue a site certificate for a facility that would produce power from wind, solar, or geothermal energy without making the findings described above, the Council may apply the above requirements to impose conditions on a site certificate issued for such a facility.

Response: The amended project includes an expansion of the site boundary, installation up to 43 additional turbines, road and collector system, as well as up to 193 acres of temporary impact and approximately 24 acres of permanent impact. An analysis of the amended project’s compliance with the historic, cultural, and archaeological resources standard is included in Exhibit S, Attachment 3. Although historic and prehistoric resources were found within the proposed Amendment 3 expansion area, significant impacts will not occur because micro-siting will avoid resources identified by the cultural resource survey impacts, including a 30 meter buffer. Based on the analysis, the Council can determine that the amended project meets the historic, cultural, and archaeological resources standard.

12) OAR 345-022-0100, RECREATION

This standard requires that the Council find that “the design, construction, and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities in the analysis area.”

Response: The Certificate Holder is requesting an expansion of the site boundary and installation of up to 43 additional turbines, which could affect visual quality of recreational opportunities. The analysis presented in Exhibit R assumes the “worst case” turbines will be installed, and concludes that there will be no change in the effect on recreation areas. The Council concluded that the recreation standard was met, and included mitigation requirements in the conditions of the Site Certificate. No turbines in the amended project area will be within an area used for recreation. The Certificate Holder is not requesting a change to these conditions. Therefore, the Council can rely on its earlier findings to determine that the amended project is in compliance with the standard for recreation.

Sections (2) and (3) of OAR 345-022-0100 do not apply.

13) OAR 345-022-0110, PUBLIC SERVICES

This standard requires the Council to find that “the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private providers within the analysis area described in

the project order to provide: sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.”

While the Council may issue a site certificate for a facility that would produce power from wind, solar, or geothermal energy without making the findings described above, the Council may apply these requirements to impose conditions on a site certificate issued for such a facility.

Response: The ASC Exhibit U describes the potential impacts to public services within 30 miles of the permitted site boundary. Although the Certificate Holder is requesting a change in the site boundary, the amended site boundary remains within the analysis area of Exhibit U. The amendment would increase the number of operation employees by two to five; moreover, construction would take a longer period of time, keeping construction workers employed longer. This amendment proposes no change in the quantity or method of disposal of solid waste, wastewater, or storm water. No change to traffic levels will result from this Third Amendment Request, and no new methods of fire control or emergency response are proposed.

Based on the information in ASC Exhibit U and First and Second Requests for Amendment, the Council concluded that the public services standard was met, and included mitigation requirements in the conditions of the Site Certificate. The Certificate Holder is not requesting a change to these conditions. Therefore, the Council can rely on its earlier findings to determine that the amended project is in compliance with the standard for public services.

14) OAR 345-022-00120, WASTE MINIMIZATION

This standard requires the Council to find that to the extent reasonably practicable:

“(a) The applicant’s solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction and operation of the facility, and when solid waste and wastewater is generated, to result in recycling and reuse of such wastes;

“(b) The applicant’s plans to manage the accumulation, storage, disposal, and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas.”

While the Council may issue a site certificate for a facility that would produce power from wind, solar, or geothermal energy without making the above findings, the Council may apply the above requirements to impose conditions on a site certificate issued for such a facility.

Response: The requested amendment does not affect the Certificate Holder’s plans to minimize, manage, recycle, or reuse solid waste or waste water. The Certificate Holder is not requesting a change to any condition related to waste management. Therefore, the Council can rely on its earlier findings to determine that the amended project is in compliance with the standard for waste minimization.

Division 23 Standards

None of the standards contained in OAR chapter 345, division 23 are applicable or relevant to the Klondike III Wind Project.

Division 24 Standards

The only standards contained in OAR chapter 345, division 24 applicable to the Klondike III Wind Project are as follows:

1) OAR 345-024-0010, PUBLIC HEALTH AND SAFETY STANDARDS FOR WIND ENERGY FACILITIES

This standard requires the Council to find that applicants for wind energy facilities:

- “(a) Can design, construct, and operate the facility to exclude members of the public from close proximity to the turbine blades and electrical equipment; and
- “(b) Can design, construct, and operate the facility to preclude structural failure of the tower or blades that could endanger the public safety and to have adequate safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure.”

Response: Although the Certificate Holder is requesting an expansion of the site boundary and up to 43 additional turbines, the requested change does not affect the Certificate Holder’s plans to exclude the public from close proximity to the turbine blades and electrical equipment or to take steps to preclude structural failure of the towers or blades that could endanger public safety. Further, the amendment does not alter the safety procedures intended to protect public safety. The Certificate Holder is not requesting any change to the conditions in the Site Certificate addressing these matters. Therefore, the Council can rely on its earlier findings and the Site Certificate conditions regarding public safety to determine that the amended project is in compliance with this standard.

2) OAR 345-024-0015, SITING STANDARDS FOR WIND ENERGY FACILITIES

This standard requires the Council to find that applicants for wind energy facilities can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures including, but not limited to, the following:

- (1) Using existing roads to provide access to the facility site, or if new roads are needed, minimizing the amount of land used for new roads and locating them to reduce adverse environmental impacts.
- (2) Using underground transmission lines and combining transmission routes.

(3) Connecting the facility to existing substations, or if new substations are needed, minimizing the number of new substations.

(4) Designing the facility to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment.

(5) Designing the components of the facility to minimize adverse visual features.

(6) Using the minimum lighting necessary for safety and security purposes and using techniques to prevent casting glare from the site, except as otherwise required by the Federal Aviation Administration or the Oregon Department of Aviation.

Response: Although the Certificate Holder is requesting an expansion of the site boundary and placement of up to 43 additional turbines within this area, the requested changes do not affect the Certificate Holder's plans to reduce cumulative adverse environmental effects in the vicinity by practicable measures.

Existing roads will be used to transport materials to the site for construction. Approximately nine miles of new access roads are the minimum required to allow appropriate spacing and micro-siting of the turbines. Overall the permanent impact would be about 24 acres, 21 of which are in agricultural lands. Access roads that are unwanted following the life of the facility will be restored to farmable condition.

The underground collector system for the expanded area will be connected to existing collector, transmission or substation facilities; No new substations or high voltage transmission lines are proposed.

The amended project area will utilize the same methods for reducing impacts to raptors, including tubular towers and underground collector lines, as the previously approved project.

Wind turbines are necessarily tall structures, and will be seen from the surrounding areas. However, the turbines in the amended project area will not be visible from the John Day River. Visual impacts are reduced by using tubular structures, painting with non-reflective coatings, and lighting the minimum number of towers allowed by the FAA. Overhead collectors will be built only when necessary to avoid bedrock or other unfavorable geotechnical conditions.

As noted above, lighting will be provided only on those turbines required by FAA. Ground lighting (for instance at the O&M buildings) will be hooded and focused downward to reduce glare. No lighting is proposed for overhead collectors or access.

The ASC analyzed all of these potential impacts, and the Certificate Holder is not requesting changes to the Site Certificate conditions addressing these potential impacts. The existing conditions would be applicable to these expanded areas and facilities as well. Therefore, the Council can rely on its earlier findings and the original Site Certificate conditions regarding these matters to determine that the amended project is in compliance with OAR 345-024-0015.

Division 27 Standards

OAR 345-027-0060(1)(f) requires an analysis of whether the facility, with the proposed change, would comply with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules, and ordinances if the Council amends the site certificate, as requested. For the purpose of this rule, a law, rule, or ordinance is “applicable” if the Council would apply or consider the law, rule, or ordinance under OAR 345-027-0070(9).

The discussion above demonstrates compliance with the applicable Council rules and local land use criteria (see also Exhibit K, Attachment 3). The discussion below demonstrates compliance with all other applicable state laws and rules.

1) OAR 340-035-0035, NOISE

The Council applies and enforces the Department of Environmental Quality’s (DEQ) noise standards for energy facilities under its jurisdiction.

Response: The amended project includes an expansion of the project boundary, and installation of up to 43 additional turbines with a maximum sound power level of 110 dBA. An analysis of the amended project’s compliance with the noise standard is included in Exhibit X, Attachment 3 of this Third Amendment request. Based on the analysis, the Council can determine that the amended project meets the noise standard provided Condition 102 (as proposed in Attachment 1) is met.

2) ORS 196.800-.990, WETLANDS

Pursuant to OAR 345-022-0000, the Council must determine compliance with applicable statutes, ORS 196.800-.990, and applicable Division of State Lands (DSL) regulations, OAR 141-085-0005, *et seq.*, relating to fill and other operations taking place within wetlands. These regulations require persons to obtain a fill-removal permit if more than 50 cubic yards of material will be removed or altered within “waters of the state.” The overall standard to be considered in granting a fill-removal permit is whether the proposed activity would not “unreasonably interfere with the paramount policy of this state to preserve the use of its waters for navigation, fishing, and public recreation.” ORS 196.825(2).

Response: The Third Request for Amendment does not propose any fill in jurisdictional waters. A wetland determination was conducted, as described in Exhibit J, which shows that there are no wetlands in the expanded site boundary. Therefore, the Council may rely on its initial findings and the existing conditions in the Site Certificate to determine that the amended project is in compliance with applicable Oregon statutes and regulations regarding wetlands.

3) ORS 469.401(2), PUBLIC HEALTH AND SAFETY

The Council is required to impose conditions in the site certificate for the protection of public health and safety.

Response: The current Site Certificate has several conditions relating to public health and safety, including measures to provide protection from electric and magnetic fields; none of these conditions are affected by this Third Request to Amend the Site Certificate. The amended project will not impact public health and safety and will not affect the project's compliance with public health and safety standards. Therefore, the Council may rely on its initial findings and the existing conditions in the Site Certificate to determine that the amended project is in compliance with applicable public health and safety requirements.

EXHIBIT F

PROPERTY OWNERSHIP

OAR 345-021-0010(1)(f)

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F.1 INTRODUCTION

OAR 345-021-0010(1)(f) *A list of the names and mailing addresses of all owners of record, as shown on the most recent property tax assessment roll, of property located within or adjacent to the corridor(s) the applicant has selected for analysis as described in subsection (b) and property located within or adjacent to the site of the proposed facility. The applicant shall submit an updated list of property owners as requested by the Department of Energy before the Department issues notice of any public hearing on the application for a site certificate as described in OAR 345-015-0220. In addition to incorporating the list in the application for a site certificate, the applicant shall submit the list to the Office in electronic format suitable to the Office for the production of mailing labels. Property adjacent to the proposed site of the facility or corridor means property that is:*

OAR 345-021-0010(1)(f)(A) *Within 100 feet of the site or corridor, where the site or corridor is within an urban growth boundary;*

OAR 345-021-0010(1)(f)(B) *Within 250 feet of the site or corridor, where the site or corridor is outside an urban growth boundary and not within a farm or forest zone;*

OAR 345-021-0010(1)(f)(C) *Within 500 feet of the site or corridor, where the site or corridor is within a farm or forest zone.*

Response: The expanded site is within a farm or forest zone; attached is a list of property owners located within or adjacent to (within 500 feet) the expanded site. This list will be updated prior to any public notice issued by the Department. In preparing the table, the Certificate Holder assembled the relevant sections of the current Sherman County tax maps and reviewed the tax maps to identify tax lots wholly or partially within the areas required by OAR 345-021-00010(1)(f). The applicant used these names and addresses to prepare Table F-1.

Table F- 1. Property Ownership Within the Project

Tax Lot #	Landowner(s)	Address	Township, Range W.M. Sherman County	Section
600	Nancy M. Faner, Trustee and Richard G. Harber and Gerry H. Harber, Trustee	Nancy Faner 23860 Long Valley Rd Hidden Hills, CA 91302	T.1N. R.18E	2
500	Rodney M. Welk and Lynette K. Welk, Trustees	Rodney Welk 31530 Sodaville Rd Lebanon, OR 97355	T.1N. R.18E	2
800	James Weir Memorial Fund - Bigelow District	c/o J. Thomas Coats 113 "A" E. Second Street The Dalles, OR 97058	T.1N. R.18E	3
7100, 8400	Richard E. Jones and Robert C. Jones, Jr. and Mary Alice Jones, Trustees	Robert C. Jones 1928 S. Century Lane Spokane Valley, WA 99037-8351	T.2N. R.18E	28
2400 / 2500 / 2700 / 2800	Roland and Sharon Simantel	Roland & Sharon Simantel PO Box 364 Wasco, OR 97065	T.1N. R.18E	11, 12, 13, 14
3700 9300 / 9400 800 / 900 / 1000 / 1100 / 1200 / 1600 / 1900 300	Stevens Family Farms Vernon and Virginia Melzer	c/o Arthur Stevens PO Box 257 Husum, WA 98623 PO Box 41 Wasco, OR 97065	T.1N. R.18E T.2N. R.18E T.1N. R.19E T.1N. R.18E	20 36 6, 7, 8 1
6700 / 8700	Frank and Deanna Zaniker	901 Richmond St The Dalles, OR 97058	T.1N. R.18E	27, 34
3400	Nancy Lewis	964A Kiely Blvd Santa Clara, CA 95051	T.1N. R.18E	19

Tax Lot #	Landowner(s)	Address	Township, Range W.M. Sherman County	Section
3600	Elizabeth Thomas	3564 East 2nd #61 The Dalles, OR 97058	T.1N. R.18E	19
5400 / 5500	U.S. Bank-Trustee - J.R. Morgan Trust, on behalf of Owners, and Marilyn Clark and Judy Probstfield	JR Morgan Trust (P&C) US Bank c/o Scott Robar SO-WA-T7TR 428 Riverside Ave Spokane, WA 99201	T.1N. R.17E	23, 24, 25, 26
2000	Lee and Terry Kaseberg	70031 Van Gilder Rd Wasco, OR 97065	T.1N. R.18E	9, 10
4101 / 4200	Lyndon P. & Symantha McClennan	P.O. Box 215 Wasco, OR 97065	T.1N. R.17E	14, 15
5300 / 5900	Alison Yamauchi	4900 Crestwood Dr Little Rock, AR 72207	T.1N. R.17E	22, 29
	Paula Walker Thompson	81157 McRae Rd. Helix, OR 97835		
	Judy Probstfield			
	Marilyn Clark			
5800 / 7700	Sylvia Irene Rogers, ET AL	2010 SW Nancy Dr. Gresham, OR 97080	T.1N. R.17E	27, 34
5600 / 7900	Kenneth R. Hart, Trust	95682 DeMoss Springs Lane Moro, OR 97039	T.1N. R.17E	25, 35
4000 / 4100 / 4201	Patrick A. & Kathleen A. Powell	12520 S.W. 19th Lake Oswego, OR 97034	T.1N. R.17E	13, 14
3900	Ronald R. Powell, LE	c/o Patrick Powell 12520 S.W. 19th Lake Oswego, OR 97034	T.1N. R.17E	13

Tax Lot #	Landowner(s)	Address	Township, Range W.M. Sherman County	Section
3300	Century Farm McDermid LLC	c/o Wendy Parker 26339 Stubbs Road Brownsville, OR 97327	T.1N. R.18E	18
5600	Eunice L. Henkle	c/o Carole Louise Makinster P.O. Box 353 Moro, OR 97039	T.1N. R.18E	30, 31
4700 / 4900 / 6300	James Robert Belshe LE	P.O. Box 327 Wasco, OR 97065	T.1N. R.18E	27, 28, 33
	Martin James Belshe	97200 Hwy. 206 Moro, OR 97039		
	Robert Boyce Belshe			
4000	William V. & Catherine Trimble	P.O. Box 10 Sandy, OR 97055	T.1N. R.18E	23, 26
4200 / 4100	BLM		T.1N. R.18E	24, 25
1400 / 2800 / 2900	Evelyn Smith LE AL	1955 Dallas Hwy. NW, Apt. 207 Salem, OR 97304	T.1N. R.19E	7, 17, 19
2600	Evelyn Smith LE AL	1955 Dallas Hwy. NW Apt. 207 Salem, OR 97304	T.1N. R.18E	13
	Lawrence L. Smith	22 Areys Lane Orleans, MA 02653		
	Ray Smith	Wasco, OR 97065		
1300 / 1500	Bonnie Anita Baker	1111 Wright St. The Dalles, OR 97058	T.1N. R.19E	7, 17

Tax Lot #	Landowner(s)	Address	Township, Range W.M. Sherman County	Section
801 / 1001/ 1700 / 1800 / 801 / 1100	David Schlecht	5701 N.E. 88th St. Vancouver, WA 98665	T.1N. R.19E	5, 6, 7, 8
6000	Mederick Liberty Trust	c/o Leslie Suske 7510 Ridge Drive Gladstone, OR 97027	T.2N. R.18E	25
6300 / 6400 / 6500 / 9100 / 9200	Dewey J. Thomas Trustee	P.O. Box 153 Wasco, OR 97065	T.2N. R.18E	26, 27, 35
9000	James E. & Dean W. Medler	James E. & Dean W. Medler 2067 Hwy. 52 Payette, ID 83661	T.2N. R.18E	35
	Louis Tatum - Living Trust	Louis Tatum Living Trust c/o Louann Jones P.O. Box 426 Irrigon, OR 97844		
5100 / 6900 / 7200	Dewey J. Thomas Trustee Ronald K.& Melva D. Thomas	James E. & Dean W. Medler 2067 Hwy. 52 Payette, ID 83661	T.2N. R.18E	21, 28, 29
7400	Delta M. Johnson, Trustee	3325 Columbia View Dr. #8 The Dalles, OR 97058	T.2N. R.18E	29
8200	Stuart M. Macnab	c/o Michael S. Macnab, Trustee 3440 N.W. Vaughn St. Portland, OR 97210	T.2N. R.18E	32
7000 / 8500 / 8701	James E. & Dean W. Medler Marci Medler Cress Thompson	Marci Medler Cress Thompson 66351 Hay Canyon Road Moro, OR 97039	T.2N. R.18E	28, 33
8600	Nancy Lewis	964A Kiely Blvd. Santa Clara, CA 95051	T.2N. R.18E	33

Tax Lot #	Landowner(s)	Address	Township, Range	Section
			W.M. Sherman County	
2900	Betty G. Parker	c/o Jan Parker 909 W. Heather Dr. Mesa, AZ 85201	T.2N. R.18E	15
4000, 4100, 4201	Pat Powell	7580 SW Fulton Park Blvd Portland, OR 97219	T.1N. R.17E	
3900	Ronald R. Powell	c/o pat Powell 7580 SW Fulton Park Blvd Portland, OR 97219	T.1N. R.17E	
2102,3013, 4500	Weedman Ranches	Guy and Mike Weedman PO Box 386 Wasco, OR 97065	T.1N R.18E	
3900, 4600	Eulalie Welk and Virginia Laughlin, Sharon Laughlin, Ginger Hakala, David Weld, Jeaney McArthur, Frank Welk, Caralyn Welk and Kathleen Rude	Virginia Laughlin 63011 Marsh Orchid Drive Bend, OR 97701-8331	T.1N R.18E	

Table F-1. Property Ownership Adjacent to (within 500 feet) the Project

<u>Owner</u>	<u>Address</u>	<u>Tenant Farmer</u>	<u>Farmer Address</u>	<u>Tax Lot #</u>	<u>Map #</u>
Nancy M. Faner, Trustee and Richard G. Harber and Gerry H. Harber, Trustee	Nancy Faner 23860 Long Valley Rd Hidden Hills, CA 91302	Jesse Stutzman	PO Box 116 98508 Emigrant Springs Lane Wasco, OR 97067	600	
Rodney M. Welk and Lynette K. Welk, Trustees	Rodney Welk 31530 Sodaville Rd Lebanon, OR 97355	Nick Welk	91916 Highway 206 Wasco, OR 97065	500	
James Weir Memorial Fund - Bigelow District	c/o J. Thomas Coats 113 "A" E. Second Street The Dalles, OR 97058	Kent Thomas	PO Box 7 Wasco, OR 97058	800	
Richard E. Jones and Robert C. Jones, Jr. and Mary Alice Jones, Trustees	Robert C. Jones 1928 S. Century Lane Spokane Valley, Wa. 99037-8351	Jesse Stutzman	PO Box 116 98508 Emigrant Springs Lane Wasco, OR 97067	7100, 8400	
Roland and Sharon Simantel	Roland & Sharon Simantel PO Box 364 Wasco, OR 97065	n/a	n/a	2400, 2500, 2700, 2800	
Stevens Family Farms	c/o Arthur Stevens PO Box 257 Husum, WA 98623	Roland Simantel	PO Box 364 Wasco, OR 97065	3700; 9300, 9400; 800, 900, 1000, 1100, 1200, 1600, 1900	
Vernon and Virginia Melzer	Vernon & Virginia Melzer PO Box 41 Wasco, OR 97065	Daryl Melzer	PO Box 51 Wasco, OR 97065	300	
Frank and Deanna Zaniker	Frank & Deanna Zaniker 901 Richmond St The Dalles, OR 97058	n/a	n/a	6700, 8700	
Nancy Lewis	Nancy Lewis 964A Kiely Blvd Santa Clara, CA 95051	Weedman Ranches	PO Box 386 Wasco, OR 97065	3400	

<u>Owner</u>	<u>Address</u>	<u>Tenant Farmer</u>	<u>Farmer Address</u>	<u>Tax Lot #</u>	<u>Map #</u>
Dan Thomas	Dan Thomas 3564 East 2nd #61 The Dalles, OR 97058	Weedman Ranches	PO Box 386 Wasco, OR 97065	3600	
U.S. Bank-Trustee - J.R. Morgan Trust, on behalf of Owners, and Marilyn Clark and Judy Probstfield	JR Morgan Trust (P&C) US Bank c/o Scott Robar SO- WA-T7TR 428 Riverside Ave Spokane, WA 99201	Chris and Ernie Moore	Star Route, Box 99 Moro, OR 97039	5400, 5500	
Lee and Terry Kaseberg	Lee & Terry Kaseberg 70031 Van Gilder Rd Wasco, OR 97065			2000	
Patrick A. Powell	Pat Powell 7580 SW Fulton Park Blvd Portland, OR 97219			4000, 4100, 4201	1N17E
Ronald R. Powell	c/o Pat Powell 7580 SW Fulton Park Blvd Portland, OR 97219			3900	1N17E
Weedman Raches, Inc.	Guy & Mike Weedman PO Box 386 Wasco, OR 97065			3102, 3103, 4500	1N18E
EULALIE WELK and VIRGINIA LAUGHLIN, SHARON LAUGHLIN, GINGER HAKALA, DAVID WELK, JEANEY McARTHUR, FRANK WELK, CARALYN WELK and KATHLEEN RUDE	Virginia Laughlin 63011 Marsh Orchid Drive Bend, OR 97701-8331			3900, 4600	1N18E
Gordon W. Hilderbrand	Gordon Hilderbrand P.O. Box 326 Wasco, OR 97065			3100	01N 18 00 00
William P. Etal O'Mera	William P. Etal O'Mera 5080 Green Road Hood River, OR 97031			5000	01N 18 00 00

<u>Owner</u>	<u>Address</u>	<u>Tenant Farmer</u>	<u>Farmer Address</u>	<u>Tax Lot #</u>	<u>Map #</u>
William P. Etal O'Mera	William P. Etal O'Mera 5080 Green Road Hood River, OR 97031			3100	01N 18 00 00
Edith Luetta Le Etal Shull	Edith Luetta Le Etal Shull P.O. Box 171 Wasco, OR 97065			6200	01N 18 00 00
James R. & Jerrine Co T Belshe	James R. & Jerrine Co T Belshe 500 Sandon Street Wasco, OR 970654			4900	01N 18 00 00
Pat & Debbie Bird	Pat & Debbie Bird 98721 Baseline Lane Moro, OR 97039			4800	01N 18 00 00
Pat & Debbie Bird	Pat & Debbie Bird 98721 Baseline Lane Moro, OR 97039			6500	01N 18 00 00
Pat & Debbie Bird	Pat & Debbie Bird 98721 Baseline Lane Moro, OR 97039			6501	01N 18 00 00
William & Cathrine Trimble	William & Cathrine Trimble 34420 S. E. Jarl Road Boring, OR 97009			4000	01N 18 00 00
Federal Government	Federal Government Exempt 00000			4100	01N 18 00 00
Stevens Family Farm	Stevens Family Farm co/ Herbert A. Stevens P.O. Box 257 Husum, WA			100	01N 18 00 00
Richard D. & Jean H. McGregor	Richard D. & Jean H. McGregor 10242 S.E. Walnut Drive Portland, OR 97066-2119			3400	01N 17 00 00

<u>Owner</u>	<u>Address</u>	<u>Tenant Farmer</u>	<u>Farmer Address</u>	<u>Tax Lot #</u>	<u>Map #</u>
Richard D. & Jean H. McGregor	Richard D. & Jean H. McGregor 10242 S.E. Walnut Drive Portland, OR 97066-2119			0002	01N 17 00 00
Keith, Christine Rice Trust	Keith, Christine Rice Trust US Bank Farm, Ranch & Timber Asset MGT Spokane, WA 99220-3588			3300	01N 17 00 00
Virginina Et Al Le Laughlin	Virginina Et Al Le Laughlin 63011 Marrsh Orchid Rd Bend, OR 97701			3600	01N 17 00 00
Michael & Guy Phill Weedman	Michael & Guy Phill Weedman 99436 Monkland Lane Wasco, OR 97065			3700	01N 17 00 00
Lyndon P. McClennan	Lyndon P. McClennan P.O. Box 215 Wasco, OR 97065			4200	01N 17 00 00
Patrick A. Powell	Patrick A. Powell 7580 S.W. Fullton Pk Blvd Portland, OR 97219			4100	01N 17 00 00
Patrick A. Powell	Patrick A. Powell 7580 S.W. Fullton Pk Blvd Portland, OR 97219			4201	01N 17 00 00
Patrick A. Powell	Patrick A. Powell 7580 S.W. Fullton Pk Blvd Portland, OR 97219			4000	01N 17 00 00
Jo Anne Kock	Jo Anne Kock 1817 Feather Way Las Vegas, NV 89108			4300	01N 17 00 00

EXHIBIT H

GEOLOGY AND SEISMICITY

OAR 345-021-0010(1)(h)

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APPENDIX

H-1	GEOLOGIC AND SEISMIC EVALUATION FOR KLONDIKE III WIND POWER PROJECT AMENDMENT 3
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H.1 INTRODUCTION

OAR 345-021-0010(1)(h) *Information from reasonably available sources regarding the geological and soil stability within the analysis area, providing evidence to support findings by the Council as required by OAR 345-022-0020, including:*

H.2 GEOLOGICAL AND TOPOGRAPHIC FEATURES

OAR 345-021-0010(1)(h)(A) *A geologic report meeting the guidance in Oregon Department of Geology and Mineral Industries open file report 00-04 “Guidelines for Engineering Geologic reports and Site-Specific Seismic Hazard Reports.”*

Response: The amended project area is within the analysis area for the authorized project. The report provided in the ASC provides most of the information required by the Guidelines for the expanded area in meeting this standard, including a site-specific seismic hazard analysis in accordance with the Guidelines. Additional information, including the MCE ground motion identified in the 2003 IBC, is provided as Appendix A to this exhibit.

H.3 SITE-SPECIFIC GEOLOGIC AND GEOTECHNICAL WORK

OAR 345-021-0010(1)(h)(B) *A description and schedule of site-specific geotechnical work that will be performed before construction for inclusion in the site certificate as conditions.*

Response: A geotechnical investigation for the amended project area will be undertaken prior to construction in the third quarter of 2007; the results of this investigation will be provided to the Department of Energy prior to construction.

The investigation may include exploration borings and test pit excavations, laboratory testing, engineering analyses, and/or the development of feasible foundation types and associated design criteria to mitigate the loess soils. Seismic design criteria will also be reviewed and modified, if appropriate, based on the subsurface conditions disclosed by the subsurface explorations.

The analysis of expected ground response, including amplification, is provided in the ASC Exhibit H and Appendix H to this Exhibit.

Geotechnical work for this amendment was to be performed by the following individuals:

Dwight J. Hardin, PE, has 33 years of geotechnical engineering experience and has directed the geotechnical services for numerous tower structures, including wind turbine towers, and over 1,500 miles of high-voltage transmission lines.

George A. Freitag, PG, CEG, is a senior engineering geologist. He has 18 years of experience and has evaluated geologic and seismic hazards for numerous projects in the Pacific Northwest.

Tova R. Peltz, PE, RG is a geologist and project engineer, who has completed seismic hazard and site response analyses for over 50 projects in Oregon.

Qualified geotechnical engineers will perform the pre-construction geotechnical study for each turbine location, once micro-siting is complete. The certificate holder must consult with, and report geotechnical investigation findings to, the Oregon Department of Geology & Mineral Industries. The First Amended Site Certificate requires the certificate holder to 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. Moreover, Council rules include mandatory conditions regarding geotechnical investigation and protection of the public from seismic hazards (Conditions 12, 13 and 14). Therefore, no changes to Site Certificate requirements will be needed to ensure that the Structural Standard is met.

H.4 EVIDENCE OF CONSULTATION

OAR 345-021-0010(1)(h)(C) *Evidence of consultation with the Oregon Department of Geology and Mineral Industries regarding the appropriate site-specific geotechnical work that must be performed before submitting the application for the Department to determine that the application is complete.*

Response: GRI contacted the Oregon Department of Geology and Mineral Industries as part of the report completed for the ASC. GRI will confirm that the site-specific geotechnical work discussed during that consultation remains appropriate for this amendment request. Confirmation will be provided to the Oregon Department of Energy via email.

H.5 TRANSMISSION LINES

OAR 345-021-0010(1)(h)(D) *For all transmission lines, a description of locations along the proposed route where the applicant proposes to perform site specific geotechnical work, including but not limited to railroad crossings, major road crossings, river crossings, dead ends, corners, and portions of the proposed route where geologic reconnaissance and other site specific studies provide evidence of existing landslides or marginally stable slopes that could be made unstable by the planned construction.*

Response: The description of locations along the proposed transmission routes where the applicant proposes to perform site specific geotechnical work is the same as that provided in the ASC.

H.6 PIPELINES

OAR 345-021-0010(1)(h)(E) *For all pipelines that would carry explosive, flammable or hazardous materials, a description of locations along the proposed route where the applicant proposes to perform site specific geotechnical work, including but not limited to railroad crossings, major road crossings, river crossings, and portions of the proposed alignment where geologic reconnaissance and other site specific studies provide evidence*

of existing landslides or marginally stable slopes that could be made unstable by the planned construction.

Response: There are no pipelines associated with the amended project.

H.7 SEISMIC HAZARD ASSESSMENT

OAR 345-021-0010(1)(h)(F) *An assessment of seismic hazards. For the purposes of this assessment, the maximum probable earthquake (MPE) is the maximum earthquake that could occur under the known tectonic framework with a 10 percent chance of being exceeded in a 50 year period. If seismic sources are not mapped sufficiently to identify the ground motions above, the applicant shall provide a probabilistic seismic hazard analysis to identify the peak ground accelerations expected at the site for a 500 year recurrence interval and a 5000 year recurrence interval. In the assessment, the applicant shall include:*

- (i) Identification of the Maximum Considered Earthquake Ground Motion shown at International Building Code (2003 edition) Section 1615 for the site.*

Response: An assessment of seismic hazards was completed for the project area, the analysis area for which includes the land encompassed by the proposed amendment, in the ASC. Appendix H-1 of this Exhibit identifies and discusses the MCE ground motion.

- (ii) Identification and characterization of all earthquake sources capable of generating median peak ground accelerations greater than 0.05g on rock at the site. For each earthquake source, the applicant shall assess the magnitude and minimum epicentral distance of the maximum credible earthquake (MCE);*

Response: Identification and characterization of earthquake sources capable of generating median PGA on rock greater than 0.05g were identified in the ASC. These sources were identified in terms of their characteristic magnitude and epicentral distance for their maximum considered events.

- (iii) A description of any recorded earthquakes within 50 miles of the site and of recorded earthquakes greater than 50 miles from the site that caused ground shaking at the site more intense than the Modified Mercalli III intensity. The applicant shall include the date of occurrence and a description of the earthquake that includes its magnitude and highest intensity and its epicenter location of region or highest intensity.*

Response: Historic seismicity of the project area, including the land encompassed by the proposed amendment, was provided in the ASC.

- (iv) Assessment of the median ground response spectrum from the MCE and the MPE and identification of the spectral accelerations greater than the design spectrum provided in the Oregon Structural Specialty Code (2004 edition). The applicant shall include a description of the probable behavior of the subsurface materials and amplification by subsurface materials and any topographic or subsurface*

conditions that could result in expected ground motions greater than those characteristic of the Maximum Considered Earthquake Ground Motion identified above

Response: The MCE will always generate spectral accelerations greater than the Oregon Structural Specialty Code (OSSC), because the OSSC design spectrum is defined as 2/3 of the MCE. The MCE median peak ground acceleration is 0.19g. The MPE peak ground acceleration is 0.09g. The OSSC (2004) design peak ground acceleration is 0.11g. Description of site response to ground motions was included in the ASC. Refer to Appendix H-1 for additional information.

(v) *An assessment of seismic hazards expected to result from reasonably probable seismic events. As used in this rule “seismic hazard” includes ground shaking, ground failure, landslide, lateral spreading, liquefaction, tsunami inundation, fault displacement and subsidence.*

Response: An assessment of seismic hazards was completed for the ASC.

H.8 NON-SEISMIC GEOLOGIC HAZARDS

OAR 345-021-0010(1)(h)(G) *An assessment of soil-related hazards such as landslides, flooding and erosion which could, in the absence of a seismic event, adversely affect or be aggravated by the construction or operation of the facility.*

Response: This information was provided in the ASC; the assessment area included the land encompassed by the proposed amendment.

H.9 SEISMIC HAZARD MITIGATION

OAR 345-021-0010(1)(h)(H) *An explanation of how the applicant will design, engineer and construct the facility to avoid dangers to human safety from the seismic hazards identified in paragraph (F). The applicant shall include proposed design and engineering features, applicable construction codes, and any monitoring for seismic hazards.*

Response: This information was provided in the ASC.

H.10 NON-SEISMIC HAZARD MITIGATION

OAR 345-021-0010(1)(h)(I) *An explanation of how the applicant will design, engineer and construct the facility to adequately avoid dangers to human safety presented by the hazards identified in paragraph (G).*

Response: This information was provided in the ASC.

APPENDIX H-1

Geologic And Seismic Evaluation For Klondike III Wind Power Project Amendment 3

Geologic and Seismic Evaluation for Klondike III Wind Power Project Amendment 3

(June 20, 2007)

I. INTRODUCTION

At the request of David Evans and Associates, Inc. (DEA), GRI has completed an assessment of the geologic and seismic conditions for the proposed Amendment 3 to the Klondike III wind power project.

The scope of work did not include a detailed geologic reconnaissance and mapping of the project area or site-specific subsurface or geophysical investigations. In this regard, the level of effort and scope of work were appropriate to evaluate the geology, seismicity, and associated hazards of the project area; however, supplemental site-specific investigations will be necessary for final design of the project.

GRI previously evaluated the Klondike III project area, and the findings of our evaluation were provided to DEA in our March 2005 report entitled, "Geologic and Seismic Evaluation for Klondike III Wind Project." Most of the information provided in the March 2005 report is also appropriate for the proposed Amendment 3 project.

II. PROJECT DESCRIPTION

The Klondike III Wind Project is located on approximately 14,500 leased acres in Sherman County at the location shown on the Vicinity Map, Figure 1.

Amendment 3 will provide additional wind turbines in the Klondike project area. As shown on the Project Base Map, Figure 2, the planned turbines are configured in several north-south alignments. Each tower alignment will be accessed by new gravel-surfaced roads exiting from existing roads.

The Klondike III project will transmit power via the BPA transmission line under construction, which will extend approximately 11 miles from the new BPA Klondike Schoolhouse substation to a new BPA John Day Substation. The alignment of this transmission line has not been determined.

III. BACKGROUND

The purpose of this report is to provide a technical basis to fulfill the requirements for the completion of the revised Exhibit H, Geology and Seismicity, as outlined in OAR 345-021-0010(1)(h) for provision of evidence to support the findings by the State of Oregon, Energy Facility Siting Council. To complete this task, GRI reviewed the 2007 revisions to Exhibit H and compared these revised requirements to the work completed for the March 2005 report by GRI.

Review of the 2007 ODOE revisions to OAR 345-021-0010(h) indicates two primary changes from the previous requirements. Section (A) of Exhibit H, requires a geologic report meeting the guidance in the Oregon Department of Geology and Mineral Industries (DOGAMI) open file report O-00-04, "Guidelines for Engineering Geologic reports and Site-Specific Seismic Hazard Reports." Section (D), Part (i) of Exhibit H requires identification of the Maximum Considered Earthquake (MCE) ground motion shown at International Building Code (2003 edition) Section 1615, for the site.

GRI completed a site-specific seismic hazard report in accordance with the guidelines outlined by DOGAMI in Open File Report O-00-04 for our March 2005 report to DEA. GRI has provided the MCE ground motion identified in the 2003 IBC within this letter.

IV. EXISTING CONDITIONS

General

With the exception of one corridor, the proposed Amendment 3 towers are located east of State Highway 206 and about 2 miles southeast of the town of Wasco. Most of the land is currently used for dry land grain farming with minor areas of grass land.

Topography

The ground surface is gently rolling ground interrupted by seasonal drainages. The ground surface in the Amendment 3 area ranges from elevation 1300 to 1500 ft.

Regional Geology

The regional geology is discussed in our March 2005 report.

V. METHODS

GRI completed a scope of work to evaluate the geology and seismicity of the Amendment 3 project area, which is outlined below.

- 1) To review new Oregon Department of Energy (ODOE) requirements for certifying and siting energy facilities;
- 2) To review existing geological and seismic information included in our previous report to you dated March 30, 2005 titled "Geologic and Seismic Evaluation for Klondike III Wind Project";
- 3) To obtain and review new seismic information that has come available since our previous report;
- 4) To complete reconnaissance of the planned tower locations;
- 5) To update the site specific seismic hazard study that was completed for our previous report.

VI. RESULTS

Site Geologic Conditions

Geologic observations made during the June 12, 2007, site visit indicate the majority of the project area is mantled by brown, fine-grained, silty soils, referred to as loess. The thickness of loess observed in road cuts was typically on the order of 4 to 6 ft. Local areas of gray to white caliche were observed in several road cuts. The rock units beneath the site are mapped as the Frenchman Springs Member of the Wanapum Basalt (part of the middle portion of the CRBG; Bela, 1982). This unit is approximately 15 million years old and is typically on the order of 300 to 500 ft thick. The unit generally consists of fine- to medium-grained basalt.

Exposures of this unit were found in a rock quarry located on the west edge of the project boundary between proposed turbine towers 1 through 3. The quarry exposures revealed an upper 5-ft thickness of fine-grained silt soil (loess) underlain by hard, brown basalt. Basalt was also exposed in a rock quarry located south of Gosson Lane, just northwest of proposed turbine towers 37 through 46. The contact between the silt and basalt appeared distinct. Basalt pieces were also observed at the base of transmission line poles along Egypt Road, just east of proposed turbine towers 5 through 18.

Obvious surficial evidence of large-scale, deep-seated slope instability, or evidence of faulting or ground rupture, was not observed during the reconnaissance. Landslide deposits are not mapped within the lease boundary (Bela, 1982; scale 1:250,000).

Barr (2004) completed a geotechnical investigation for the Klondike Wind II project, which is adjacent to the Klondike III project area. In general, their investigation disclosed the project area is underlain by a surface layer of silt (loess) overlying basalt. The silt was on the order of 3 to 20 ft thick. Basalt was encountered to the maximum depth of their explorations (47 ft). Groundwater was not encountered in the explorations.

Structural Geology Setting

The structural geologic setting is described in the March 2005 report by GRI.

Historic Seismicity

The historic seismicity of the Amendment 3 study area is discussed in the March 2005 report by GRI.

Seismicity

The potential seismicity of the study area is discussed in the March 2005 report by GRI.

Seismic Hazard Conclusions

GRI completed a site-specific seismic hazard study in accordance with Oregon Department of Geology and Mineral Industries guidelines, and the results are provided in the March 2005 report by GRI.

The following discussion addresses identification of the MCE ground motion as required by recent ODOE revisions to OAR 345-021-0010(h).

Summary of Maximum Considered Earthquake

Historically, building codes have required structural design for ground acceleration associated with an earthquake that has a 10% probability of exceedance in 50 years, which corresponds to an earthquake return period of 475 years. The International Building Code (IBC) reevaluated this design level, and identified the new design spectrum by using two-thirds of the Maximum Considered Earthquake (MCE) ground motion. The MCE earthquake is defined as an earthquake with a 2% probability of exceedance in 50 years (return period of about 2,500 years), except where subject to deterministic limitations (Leyendecker, et al., 2000). For Exhibit H, the Maximum Probable Earthquake (MPE) is defined as an earthquake with a 10% probability of exceedance in 50 years (return period of about 475 years).

The IBC design methodology and Oregon Structural Specialty Code (OSSC), use two spectral response coefficients, S_s and S_1 , corresponding to periods of 0.2 and 0.1 seconds to develop the design earthquake

spectrum. The S_s and S_1 coefficients identified in the 2003 IBC and 2004 OSSC for the site are 0.42 and 0.14 g, respectively.

The ground motion parameters for the 2003 IBC were based on the 1996 U.S. Geological Survey (USGS) probabilistic mapping project. The USGS mapping identified the likelihood of movement for all identified seismic sources (i.e., local crustal, subcrustal, and subduction zone earthquakes) and probabilistically determined single acceleration response spectra for earthquakes with a range of return periods. Based on review of available published information, the earthquake sources identified in the March 2005 report by GRI are appropriate for the Amendment 3 project area. According to the 1996 USGS probabilistic study, the local crustal fault sources identified in the March 2005 report contribute the majority of the earthquake hazard to both the MPE and the MCE within the project area. These sources are all capable of generating peak ground accelerations greater than 0.05 g at the site. According to the 1996 USGS study, the MPE peak ground acceleration at the site is 0.08 g, and the MCE peak ground acceleration at the site is 0.18 g. Figure 3 shows the MPE and MCE response spectra, as well as the design spectrum for the 2003 IBC on Site Class B.

As shown on Figure 3, the MCE response spectrum exceeds the 2003 IBC design spectrum. This is because the design spectrum is defined as two-thirds of the MCE spectrum.

Non-Seismic Geologic Hazards

The discussion in the March 2005 report by GRI addressing non-seismic geologic hazards is also appropriate for the Amendment 3 project area.

Mitigation of Non-Seismic Geologic Hazards

The discussion in the March 2005 report by GRI addressing mitigation of non-seismic geologic hazards is also appropriate for the Amendment 3 project area.

VII. FUTURE INVESTIGATIONS

GRI has completed an evaluation of the geologic conditions and seismicity of the Amendment 3 portion of the Klondike III project. As discussed previously, the scope of work was completed to characterize the general geologic conditions of the site and vicinity, and the associated seismicity for the purpose of identifying potential geologic and seismic hazards that could affect siting and design of project elements. As such, the findings in this report are somewhat preliminary in nature. For this reason, additional site-specific investigations should be completed for the final design of the project.

A geotechnical investigation should be undertaken to investigate the subsurface and foundation support conditions at the locations of the turbine towers. The investigation will likely include exploration borings and/or test pit excavations, laboratory testing, engineering analyses, and the development of feasible foundation types and associated design criteria to mitigate the loess soils. Seismic design criteria should also be reviewed and modified, if appropriate, based on the subsurface conditions disclosed by the subsurface explorations.

VIII. LIMITATIONS

This report has been prepared to aid in the preliminary assessment of the proposed Amendment 3 to the Klondike III project. The scope is limited to the specific project and location described herein, and our

description of the project represents our understanding of the significant aspects of the project relevant to the feasibility of constructing the proposed wind farm. The information provided in this report is intended to supplement the March 2005 report by GRI for the Klondike III project.

The information provided herein is for preliminary assessment only and is not intended for design or construction of the project. Additional geotechnical investigations will be necessary to develop guidelines for final design of this project.

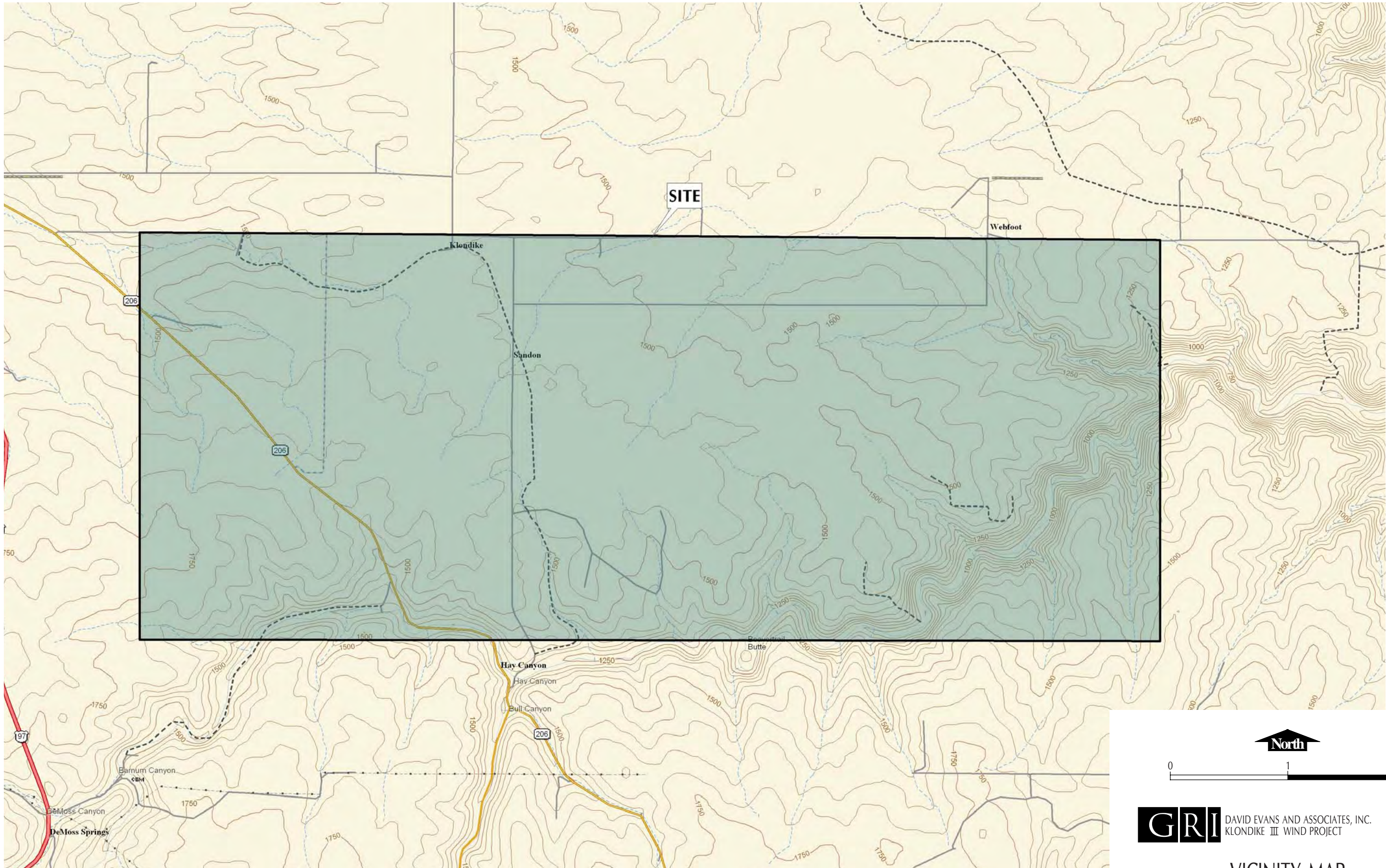
IX. REFERENCES

Bela, J.L., 1982, Geologic Compilation Map of The Dalles 1° by 2° Quadrangle, Oregon and Washington: Oregon Department of Geology and Mineral Resources Geologic Map Series GMS-27.

International Code Council, 2003, International building code: Building Officials and Code Administrators International, Inc., International Conference of Building Officials, Southern Building Code Congress International.

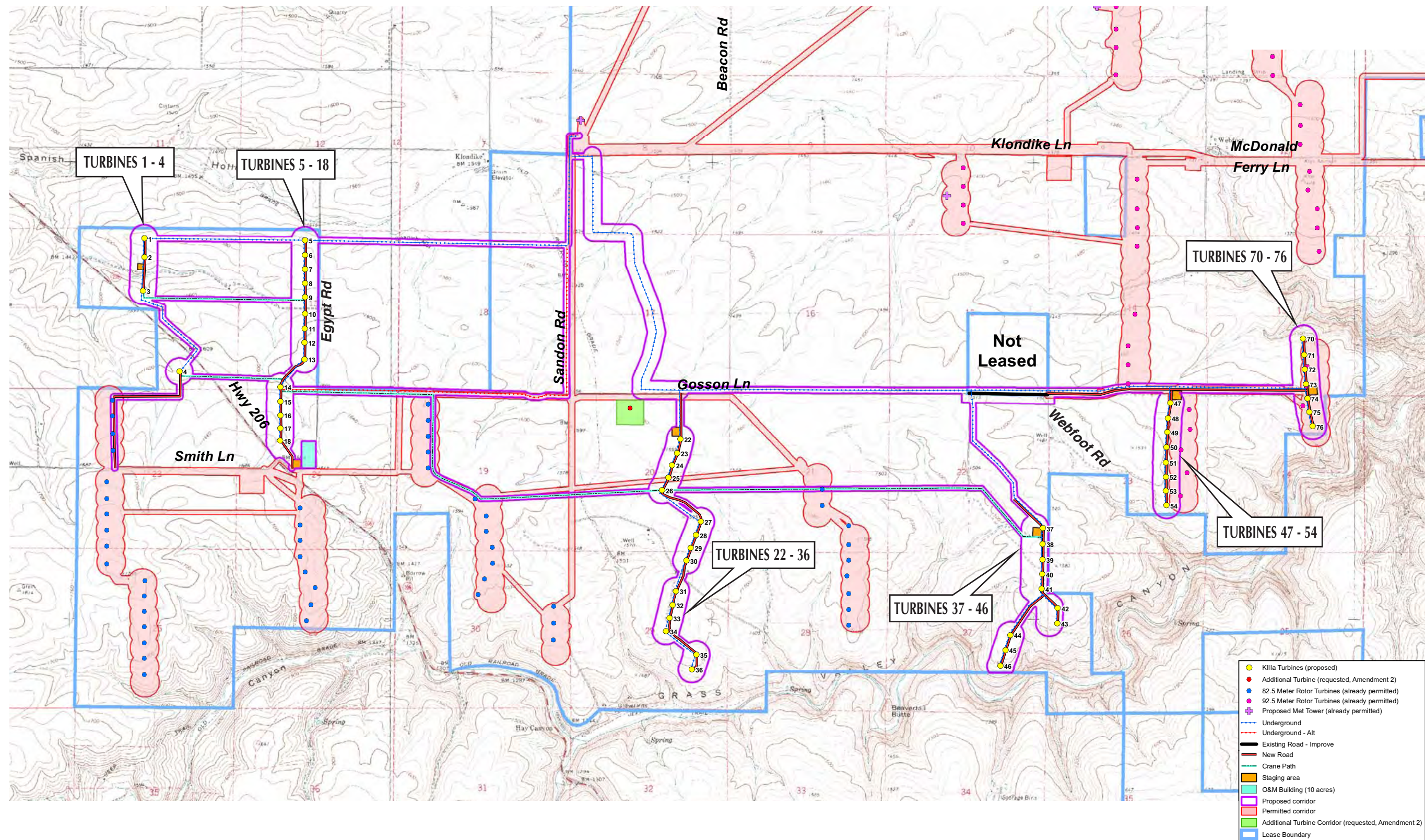
Leyendecker, E.V., and Frankel, A.D., February 2000, Development of maximum considered earthquake ground motion maps, in Earthquake Spectra, vol. 16, no. 1.

U.S. Geological Survey, 1996, Probabilistic hazard lookup by latitude, longitude, accessed 6/17/07, from USGS website: <http://eqint.cr.usgs.gov/eq-men/html/lookup-interp-96.html>.

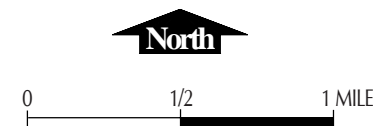


GRI DAVID EVANS AND ASSOCIATES, INC.
KLONDIKE III WIND PROJECT

VICINITY MAP



SITE PLAN FROM FILE BY DAVID EVANS AND ASSOCIATES, INC., DATED MAY 7, 2007



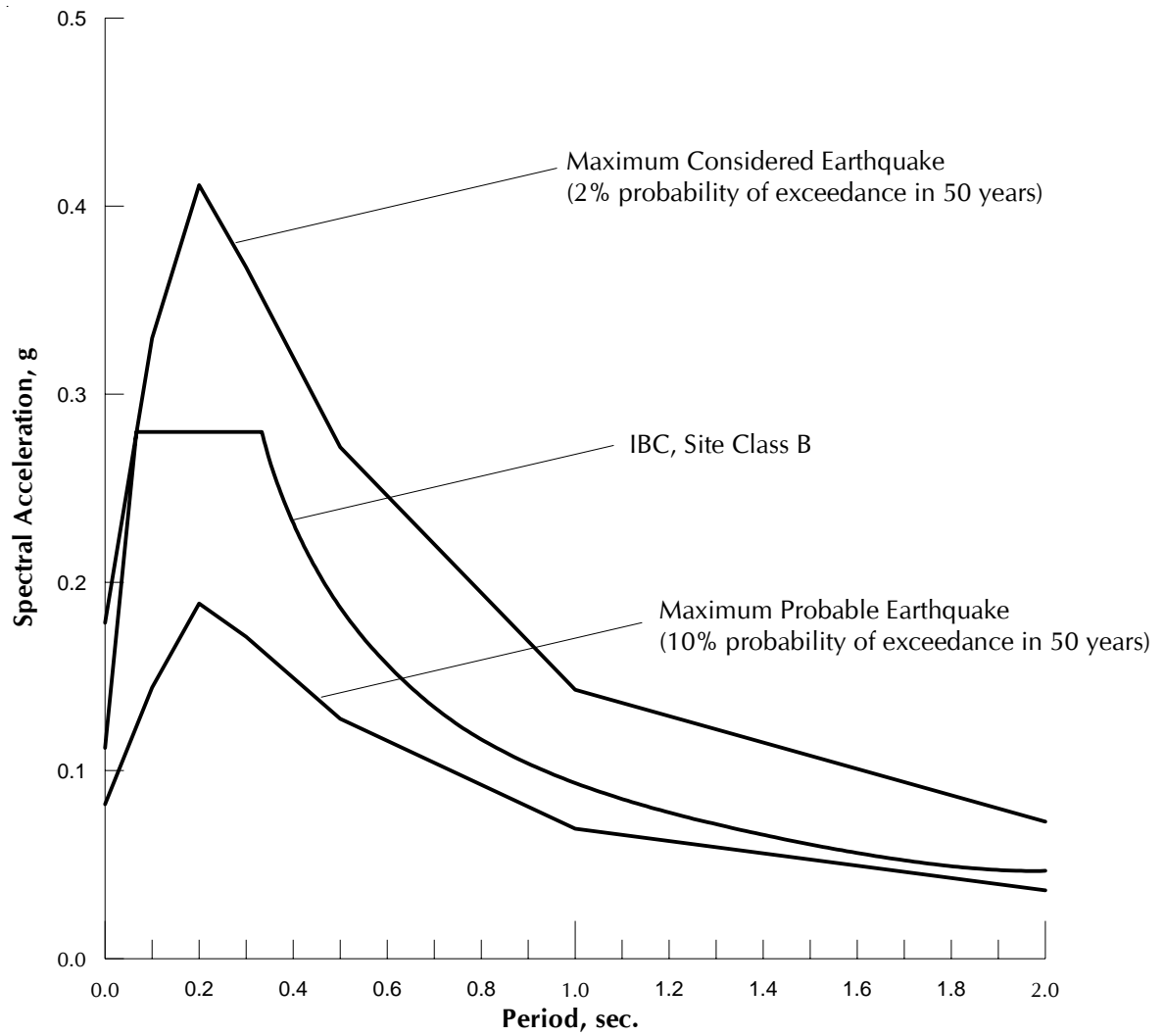
GRI DAVID EVANS AND ASSOCIATES, INC.
KLONDIKE III WIND PROJECT

SITE PLAN

JUNE 2007

JOB NO. 4207

FIG. 2



DAVID EVANS AND ASSOCIATES, INC.
KLONDIKE III WIND PROJECT

VICINITY MAP

EXHIBIT I

SOILS

OAR 345-021-0010(1)(i)

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I.6 MONITORING PROGRAM.....	2
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APPENDIX

I-1 AMENDED 1200-C PERMIT APPLICATION

I.1 INTRODUCTION

OAR 345-021-0010(1)(i) *Information from reasonably available sources regarding soil conditions and uses in the analysis area, providing evidence to support findings by the Council as required by OAR 345-022-0022, including:*

Response: The evidence below demonstrates that facility construction and operation in the expanded site boundary will not result in significant adverse impacts to soils. The potential for erosion during facility construction will be minimized by adhering to an erosion control plan and NPDES 1200-C construction permit for the expanded area. As described in the ASC, all areas of temporary soil disturbance and vegetation removal will be reclaimed through reseeded of native vegetation or crops to protect against loss of soil to erosion.

I.2 IDENTIFICATION AND DESCRIPTION OF SOIL TYPES

OAR 345-021-0010(1)(i)(A) *Identification and description of the major soil types in the analysis area;*

Response: Soil types in the expanded site boundary are the same as those identified in the ASC.

I.3 IDENTIFICATION AND DESCRIPTION OF LAND USES

OAR 345-021-0010(1)(i)(B) *Identification and description of any land uses in the analysis area, such as growing crops, that require or depend on productive soils;*

Response: Within the expanded site boundary, land uses consist of private agricultural land generally used for dryland wheat production. Permanent project facilities in the expanded area will occupy approximately 21 acres of agricultural land and 3.25 acres of non-agricultural land. Temporary impacts from construction in the expanded area will disturb an additional 169 acres.

I.4 IDENTIFICATION AND ASSESSMENT OF IMPACTS TO SOILS

OAR 345-021-0010(1)(i)(C) *Identification and assessment of significant potential adverse impact to soils from construction, operation, and retirement of the facility, including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills;*

Response: Unavoidable impacts to soils within the expanded site boundary will result from placement of permanent project facilities on approximately 24 acres. Additionally, facility construction will temporarily disturb 169 acres. These soil impacts will be limited according to the same methods identified in the ASC.

I.5 DESCRIPTION OF PROPOSED MITIGATION MEASURES

OAR 345-021-0010(1)(i)(D) *A description of any measures the applicant proposes to avoid or mitigate adverse impact to soils; and*

Response: Direct permanent impacts to soil within the expanded area due to construction of access roads, turbine foundations, laydown areas, underground collectors and other features will be unavoidable. Construction of all features of the project will be in compliance with an amended NPDES 1200-C construction permit (see Appendix I-1 for the Application). Measures outlined in the existing Erosion Control Plan submitted with the ASC will be implemented to minimize soil impacts and erosion.

I.6 MONITORING PROGRAM

OAR 345-021-0010(1)(i)(E) *The applicant's proposed monitoring program, if any, for adverse impact to soils during construction and operation.*

Response: Monitoring of construction and soils disturbing activities in the expanded site boundary will be the same as for the permitted site, and will include periodic visual inspection of project facilities during operations.

I.7 CONCLUSION

The information provided in this exhibit describes soils on the site and potential impacts in detail. The applicant will minimize impacts to soils by using existing roads and restoring temporarily disturbed areas. These preventative measures and the erosion control measures described in the amended NPDES 1200-C permit application will ensure the impacts to soils are insignificant. Therefore, the applicant has met this standard, and the Council may find that the standard contained in OAR 345-022-0022 is satisfied.

Appendix I-1

Amended 1200-C Permit Application



NPDES #1200-C Permit Application Form

Oregon Department of Environmental Quality APPLICATION FOR NEW NPDES GENERAL PERMIT #1200-C

For stormwater discharges to surface waters from construction activities disturbing 1 acre or more.

Please answer all questions. No line may be left blank. An incomplete application will not be processed and will be returned. If the information requested is not applicable or not yet available, please indicate as such.

A. PROJECT INFORMATION

<p>1. <u>Klondike Wind Power III LLC (Klondike III)</u> Applicant (Owner, Developer, or General Contractor) <u>Alan Vandehey</u> Contact Name <u>1125 NW Couch, Suite 700</u> Address <u>Portland</u> <u>Oregon</u> <u>97209</u> City State Zip <u>(503) 796 - 7109</u> Telephone E-Mail Address</p>	<p>2. If fee invoicing is different than Applicant, provide contact info: <u>Invoice Name</u> <u>c/o PPM Energy, Inc., 1125 NW Couch, Suite 700</u> Address <u>Portland</u> <u>Oregon</u> <u>97209</u> City State Zip <u>(503) 796-7045</u> Telephone E-Mail Address</p>
<p>3. <u>David Evans and Associates, Inc</u> Architect/Engineering Firm (Erosion & Sediment Control Plan) <u>Dana Siegfried</u> Project Manager <u>(503) 499-0369</u> <u>dns@deainc.com</u> Telephone E-Mail Address</p>	<p>4. <u>the inspector will be selected by the contractor</u> Applicant's Designated Erosion and Sediment Control Inspector <u>Contact Name</u> Telephone E-Mail Address</p>
<p>5. <u>Klondike III Wind Project</u> Name of Project <u>Address or Cross Street</u> <u>4 miles east of Wasco</u> City State Zip <u>Sherman County</u> County</p>	<p>6. Nature of the Construction Activity <input type="checkbox"/> Single Family (SIC Code 1521) <input type="checkbox"/> Multi-Family Residential (SIC Code 1522) <input type="checkbox"/> Commercial (SIC Code 1542) <input checked="" type="checkbox"/> Industrial (SIC Code 1541) <input type="checkbox"/> Highway (SIC Code 1611) <input type="checkbox"/> Utilities (SIC Code 1623): <input type="checkbox"/> Other:</p>
<p>7. Site Location by Latitude and Longitude: Latitude: <u>45</u> / <u>58</u> / <u>0.98N</u> Degrees Minutes Seconds Longitude: <u>120</u> / <u>56</u> / <u>1.46W</u> Degrees Minutes Seconds</p>	<p>8. Project Size: Total Site Acreage (acres): <u>approximately 20,000</u> Total Construction Area (acres): <u>722 acres</u> Disturbed Area for this phase, if multiple phases: <u>193 acres</u> Total Number of Lots:</p>

DEQ USE ONLY

App. #: _____ File #: _____ LLID #: _____ River Mile: _____
Date Received: _____ Amount: _____ Check Name: _____ Check #: _____
Deposit #: _____ Receipt #: _____ Legal Name Confirmed: ☐

A. PROJECT INFORMATION Continued

9. Runoff from proposed construction activities goes to:

- ☒ Creek/Stream: Grass Valley/ John Day River
☐ Municipal Storm Sewer or Drainage System
☐ Infiltration device

☐ Ditch: _____
☐ Other: _____

10. ☐ Proposed site runoff discharges directly to, or into a storm sewer or drainage system that discharges to, a Total Maximum Daily Load (TMDL) or 303(d) listed water body for turbidity or sedimentation (*if applicable*).

B. LAND USE COMPATIBILITY STATEMENT

Attach the *original* and complete Land Use Compatibility Statement (LUCS) signed by the local land use authority. The application will not be processed unless the local land use authority approves it and it meets statewide planning goals. (See Attachment C for the LUCS statement)

C. SIGNATURE OF LEGALLY AUTHORIZED REPRESENTATIVE

The legally authorized representative *must* sign the application. The following are authorized to sign the document:

- ◆ **Corporation** — president, secretary, treasurer, vice-president, or any person who performs principal business functions; or a manager of one or more facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million that is assigned or delegated in accordance to corporate procedure to sign such documents
- ◆ **Partnership** — General partner
- ◆ **Sole Proprietorship** — Owner. If more than one person is the sole proprietor, each person must sign the form.
- ◆ **City, County, State, Federal, or other Public Facility** — Principal executive officer or ranking elected official
- ◆ **Limited Liability Company** — Member
- ◆ **Trusts** — Acting trustee

Please see 40 CFR 122.22 for more detail, if needed.

I hereby certify that the information contained in this application is true and correct to the best of my knowledge and belief. In addition, I agree to pay all permit fees required by Oregon Administrative Rules 340-045. This includes a renewal application fee to renew the permit and a compliance determination fee invoiced annually by DEQ to maintain the permit.

389
Allan E. Query

Vice President

Name of Legally Authorized Representative (Type or Print)

Title

Allan E. Query

June 20, 2007

Signature of Legally Authorized Representative

Date

In order to authorize permit registration, the following must be completed and submitted to DEQ office listed below or to a DEQ Agent (see Attachment A for list of Agents):

- ☐ Signed Application form.
☐ Land Use Compatibility Statement with signature of the local land use authority
☐ Stormwater Erosion and Sediment Control Plan Narrative
☐ Stormwater Erosion and Sediment Control Plan Drawings
☐ \$670 fee to the appropriate DEQ regional office and make the check payable to DEQ of Environmental Quality. If you are sending your application to a DEQ Agent, check with the DEQ Agent for the appropriate fees and make check payable to the DEQ Agent.

DEQ Northwest Region
2020 SW 4th Ave., Suite 400
Portland, OR 97201-4987
503-229-5263 or 1-800-452-4011

DEQ Western Region
750 Front St. NE, Suite 120
Salem, OR 97301-1039
503-378-8240 or 1-800-349-7677

DEQ Eastern Region
700 SE Emigrant, Suite 330
Pendleton, OR 97801
541-276-4063 or 1-800-452-4011

DEQ AGENT

(Note: See Table A-2 for appropriate local Agent contact information.)

Erosion and Sediment Control Plan Worksheet

Project Name: Third Request for Amendment to the Klondike III Wind Project

Prepared By: Sean P. Sullivan, L.A. (Oregon No. 412)

Company Name: David Evans and Associates, Inc.

Telephone: 503-223-6663

Please answer the following questions as indicated. If needed, additional space is provided for you at the end of this form. You may also attach any information you feel is pertinent to the project.

1. Is your Erosion and Sediment Control Plan for an activity that covers 20 acres or more of disturbed land?

☒ YES ☐ NO

If yes, the plan must be prepared by an Oregon Registered Professional Engineer, Oregon Registered Landscape Architect, or Certified Professional in Erosion and Sediment Control (Soil and Water Conservation Society). Please complete question #4.

2. Does your Erosion and Sediment Control Plan require engineered facilities such as settling basins and/or diversion structures?

☐ YES ☒ NO

If yes, the plan must be prepared by an Oregon Registered Professional Engineer.

3. If you answered "YES" to question #1 or 2, please provide the following information and use the space provided to imprint your seal.

Name: Sean P. Sullivan, L.A. (Oregon No. 412)

Address: David Evans and Associates, Inc.

2100 SW River Parkway

Portland, OR 97201

Telephone: 503.223.6663



Imprint Seal Above

4. Describe the nature of the construction activity: The applicant proposes to construct an expansion to a wind generation project in Sherman County, Oregon. The proposed expansion will involve construction of up to 43 turbines and generate 90 MW of power.

5. Describe in detail the phases of construction and the erosion control measures to be implemented during each phase. Also complete the table on the next page to assist with the narrative description.

See Attached. _____

Fill in the year(s) and the month(s) at the top of the chart during which the project will occur, and check the appropriate boxes to indicate when the items in the left column will be performed and/or installed. You may photocopy the chart if your project will last longer than 12 months.

YEAR: 2007-2008	2007				2008											
MONTH:	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
CLEARING	x	x	x	x												
EXCAVATION	x	x	x	x	x	x										
GRADING	x	x	x	x	x	x	x	x	x							
CONSTRUCTION	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
EROSION CONTROLS:																
Vegetative Buffer Strips	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Mulching	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Netting/Mats/Blankets																
Temporary Seeding																
Permanent Seeding											x	x	x	x	x	x
Sod Stabilization																
Other:																
SEDIMENT CONTROLS:																
Silt Fencing	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Straw Bales	x	x	x	x	x	x	x	x	x	x						
Sediment Traps		x	x	x	x	x	x	x	x	x						
Sediment Basins																
Storm Inlet Protection																
Drainage Swales																
Check Dams																
Contour Furrows																
Terracing																
Pipe Slope Drains																
Rock Outlet Protection																
Other: Sediment moat	x	x	x	x	x	x	x	x	x	x						

6. Describe the origin and nature of fill material to be used: Native soils will be excavated for placement of the concrete turbine pads and temporary staging areas. These soils will be stockpiled until after construction when they will be redistributed over the temporarily disturbed areas.
7. Describe the soils present on the site and erosion potential of the soils.

Soil type(s): The near surface soils at the project area were identified using the U.S. Soil Conservation Service (SCS) Soil Survey of Sherman County, Oregon. The near surface soils in the project area are grouped into four General Soil Units: Walla Walla-Anderly, Wrentham-Lickskillet-Rock Outcrop, Lickskillet-Nansene, and Mikkalo-Ritzville.

The Walla Walla-Anderly series soils are extensive on mesas in the north-central part of Sherman County in mostly smooth and gently sloping areas. They have formed from loess over basalt in a 12- to 13-inch precipitation zone. This General Soil Unit is approximately 73 percent Walla Walla soils and 22 percent Anderly soils. The rest is soils of minor extent. Walla Walla soils are very deep or deep and are well drained. The surface layer is very dark brown silt loam. The subsoil is dark brown silt loam. Anderly soils are moderately deep and well drained. The surface layer is very dark grayish brown silt loam. The subsoil is dark brown silt loam. Of minor extent in this unit are very deep Endersby soils on terraces, very deep Hermiston soils on flood plains, and shallow Kuhl soils on north-facing canyonsides. The soils in this unit are used mainly for wheat and barley grown in a grain-summer fallow system, for alfalfa hay, and as pasture. Areas too steep for cultivation are used for livestock grazing and as wildlife habitat.

Wrentham-Lickskillet-Rock Outcrop series soils are moderately deep and shallow, well drained silt loam and very stony loam that formed in loess over basalt and in residuum derived from basalt in an 11- to 12-inch precipitation zone. They occur mainly in canyons. This map unit is adjacent to the Deschutes and John Day Rivers, in the southern part of the county. This map unit consists of about 30 percent Wrentham soils, 30 percent Lickskillet soils, and 26 percent Rock outcrop. Wrentham soils are moderately deep and well drained. The surface layer is very dark brown silt loam. The subsoil is dark brown extremely cobbly silt loam. Lickskillet soils are shallow and well drained. The surface layer is very dark grayish brown very stony loam. The upper part of the subsoil is dark brown very gravelly loam, and the lower part is dark brown very gravelly clay loam, very gravelly loam, or very cobbly loam. Rock outcrop consists of areas of exposed bedrock on the shoulders and convex side slopes of very steep canyons. The soils in this unit are used mainly for livestock grazing and as wildlife habitat.

Lickskillet-Nansene series soils are composed of shallow and deep, well drained very stony loam and silt loam that have formed in residuum derived from basalt and in loess over basalt in a 12- to 13-inch precipitation zone. This map unit is located in the northern part of Sherman County. It is about 45 percent Lickskillet soils and 12 percent Nansene soils. The rest consists of soils of minor extent. Lickskillet soils are shallow and well drained. The surface layer is very dark grayish brown very stony loam. The upper part of the subsoil is dark brown very gravelly loam, and the lower part is dark brown very gravelly clay loam, very gravelly loam, or very cobbly loam. Nansene soils are deep and well drained. The surface layer and subsoil are very dark brown silt loam. The substratum is dark brown silt loam. Of minor extent in this unit are very shallow Bakeoven soils on ridgetops and benches of canyons, very deep Sagemoor soils on dissected terraces, and moderately deep Wrentham soils on north-facing canyonsides. This soil unit is used mainly for livestock grazing and as wildlife habitat.

The Mikkalo-Ritzville General Soil Unit consists of moderately deep and deep, well drained silt loam that has formed in loess over basalt in a 9- to 11-inch precipitation zone, typically on mesas. This map unit is in the northeastern corner of the survey area. It is about 56 percent Mikkalo soils and 38 percent Ritzville soils. The rest is soils of minor extent. Mikkalo soils are moderately deep and well drained. The surface layer is very dark grayish brown silt loam. The subsoil is dark brown, calcareous silt loam. Ritzville soils are deep and well drained. The surface layer is dark brown silt loam. The subsoil is dark yellowish brown, calcareous silt loam. Of minor extent in this unit are shallow Lickskillet Soils. The soils in this unit are used mainly for wheat and barley grown in a grain-summer fallow system. Areas too steep for cultivation are used for livestock grazing and as wildlife habitat.

b) Erosion Potential: Based on the soil types present, soil erosion potential at the facility site varies, being high in some areas and not high in others (USDA 1964; Table 2).

Table 2. Detailed soil map units present on project site and their properties.

Soil Series	Drainage Class	Erosion Potential
Anderly silt loam, 1 to 7 percent slopes	Well drained	Highly
Anderly silt loam, 7 to 15 percent slopes	Well drained	Highly
Anderly silt loam, 15 to 35 percent south slopes	Well drained	Highly
Endersby fine sandy loam, 0 to 3 percent slopes	Somewhat excessively drained	Not highly
Endersby-Hermiston complex, 0 to 3 percent slopes	Well drained	Not highly
Kuhl very stony very fine sandy loam, 3 to 20 percent slopes	Well drained	Highly
Licksillet-Rock outcrop complex, 40 to 70 percent south slopes	Well drained	Not highly
Licksillet very stony loam, 7 to 40 percent south slopes	Well drained	Not highly
Licksillet-Bakeoven complex, 2 to 20 percent slopes	Well drained	Not highly
Mikkalo silt loam, 2 to 7 percent slopes	Well drained	Highly
Mikkalo silt loam, 7 to 15 percent slopes	Well drained	Highly
Nansene-Rock outcrop complex, 35 to 70 percent north slopes	Well drained	Not highly
Ritzville silt loam, 2 to 7 percent slopes	Well drained	Not highly
Ritzville silt loam, 7 to 15 percent slopes	Well drained	Not highly
Rock outcrop-Rubble land-Licksillet complex, 50 to 80 percent south slopes	Well drained	Not highly
Walla Walla silt loam, 1 to 7 percent slopes	Well drained	Not highly
Walla Walla silt loam, 7 to 15 percent slopes	Well drained	Not highly
Walla Walla silt loam, 15 to 35 percent north slopes	Well drained	Not highly
Wato very fine sandy loam, 3 to 7 percent slopes	Well drained	Not highly
Wato very fine sandy loam, 7 to 15 percent slopes	Well drained	Not highly

8. Submit two copies of site maps and constructions plans. The following checklist is provided for your convenience:

IS THE FOLLOWING INFORMATION PROVIDED AND DETAILED ON THE MAPS SUBMITTED TO THE DEQ?	YES	NO	NOT APP.	EXHIBIT
a. The complete development, including any phases.	x			Figure 1
b. The areas of soil disturbance on the site, including areas that will be cleared, graded or excavated.	x			Figure 1
c. The areas of cut and fill.	x			Figure 1
d. The drainage patterns and slopes of the land both before and after major grading activities.	x			Figure 1
e. The location of existing and proposed storm drains and outfalls.			x	
f. The receiving water body for drainage from the site.	x			Figure 1
g. The areas used for storage of soils or wastes. (laydown areas)	x			Figure 1
h. The location of all erosion and sediment control facilities and/or structures.			x	
i. The areas on the site where vegetative practices will be used.			x	
j. The location of existing and future impervious structures and areas.	x			Figure 1
k. The location and name of all springs, wetlands, and surface waterbodies near the project.	x			Figure 1
l. The boundaries of the 100 year flood plain if known.			x	
m. The location of graveled access entrance and exit drives and graveled parking areas to be used by construction vehicles. (at each turbine string entrance)	x			Figure 1
n. The locations of graveled roads traveled by more than 25 vehicles per day.	x			Figure 1
o. Installation details of vegetative and other erosion control practices (vegetative buffer strips, seeding, mulching, erosion blankets, etc.).			x	
p. Installation details of sediment control practices (silt fences, straw bale dikes, storm drain inlet protection, etc.). (per DEQ BMP for Stormwater Discharges Associated with Construction Activities guide)	x			
q. List the temporary and permanent vegetative seed in the seed mix. *	x			
r. If concrete work is done on site, then note the concrete truck washout procedure used and locate any sump, if used, on the drawing.			x	

* No temporary seeding is proposed because of arid conditions during construction period. Mulch will be used instead. Permanent seeding will be completed in Fall 2008.

9. Describe the truck drippage precautions you will take to prevent discharge of water from trucks hauling wet soils or stone excavated from the site: See Attached. _____

10. Describe the procedures you will use to assure prompt maintenance and repair of graded surfaces and erosion and sediment control measures: See Attached. _____

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5. *Describe in detail the phases of construction and the erosion control measures to be implemented during each phase. Also complete the table on the next page to assist with the narrative description.*

Response: Construction activities for the expanded project area are anticipated to begin in the third quarter of 2007 and conclude in the fourth quarter of 2008. Phases of construction and the erosion control measures (best management practices or "BMPs") to be implemented during each phase are generally as follows:

Mobilization, Staging, and Laydown

It is anticipated that one or more general contractors would mobilize to the project area and would require staging areas for temporary construction offices, temporary laydown facilities, and materials staging (Figure 1, Project Layout and Description map). These staging areas would be used to park construction vehicles, construction employees' personal vehicles, and other construction equipment. Staging area locations will be proposed by the contractor and approved by the Applicant.

Four laydown areas will be required during tower construction and turbine installation. At each turbine location, an area of approximately 2,500 square feet would be required to place turbine blades and other turbine components and to station a construction crane as each tower is erected. Tower sections, nacelles, blades, and appurtenances would be temporarily stored in laydown facilities as each turbine is constructed. Fueling and chemical/solvent storage will occur at staging areas at each turbine string. At the end of the turbine string, an area approximately 300 feet in diameter (1.6 acres) would be needed to allow construction equipment to turn around.

BMPs anticipated for use during this phase include silt fences placed on the down slope side of the staging areas, gravel construction entrances, gravel laydown facilities, and container and waste storage bins/dumpsters. Additionally, the following BMPs would also be developed to prevent or minimize the mixing of runoff with pollutants such as hydraulic fluid, fuel, and lubricants: written spill prevention and response procedures, employee training on spill prevention and proper disposal, emergency spill kits, and regular maintenance schedule for vehicles and equipment.

After completion of construction within the expanded site boundary, these temporary staging/laydown areas would be restored to their pre-construction conditions. Disturbed areas would be re-seeded to wheat or native grasses as appropriate to establish permanent vegetation. Silt fences and other BMPs would be removed once vegetation provides soil stabilization.

Road Construction

To the extent possible, existing roads would be used to minimize the need to construct new roads. New roads would be constructed to provide access to the turbine locations (Figure 1). All unpaved roads used for construction purposes would be graveled or paved as appropriate, or effective BMPs would be placed on the road or down slope of the road to prevent the discharge of fugitive sediment in lieu of graveling.

A variety of BMPs would be used during road construction to control erosion and sedimentation. These BMPs may be used individually or in concert as site conditions and levels of disturbance warrant. BMPs for road construction include graveling, watering or applying other dust palliatives, preserving existing vegetation, silt fence, mulching, and reestablishing permanent vegetation. Silt fences would be removed once vegetation stabilized soils.

Underground Utility Construction

Underground electrical and communications cables would be placed in a trench approximately 2 feet wide and at least 3 feet deep, generally along the length of the proposed turbine access roads and County roads linking turbine strings to collector substations near Schoolhouse and Webfoot. Topsoil would be stripped and stockpiled adjacent to the work area. The remaining trench excavation would be sidecast adjacent to the trench and later used as backfill. Upon the installation of electrical cables, and communications cables, the trench would be backfilled with native material and then top-dressed with the salvaged topsoil. The trench excavation would be reseeded with wheat or native seed as appropriate.

BMPs for underground utility construction include phasing the work as practical to minimize disturbance at any given time, preserving existing vegetation, and reestablishing permanent vegetation. If construction persists in the wet season, additional BMPs such as covering the sidecast and topsoil stockpiles would be considered.

Turbine Foundation Construction

It is anticipated that up to 43 turbine foundations would be designed by conventional methods including: (1) spread foundations below the loess (i.e., wind-formed soils), (2) drilled shaft foundations that support in the materials below the loess, (3) removal of the loess and replacement with compacted fill, and/or (4) in situ improvements of the loess soils. One or more of these approaches have been used in the design and construction of the foundations for Klondike II and will be used to design the foundations for the expanded project.

Construction would likely require excavation approximately nine to ten feet deep and approximately 50 feet in diameter. Excavated material would be stockpiled for use as backfill adjacent to the turbine pad for approximately 14 to 28 days while the concrete cures. Silt fences or sediment moats would be installed on the downslope side of stockpiles. Sediment moats are ditches dug around the perimeter of the stockpile with the excavation sidecast to the outboard side of the ditch to form a temporary dike. The temporary dike provides a physical barrier that traps sediment "in the moat" and prevents its discharge. Once the concrete cures, the stockpiled materials would be used for backfilling. The contractor would be responsible for locating a disposal site, which may include placing and cultivating the excess material on upland agricultural lands within the lease boundary for excess materials if saturated soils are encountered and must be hauled away from the site, loads would be drained on-site until dripping is reduced to minimize spillage on roads. Disturbed areas resulting from foundation and crane pad construction would be seeded to establish crops or native species as appropriate.

BMPs used as part of turbine foundation construction would include phasing the work as practical to minimize disturbance at any given time, preserving existing vegetation, graveled access road, draining saturated soils on site, silt fences, sediment moats, and reestablishing permanent vegetation. If construction persisted in the wet season, additional BMPs such as covering the stockpiles and heavy mulching would be considered. Silt fences would be removed once the stockpile has been removed and the disturbed areas stabilized with vegetation.

Tower and Rotor Assembly

Turbine tower pieces, nacelle, hub, blades and appurtenances would be transported by trucks to each turbine location and erected using a construction crane. The base tower section would be bolted to the

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foundation pedestal, the middle section would then be bolted to the base section, and the top section would then be bolted to the middle section. The nacelle is then lifted to the top of the tower and bolted in place. The rotor (hub and three blades) is assembled on the ground and then the rotor assembly is hoisted and attached to the turbine nacelle.

No additional BMPs would be required for this phase of construction. BMPs previously installed as part of road construction and/or turbine foundation construction should provide adequate erosion and sedimentation control.

Mitigation Site

Portions of the two proposed conservation areas may be plowed in preparation of habitat mitigation. A 100-foot wide vegetated filter strip will be left on the downslope side of the mitigation site, to prevent exposed soils from entering Grass Valley Canyon or its intermittent tributary.

Stormwater Management

Stormwater management will be ongoing through the life of the project. The use of water for construction practices (e.g., dust suppression, road compaction) is not anticipated to generate runoff. Wastewater would not be discharged into wetlands or other adjacent resources. The area receives approximately 12 inches of precipitation annually, most of which occurs between October 1 and March 31. Stormwater runoff resulting from precipitation is anticipated to be minimal and would infiltrate onsite.

Demobilization

Demobilization would include final road grading, site cleanup, and decommissioning the erosion and sedimentation BMPs among other activities. The applicant will remove all silt fences and other BMPs as appropriate and would end 1200-C permit coverage once all soil disturbance activities have been completed and final stabilization of exposed soils has occurred.

Table 1 lists construction equipment typically used during wind project construction.

TABLE 1.- EQUIPMENT TYPICALLY USED FOR WIND FACILITY CONSTRUCTION

Equipment	Use
Bulldozer	Road and pad construction
Grader	Road and pad construction
Water trucks	Compaction, erosion and dust control
Roller/compactor	Road and pad compaction
Backhoe/trenching machine	Digging trenches for underground utilities
Excavator	Foundation excavation
Heavy duty rock trencher	Underground trenching

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TABLE 1.- EQUIPMENT TYPICALLY USED FOR WIND FACILITY CONSTRUCTION

Truck-mounted drilling rig	Drilling power pole holes
Concrete trucks/concrete pumps	Pouring tower and other structure foundations
Cranes	Tower/turbine erection
Dump trucks	Hauling road and pad material
Flatbed & Low-bed trucks	Hauling towers, turbines and components, and construction equipment
Pickup trucks	General use and hauling minor equipment
Small hydraulic cranes/forklifts	Loading and unloading equipment
Four-wheel-drive all-terrain vehicles	Rough grade access and underground cable installation
Rough-terrain cranes / forklifts	Lifting equipment and pre-erection assembly

Additional Information

A revegetation plan describing revegetation methods and seedmixes is attached. Erosion and Sediment control BMPs will be installed according to the guidance provided in NPDES Storm Water Regulations for Construction Projects, December 2002.

In addition to the NPDES guidance, practices that can be used to control erosion of loess soils include seeding early in the spring, stubble-mulch tillage, and construction of terraces, diversions, and grassed waterways. Leaving crop residue near the surface helps conserve moisture, maintain tilth, and control erosion.

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9. *Describe the truck drippage precautions you will take to prevent discharge of water from trucks hauling wet soils or stone excavated from the site:*

Because of the climate and soil types in the area, excessively wet soils and/or stone excavation are not anticipated. Therefore, truck drippage is not expected to be an issue. In the unlikely event of hauling wet soils or stone, trucks would be allowed to drain on-site before entering public right-of-way (i.e., county road system). If draining on-site is determined to be inadequate, the ESC Lead would coordinate additional BMPs to minimize truck drippage.

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10. *Describe the procedures you will use to assure prompt maintenance and repair of graded surfaces and erosion and sediment control measures:*

Response: A copy of the Erosion and Sediment Control Plan (Plan) and all inspection reports (described below) for the expanded site boundary would be retained on-site and made available to the Department of Environmental Quality, its agent, or the local municipality upon request. The contractor would designate an Erosion and Sediment Control Lead (ESC Lead) who would be responsible for implementing the Plan and following through on all maintenance requirements. The ESC Lead would be a person with knowledge and experience in construction stormwater controls and management practices. The ESC Lead's contact information, including an emergency contact number, would be provided as part of the Plan.

All roads, pads, trenched areas, stockpiles and disturbed areas resulting from facility construction would be inspected regularly and maintained to minimize erosion and sedimentation. For active sites, inspections would occur daily during stormwater runoff or snowmelt runoff and at least once every seven calendar days and within 24 hours after any storm event greater than 0.5 inches of rain in a 24-hour period. For inactive periods greater than seven days, inspections would occur once every two weeks. If a site is inaccessible due to adverse weather conditions, inspections would not occur, but the adverse weather conditions would be noted on the inspection report. Inspections during operations would occur monthly to ensure no bare, unprotected soils remain; if found these areas would be mulched and seeded to re-establish vegetation.

The inspections would document the following:

- Inspection date, inspector's name, weather conditions, and rainfall amount in the last 24 hours.
- List observations of all BMPs.
- At representative discharge point(s), document the quality of discharge for any turbidity, color, sheen, or floating materials.
- Recommended corrective actions required, if any.

The applicant would implement the following maintenance activities and guidelines:

- Significant amounts of sediment that leave the site would be cleaned up within 24 hours and placed back on the site or disposed of in a legal manner.
- Under no circumstances would sediment be intentionally washed into storm sewers or drainages unless it was to be captured by a BMP (e.g., basin insert) before entering receiving waters.
- For silt fences, the trapped sediment would be removed before it reaches one third of the above ground height of the fence.
- For catch basin protection, cleaning would occur when design capacity has been reduced by 50 percent.
- All erosion and sedimentation control BMPs not directly in the path of work would be installed before any land disturbance.
- All disturbed areas that would be revegetated with native species would be reseeded at appropriate intervals until a performance standard of 70 percent cover is met.
- Fertilizers would not be used when seeding native species, and would only be used in such a way to minimize nutrient-laden runoff when seeding wheat.
- If construction activities cease for 30 days or more, all disturbed areas would be stabilized using vegetation, heavy mulch, temporary seeding, or other appropriate BMPs as necessary.
- All temporary erosion and sediment control measures will be removed within 30 days after final stabilization of the site. Final stabilization is deemed to have occurred when the impacted areas demonstrate 70% cover and the risk of erosion has been minimized.

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- Adequate stockpiles of silt fences, straw bales, spill kits, and other measures as appropriate will be maintained on site for emergency situations and to allow for the prompt response for repairs.

REVEGETATION PLAN

Third Request for Amendment for the Klondike III Wind Project 1200-C Worksheet June 2007

Prepared by Sean Sullivan, Registered Landscape Architect (Oregon No. 412)

BACKGROUND

This plan supplements the 1200-C Permit application for the Third Request for Amendment to the Klondike III Wind Project (Project) and outlines techniques for revegetating areas temporarily disturbed as a result of Project construction. The Project occurs in Sherman County, Oregon on private agricultural lands primarily used for dry land winter wheat production. Soils are typically loess formations of well-drained, moderately permeable, fertile silt loams over basalt. Areas too steep for cultivation are suitable for livestock grazing and wildlife habitat. Depth to bedrock is generally 20 to 60 inches. The vicinity receives less than 12 inches of precipitation annually, most of which occurs October 1 to March 31.

REVEGETATION APPROACH

Revegetation would occur by applying a variety of seed mixes to disturbed areas using common application methods such as broadcasting and drilling. Given climatic constraints and anticipated soil moisture levels, it is anticipated that mulching and other best management practices (BMPs) will be used for temporary erosion and sediment control throughout most of the construction window. Permanent seeding to establish vegetation would occur near the end of construction and when soil moisture conditions are conducive to seed germination (approximately October 1 to March 31 as conditions allow). The contractor would be allowed flexibility to apply seed in less favorable conditions with the understanding that reseeding may be required if adequate cover is not achieved. Up to four seed mixes are anticipated for this Project as described below:

Seedmix 1 – Dry Land Wheat

Agricultural areas temporarily disturbed by construction activities would be reseeded with dry land wheat. The species composition, seed and fertilizer application rates, and application method would be coordinated with the landowner and/or farmer.

Seedmix 2 – Conservation Reserve Program

Conservation Reserve Program (CRP) easements disturbed by construction would be reseeded with a mix compatible with the CRP goals. The species composition, application rate, use of fertilizers, and application method would be coordinated with Oregon Department of Fish and Wildlife (ODFW) and the easement holder.

Seedmix 3 – Habitat Mitigation

As described in Exhibit P, an area in the southwest portion of the Project area would be used to mitigate unavoidable impacts to wildlife habitat. This area would be seeded with a mix whose composition, application rate, and application method will be coordinated with ODFW. It is anticipated that fertilizer would not be applied to areas receiving Seedmix 3.

Seedmix 4 – Permanent Revegetation (Upland)

Seedmix 4 would be applied to all remaining disturbed areas resulting from construction. Native species have been selected based on their relative availability and their compatibility with xeric site conditions. It is anticipated that fertilizer would not be applied to areas receiving Seedmix 4. The composition and application rate are as follows:

Botanical Name	Common Name	PLS* Rate (lbs/ac)
<i>Artemisia tridentata</i> ssp. <i>tridentata</i>	big basin sagebrush	0.09
<i>Elymus lanceolatus</i> ssp. <i>lanceolatus</i>	thickspike wheatgrass	8.07
<i>Poa ampla</i>	big bluegrass	1.23
<i>Poa sandbergii</i>	Sandberg bluegrass	1.18
<i>Pseudoroegneria spicata</i> ssp. <i>inermis</i>	beardless wheatgrass	6.01
<i>Pseudoroegneria spicata</i> ssp. <i>spicata</i>	bluebunch wheatgrass	6.93
Total		23.51

*PLS = Pure Live Seed

Pure Live Seed (PLS) is the amount of living, viable seed in a larger total amount of seed. The amount of seed to be applied is obtained by using the purity and germination percentages from the label on the actual bag of seed to be used on the project.

To calculate the amount of seed to be applied:

1. Obtain the PLS factor by multiplying the seed label germination times the seed label purity percentage. (Change the percentages to decimals before multiplying.)
2. Divide the specified PLS rate by the PLS factor.
3. Round off the result as approved by the Landscape Architect.

For example, a PLS seeding rate of six pounds per acre is specified. The seed label shows a purity of 98% and germination rate of 90%. 0.98 times 0.90 equals a PLS factor of 0.88. The specified PLS rate, six pounds per acre, divided by the factor of 0.88 equals 6.82. About 6.8 pounds of total seed needs to be applied in order to meet a specified PLS seeding rate of six pounds per acre.

The final application rate should be based on the purity and germination rates shown on the seed certification tags provided by the supplier. It is assumed that all seed would be provided by a reputable supplier and would comply with the Oregon Seed Law.

APPLICATION METHODS

This plan prescribes two methods that would be used for seeding disturbed areas: broadcasting and drilling. Hydroseeding is not recommended for this relatively arid environment. It is anticipated that the contractor would have flexibility in selecting the method most appropriate for

a given site and would consider factors such as slope, access, area to be seeded, wind conditions, available soil moisture, and erosion potential when selecting a method.

Broadcasting

Broadcast the seedmix at the specified application rate. Where feasible, apply half of the total mix in one direction and the second half of mix in direction perpendicular to first half. Apply weed free straw from a certified field or sterile straw at a rate of two tons per acre immediately after applying seed. Crimp straw into the ground to a depth of two inches using a crimping disc or similar device. As an alternative to crimping, a tackifier may be applied using hydroseed equipment at a rate of 100 pounds per acre. Prior to mixing the tackifier, visually inspect the tank for cleanliness. If remnants from previous hydroseed applications exist, wash tank to remove remnants. Include a tracking dye with the tackifier to visibly aid uniform application.

Broadcasting should not be used if winds exceed five miles per hour.

Drilling

Using an agricultural or range seed drill, drill seed at 70 percent of the recommended application rate to a depth of ¼ inch or as recommended by the seed supplier. Where feasible, apply half of the total mix in one direction and the second half of mix in direction perpendicular to first half. If mulch has been previously applied as a temporary BMP, seed may be drilled through the mulch provided the drill is capable of penetrating the straw resulting in seed-to-soil contact conducive for germination.

PERFORMANCE STANDARD

Revegetation will be considered successful when the disturbed area reaches 70 percent cover by desirable species. For the purposes of monitoring, desirable species include species included in the seedmix, or native or naturalized species common to similar areas.

MONITORING AND MAINTENANCE

Disturbed, unseeded areas would be managed with chemical and/or mechanical means to prevent weed species from going to seed during the construction period. The contractor would be responsible for complying with all local, state, and federal regulations regarding the application of chemical pesticides and herbicides.

Areas failing to achieve the performance standard would be evaluated to determine potential reasons for lack of performance. Corrective action would be taken based on the evaluation that may include reseeding at appropriate intervals or reconfiguring the seedmix.

EXHIBIT J

WETLANDS

OAR 345-021-0010(1)(j)

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APPENDIX

J-1 WETLAND DELINEATION	
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J.1 INTRODUCTION

OAR 345-021-0010(1)(j) *Information based on literature and field study, as appropriate, about waters of the state or waters of the United States, including:*

Response: A wetland delineation was conducted in accordance with the Corps of Engineers Wetland Delineation Manual (1987) that included a review of background resources as well as an on-site investigation of the expanded site boundary proposed in the Third Request for Amendment to the Klondike III Wind Project (Appendix J-1). The wetland delineation covered the area occupied by proposed new and shifted turbine corridors, crane paths, underground collector lines, and other features proposed in Amendment 3. Results of this analysis are provided below.

J.2 DESCRIPTION OF WATERS OF THE STATE OR WATERS OF THE UNITED STATES

OAR 345-021-0010(1)(j)(A) *A description of all areas within the site boundary that might be waters of the state or waters of the United States and a map showing the location of these features.*

Response: The wetland delineation resulted in the identification of no wetlands or other waters of the State or waters of the United States as occurring within the wetland analysis area. The wetland delineation, with accompanying data sheets for each data plot, is attached as Appendix J-1. The report includes a map of data plots within the wetland analysis area.

No waters of the State or waters of the United States were identified within the wetland analysis area. All drainages shown on the USGS quad map were investigated and determined not to be waters of the State or waters of the United States, because they had been plowed through and had no discernible channel.

J.3 EFFECT ON WATERS OF THE STATE OR WATERS OF THE UNITED STATES AND WETLANDS DELINEATION REPORT

OAR 345-021-0010(1)(j)(B) *An analysis, of whether construction or operation of the proposed facility would adversely affect any waters of the state, as defined under OAR 141-085-0010, or waters of the United States, as defined under Section 404 of the Clean Water Act.*

Response: Based on the wetland delineation results, no impacts to any waters of the State or waters of the United States are anticipated as a result of the proposed project, because none were identified within the expanded site boundary proposed in the Third Request for Amendment to the Klondike III Site Certificate. A wetland delineation was conducted for the proposed expanded site boundary and is provided in Appendix J-1.

J.4 SIGNIFICANT POTENTIAL IMPACTS TO WATERS OF THE STATE OR WATERS OF THE UNITED STATES

OAR 345-021-0010(1)(j)(C) *A description of the significance of potential adverse impacts to each feature identified in (A), including the nature and amount of material the applicant would remove from or place in the waters analyzed in (B).*

Response: No impacts to wetlands or other waters of the State or waters of the United States will occur as a result of the expansion proposed in the Third Request for Amendment to the Klondike III Site Certificate because no wetlands or waters of the State or waters of the United States occur in this area.

J.5 EXPLANATION OF WHY NO REMOVAL-FILL AUTHORIZATION REQUIRED

OAR 345-021-0010(1)(j)(D) *If the proposed facility would not need a removal-fill authorization as described under OAR 141-085-0018, an explanation of why no such authorization is required for the construction and operation of the proposed facility.*

Response: The project will not result in impacts (i.e. removal or fill) to wetlands and other waters of the State. Therefore, a removal-fill authorization is not needed from the Oregon Department of State Lands.

J.6 EVIDENCE THAT REMOVAL-FILL PERMIT CAN BE ISSUED

OAR 345-021-0010(1)(j)(E) *If the proposed facility would need a removal-fill authorization, information to support a determination by the Council that the Oregon Department of State Lands should issue a removal-fill permit, including information in the form required by the Department of State Lands under OAR Chapter 141 Division 85.*

Response: The project will not result in impacts (i.e. removal or fill) to wetlands and other waters of the State. Therefore, a removal-fill authorization is not needed from the Oregon Department of State Lands.

J.7 MITIGATION AND MONITORING PROGRAM, IF ANY, FOR IMPACTS TO WATERS OF THE STATE OR WATERS OF THE UNITED STATES

OAR 345-021-0010(1)(j)(F) *A description of proposed actions to mitigate adverse impacts to the features identified in (A) and the applicant's proposed monitoring program, if any, for such impacts.*

Response: Mitigation and monitoring are not warranted or proposed because no impact to wetlands or other waters of the State or waters of the United States will result from the proposed project.

APPENDIX J-1

Wetland Delineation

WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

This form constitutes a request for a jurisdictional determination by the Department of State Lands. It must be fully completed and signed, and attached to the front of reports submitted to the Department for review and approval.

Wetlands Program Manager/Oregon Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279

<input checked="" type="checkbox"/> Applicant <input type="checkbox"/> Owner Name, Firm and Address: Klondike Wind III Power LLC, Attn Jesse Gronner 1125 NW Couch, Suite 700 Portland, OR 97209	Business phone # 503.796.7045 Home phone # (optional) FAX # 503.796-6907 E-mail: jesse.gronner@ppmenergy.com
<input type="checkbox"/> Authorized Legal Agent, Name and Address: NA	Business phone # FAX # E-mail:

I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.
Typed/Printed Name: **Jesse Gronner** Signature: *Jesse Gronner*
Date: **6/20/2007** Special instructions regarding site access: **Call Applicant at least 2 days prior to site visit**

Project and Site Information (for latitude & longitude, use centroid of site or start & end points of linear project)

Project Name: Third Request for Amendment - Klondike III Wind Project		Latitude: 45 55 1	Longitude: 120 56 1
Proposed Use: Power generation	Tax Map # multiple; see attached		
Project Street Address (or other descriptive location): Near Klondike Lane	Township see attached	Range	Section QQ
	Tax Lot (s) multiple		
	Waterway: Grass Canyon Val River Mile: NA		
City: Near Wasco	County: Sherman	NWI Quad(s): Wasco, Klondike, McDonald	

Wetland Delineation Information

Wetland Consultant Name, Firm and Address: David Evans and Associates, Inc., Attn Dana Siegfried 2100 SW River Parkway Portland, OR 97201	Phone # 503.499.0369 FAX # 503.223.2701 E-mail address: dns@deainc.com
The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge. Consultant Signature: _____ Date: 6/18/2007	
Primary Contact for report review and site access is <input checked="" type="checkbox"/> Consultant <input type="checkbox"/> Applicant/Owner <input type="checkbox"/> Authorized Agent	
Wetland/Waters Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Total Wetland Acreage: NA	

Delineation Purpose:

<input type="checkbox"/> R-F permit application submitted with delineation	<input type="checkbox"/> Sale, purchase, lease etc.
<input type="checkbox"/> Mitigation bank site	<input type="checkbox"/> Partition, re-plat, lot line adjustment
<input type="checkbox"/> Industrial Land Certification Program site	<input type="checkbox"/> Habitat restoration project
<input type="checkbox"/> R-F application will be submitted within 90 days	<input checked="" type="checkbox"/> Other: EFSC Project -No wetland impacts
Other Information:	Y N
Has previous delineation/application been made on parcel?	<input type="checkbox"/> <input type="checkbox"/> If known, previous DSL #
Does LWI, if any, show wetland on parcel?	<input type="checkbox"/> <input type="checkbox"/> LWI wetland code:

For Office Use Only

DSL Reviewer: _____	Report Tier: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	DSL WD # _____
Date Delineation Received: ____ / ____ / ____	DSL Project # _____	DSL Site # _____
Scanned: <input type="checkbox"/> Final Scan: <input type="checkbox"/>	DSL WN # _____	DSL App. # _____

Wetland Delineation Report

Klondike III Wind Project

Amendment 3

Prepared for
Klondike Wind Power III LLC

Prepared by
David Evans and Associates, Inc.

June 2007

Wetland Delineation Report

Klondike III Wind Project

Amendment 3

Prepared for

Klondike Wind Power III LLC

c/o PPM Energy, Inc.

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Portland, OR 97209

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June 2007

PREFACE

David Evans and Associates, Inc. (DEA) prepared this wetland delineation report for Klondike Wind Power III, LLC. The findings of this report are based upon information gathered during the field investigation and upon DEA's understanding of state and federal law relating to the regulation of wetland areas. DEA staff used the *U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual* (Environmental Laboratory 1987) and *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Environmental Laboratory 2006) in completing the wetland delineation.

The wetland boundaries and classifications described in this document represent the best professional judgment of DEA staff. The decisions were based on the circumstances and site conditions at the time of the field investigation. Final verification of this wetland delineation is to be made as part of the Oregon Energy Facility Siting Council process.

EXECUTIVE SUMMARY

David Evans and Associates Inc. (DEA) conducted a wetland delineation on May 22 and 23, 2007, for the third Amendment to the Klondike III Wind Power Project (Klondike III). The Klondike III project site is located in rural, northeast Sherman County (Figure 1). It is roughly one mile west of the John Day River, at its closest, approximately three miles south of the Columbia River, and twelve miles east of the Deschutes River. Grass Valley, which contains an intermittent tributary to the John Day River, extends along the southern edge of the project site. The project site is located approximately four miles east of Wasco, Oregon.

Wetland delineation results found that no wetlands or waters of the state exist within the expanded site boundary proposed in the Third Amendment to the Site Certificate.

Topography within the project vicinity is typified by gently rolling to level ground located along a high plateau. Areas of steep slopes are confined to portions of the southern margins of the expanded project site. These areas drop rapidly from the high and relatively level plateau down to the Grass Valley. Elevations along the plateau, within the project vicinity, range between approximately 1,250 feet to 1,500 feet. Elevations within the project vicinity drop to roughly 1,000 feet in portions of the Grass Valley.

The vast majority of the project site is under dry land wheat production. Very little acreage of native plant communities remain within the expanded site, occurring predominantly along the steep side slopes of Grass Valley. These communities consist of sagebrush (*Artemisia tridentata*) and rabbit brush (*Chrysothamnus* sp.), dominated shrublands and native bunchgrass grasslands, each with varying degrees of invasive species present. Agricultural areas that are enrolled under the Conservation Reserve Program (CRP) are located throughout the project site, occurring as narrow strips in previously plowed areas, and as large blocks in other areas. CRP areas have been planted with a mix of native and non-native bunch grasses with the primary intent of increasing wildlife habitat in the area.

A Level 2 Routine On-Site Method was used to delineate wetland areas according to the *Interim Regional Supplement to the Corps of engineers Wetland Delineation Manual: Arid West Region* herein referred to as the *Arid West Supplement*. This manual is designed as a supplement to the *U.S. Army Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987). This method requires an area to possess a prevalence of hydrophytic vegetation, hydric soils, and wetland hydrology. Under normal circumstances, positive indicators of each of these three parameters must be present for an area to satisfy the criteria for jurisdictional wetlands. Areas of relatively low disturbance, such as CRP areas, were considered to have normal circumstances. In instances where a site has been substantially disturbed and one or more parameters were not measurable, then the wetland delineation may rely solely on the remaining

measurable parameter(s). Such circumstances are referred to as atypical situations. Areas within the wetland analysis area consisting of cultivated wheat were considered atypical situations. In these instances, only soil conditions and wetland hydrology indicators were used to determine if an area should be classified as a jurisdictional wetland.

Wetlands or other waters of the U.S. are under the jurisdiction of either the U.S. Army Corps of Engineers (USACE) and/or the Oregon Department of State Lands (DSL). DSL requires a Removal/Fill Permit when the total removal or fill in a water of the state, including wetlands, is equal to or exceeds 50 cubic yards. In essential salmonid habitat (ESH), a permit is required for any fill amount. No areas within the wetland analysis area are mapped as essential salmonid habitat by DSL.

USACE administers Section 404 of the Clean Water Act, which regulates the discharge of fill materials into waters of the U.S., including wetlands. USACE issues Nationwide or Individual permits depending on the amount of impact to wetland resources and the purpose for which the discharge of fill materials is proposed.

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1 INTRODUCTION

David Evans and Associates, Inc. (DEA) conducted a wetland delineation on May 22 and 23, 2007, for the Third Amendment Request to the Klondike III Wind Power Project (Klondike III). The Klondike III project site is located in rural, northeast Sherman County (Figure 1). It is roughly one mile west of the John Day River, at its closest, approximately three miles south of the Columbia River, and twelve miles east of the Deschutes River. Grass Valley, which contains an intermittent tributary to the John Day River, extends along the southern edge of the project site. The proposed amended project site is located approximately four miles east of Wasco, Oregon, in the following Township, Range, and Sections:

- Township 1 North, Range 17 East, Sections 13, 14, 23 and 24
- Township 1 North, Range 18 East, Sections 8, 9, 10, 11, 13, 15, 17, 20, 21, 22, 23, 24, 27 and 29

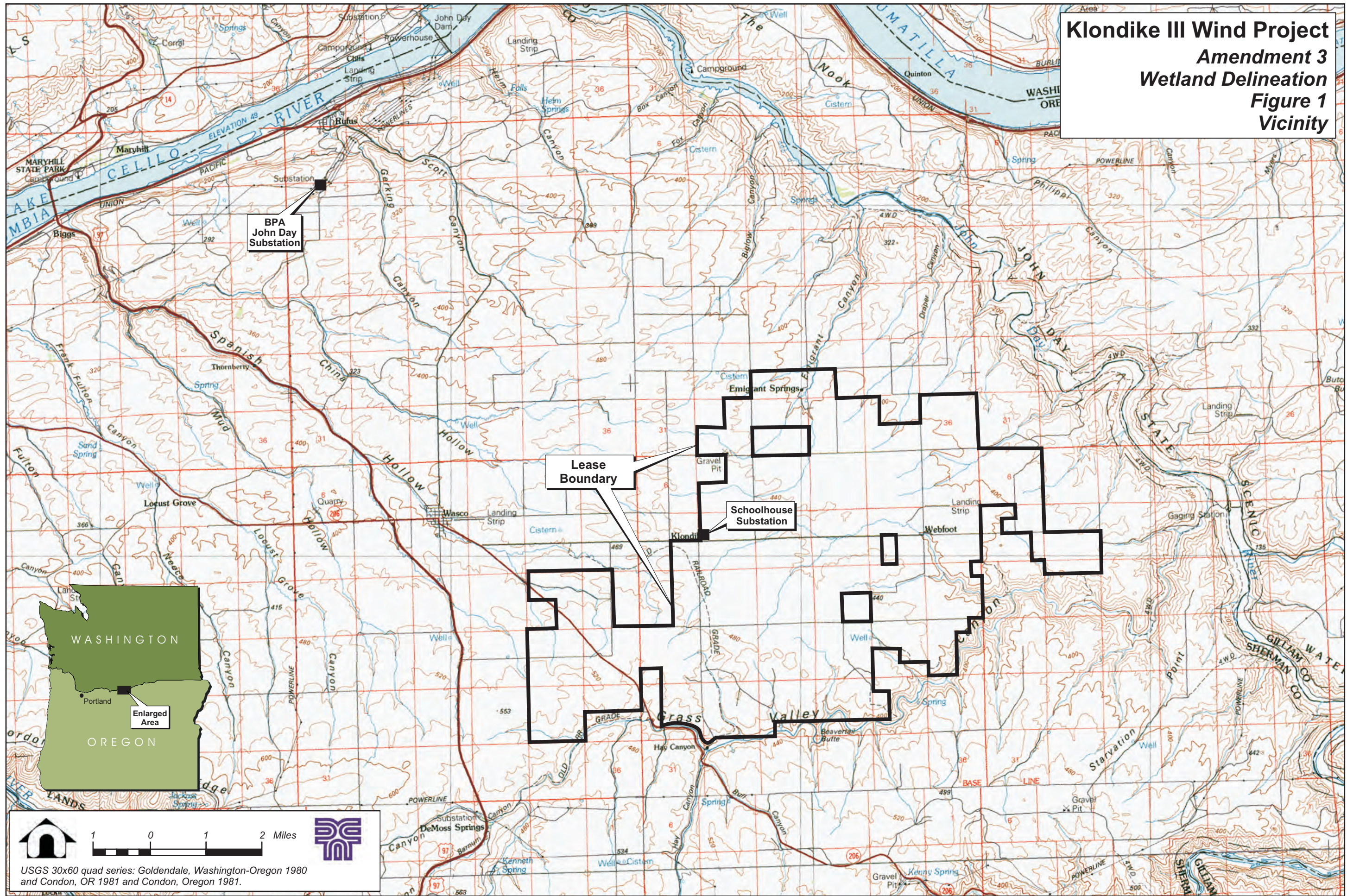
The purpose of this delineation is to determine the current presence, location, and size of federal and state jurisdictional wetlands and other “waters of the U.S.” Once verified by the appropriate agencies, this wetland delineation will allow Klondike III to accurately understand specific impacts to waters of the U.S. and/or waters of the state, including wetlands associated with the Third Request for Amendment to the Site Certificate.

2 PROJECT DESCRIPTION

The Third Request for Amendment to the Klondike III Site Certificate proposes to construct an additional 109 Megawatts (MW) and add up to 33 new turbines to the project (Figure 2). The expanded micro-siting corridors will be constructed on privately owned land and will be connected to the regional transmission grid at Bonneville Power Administration’s (BPA) Klondike Schoolhouse Substation.

It is anticipated that construction of the facilities anticipated by the Third Request for Amendment will begin in the Third quarter of 2007, with a completion of construction by the fourth quarter of 2008.

**Klondike III Wind Project
Amendment 3
Wetland Delineation
Figure 1
Vicinity**



BPA
John Day
Substation

Lease
Boundary

Schoolhouse
Substation



3 SITE BOUNDARY AND WETLAND ANALYSIS AREA

The Third Request for Amendment to the Site Certificate would expand the “site boundary” for the Proposed Klondike III Wind Power Project includes all areas of proposed permanent and temporary construction activities that would result from the project (Figure 2). The site boundary was derived using the following protocols:

- 900-foot corridors centered on the new and revised turbine strings
- 150-foot buffer centered on proposed new roads and underground collector system, and 200 feet centered on crane paths.

The wetland analysis area was derived from the site boundary, and is shown on Figure 2. This wetland delineation covers all of the area within the wetland analysis area.

4 SITE DESCRIPTION

Located on the eastern side of the Cascade Mountains, the project site predominantly exhibits the continental climate of the Intermountain Region – extreme temperatures and low rainfall (Orr, et al. 1992). However, the Columbia River Gorge provides a passageway for the normal eastward migration of ocean-conditioned air masses from the Pacific. These currents usually lead to shorter hot or cool periods than those typical of the Intermountain Region. For the period 1971 to 2000, mean minimum and maximum temperatures for the month of January, the coldest month of the year, were 24.7°F and 38.3°F, respectively (Oregon Climate Center 2005). For the month of August, the warmest month of the year, mean minimum and maximum temperatures were 52.6°F and 81.8°F respectively. However, temperature extremes are known to range from -16°F to 106°F. Most of the annual rainfall in Sherman County occurs between November and February, reflecting the strong influence of marine air masses entering from the Pacific Ocean. Mean monthly rainfall (measured 1971 – 2000 at Moro, Oregon) ranges from 0.31 inches in July to 1.57 inches in January. Between 1910 and 1995, mean total annual precipitation was 11.76 inches in Wasco, Oregon.

Sherman County is on the Deschutes-Columbia Plateau, a lava-floored plain that has experienced uplifting. This is predominantly a volcanic province sloping gently northward to the Columbia River. Topography within the project site is typified by gently rolling to level ground located along the high plateau. Areas of steep slopes are confined to portions of the northeast and southern margins of the project site and vicinity. Elevations within the project vicinity drop to roughly 1,000 feet in portions of Grass Valley.

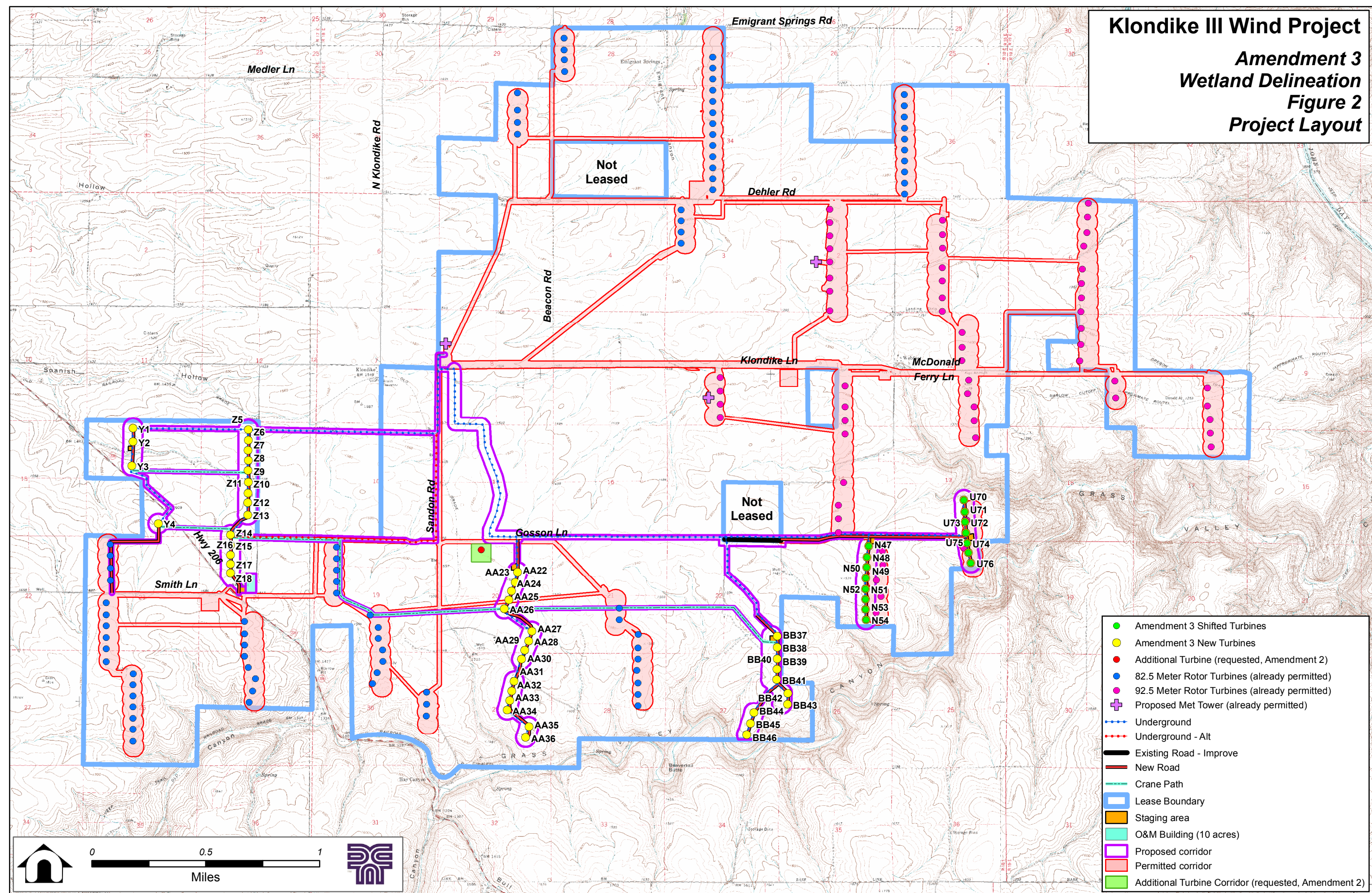
Klondike III Wind Project

Amendment 3

Wetland Delineation

Figure 2

Project Layout



- Amendment 3 Shifted Turbines
- Amendment 3 New Turbines
- Additional Turbine (requested, Amendment 2)
- 82.5 Meter Rotor Turbines (already permitted)
- 92.5 Meter Rotor Turbines (already permitted)
- ✚ Proposed Met Tower (already permitted)
- Underground
- Underground - Alt
- Existing Road - Improve
- New Road
- Crane Path
- Lease Boundary
- Staging area
- O&M Building (10 acres)
- Proposed corridor
- Permitted corridor
- Additional Turbine Corridor (requested, Amendment 2)

The vast majority of the project site is under dry land wheat production. Very little acreage of native plant communities remains, occurring predominantly along the plateau margins and steep side slopes of the Grass Valley. These communities consist of sagebrush (*Artemisia tridentata*) and rabbit brush (*Chrysothamnus* sp.), dominated shrublands and native bunchgrass grasslands, each with varying degrees of invasive species present. Agricultural areas that are enrolled under the Conservation Reserve Program (CRP) are located throughout the project site, occurring as narrow strips in previously plowed drainageways, and as large blocks in other areas. CRP areas have been planted with a mix of native and non-native bunch grasses.

5 METHODS

5.1 PRELIMINARY RESOURCE REVIEW

Reference materials were reviewed prior to the field investigation to provide information regarding the possible presence of wetlands, water features, hydric soils, wetland hydrology and site topography. The materials reviewed included:

- Precipitation data for Pendleton, Oregon (Oregon Climate Service, 2005)
- Wasco, Oregon, 7.5 minute Quadrangle, U.S. Geological Survey (USGS 1987)
- Klondike, Oregon, 7.5 minute Quadrangle, U.S. Geological Survey (USGS 1971)
- McDonald, Oregon, 7.5 minute Quadrangle, U.S. Geological Survey (USGS 1975)
- Wasco, Oregon, National Wetlands Inventory (NWI) 7.5 minute quadrangle maps, U.S. Fish and Wildlife Service (USFWS 1981)
- Klondike, Oregon, National Wetlands Inventory (NWI) 7.5 minute quadrangle maps, U.S. Fish and Wildlife Service (USFWS 1981)
- McDonald, Oregon, National Wetlands Inventory (NWI) 7.5 minute quadrangle maps, U.S. Fish and Wildlife Service (USFWS 1981)
- On-line Soil Survey of Sherman County Area, Oregon, U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS), (USDA 2005)

5.2 FIELD METHODS

Wetland areas were delineated according to the Level 2 Routine On-Site Method described in the *U.S. Army Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987) and the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Environmental Laboratory 2006). The project site is located within the Columbia/ Snake River Plateau of Land Resource Region (LRR B) as described in the *Arid West Supplement*, applicable to significant portions of Oregon that are dominated mainly by grasslands, shrublands, hardwood savannas, deciduous woodlands, and pinyon/juniper woodlands (Environmental Laboratory 2006).

This method requires an area to possess a prevalence of hydrophytic vegetation, hydric soils, and wetland hydrology. Under normal circumstances, positive indicators of each of these three parameters must be present for an area to satisfy the criteria for jurisdictional wetlands. Areas of relatively low disturbance, such as CRP areas, were considered to have normal circumstances. In instances where a site has been substantially disturbed and one or more parameter is not measurable, then the wetland delineation may rely solely on the remaining measurable parameter(s). Such circumstances are referred to as atypical situations. Areas within the wetland analysis area consisting of cultivated wheat were considered atypical situations. Although vegetative cover data was recorded for these areas, only soil conditions and wetland hydrology indicators were used to determine if an area should be classified as a jurisdictional wetland.

5.2.1 Hydrology

For the purpose of delineating wetlands, an area is considered to possess wetland hydrology when the soil is saturated to the surface for a sufficient period of time during the growing season to develop anaerobic conditions. The USDA Natural Resource Conservation Service WETS Table database for Sherman County (USDA 2005) identifies the growing season for Moro, Oregon as occurring from April 19 to October 15 with a 50 percent (%) probability. Saturation to the surface must occur for a minimum of 9 consecutive days (5%) during the growing season, but more likely for 22 consecutive days (12.5%) of the 178-day growing season for this area (USDA 2005), for wetland hydrology to occur (Environmental Laboratory 1987).

Field indicators of wetland hydrology are divided into two categories: primary and secondary. Primary indicators include surface water, high water table, saturation, non-riverine water marks, non-riverine sediment deposits, etc. Two Secondary field indicators are required; they include riverine watermarks, riverine sediment deposits, riverine drift deposits, drainage patterns, dry season water table, thin muck surface, crayfish burrows, saturation visible on aerial imagery, shallow aquitard, or a FAC-neutral test. At each sample plot, the surrounding area was examined for the presence of primary and secondary indicators of wetland hydrology.

5.2.2 Soils

The project site was examined for the presence of hydric soils. Hydric soils are soils which are saturated, flooded, or ponded long enough (usually a week or more) during the growing season to develop anaerobic conditions in the upper part (Environmental Laboratory 1987). All mineral layers above any of the indicators must have a dominant chroma of 2 or less, or the layers with dominant chroma of more than 2 must be less than six inches thick to meet any hydric soil indicator. There are 17 hydric soil indicators plus several that are region specific. Generally they include hystic soils, depletion, muck, redox, and gleying. Low soil chroma and redox are indicators of reduced soil conditions caused by anaerobic, wet environments. Redox indicates a fluctuating water table. The

Soil Survey of Sherman County Area, Oregon (USDA 1988) was consulted prior to fieldwork to determine if hydric soils were mapped in the analysis area.

Soil pits were dug to a depth of 16 inches, when not hindered by the presence of hardpan. Soil was analyzed for color using the *Munsell Soil Color Chart* (Munsell Color 1990). Soil color is based on hue, value, and chroma. Prescribed methods require a colorimetric determination immediately below the “A” horizon, or 10 inches, whichever is less.

5.2.3 Vegetation

USFWS has classified vegetation according to its frequency of occurrence in wetlands (USFWS 1988). Many plant species have been given wetland indicator status of either obligate wetland (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), or upland (UPL) based on their probabilities for occurring in wetlands. Table 1 provides the definitions of plant indicators used to determine wetland status.

In accordance with the *USACE 1987 Manual and Arid West Supplement*, vegetation plots were established in areas supporting a single plant community. Plant species observed were identified using *The Flora of the Pacific Northwest* (Hitchcock and Cronquist 1973) and assigned their indicator status using the *National List of Plant Species that Occur in Wetlands, Northwest - Region 9* (USFWS 1988) and the 1993 supplement (USACE 1993). Percent cover of each plant species was visually estimated. Plots with a 5-foot radius were used to estimate percent cover of herbaceous vegetation. The same plot was enlarged to a 30-foot radius to estimate percent cover of shrubs, saplings, vines, and trees. Plot sizes were adjusted in size and shape, as necessary, to encompass only one plant community.

Table 1. Plant Indicators Used to Determine Wetland Status

Indicator Symbol	Indicator Status	Definition
OBL	Obligate	Species that occur almost always (estimated probability >99%) in wetlands under natural conditions.
FACW	Facultative wetland	Species that occur in wetlands (estimated probability 67 to 99%), but occasionally are found in non-wetlands.
FAC	Facultative	Species that are equally likely to occur in wetlands or non-wetlands (estimated probability 34-66%).
FACU	Facultative upland	Species that usually occur in non-wetlands (estimated probability 67-99%), but occasionally are found in wetlands.
UPL	Upland	Species that occur almost always in non-wetlands under normal conditions (estimated probability >99%).
NI	No indicator	Species for which insufficient information was available to determine an indicator status.

Source: *National List of Plant Species that Occur in Wetlands: Northwest (Region 9)* (USFWS 1988).

Dominant species were determined for each of the three vegetative strata found on site (herb, sapling/shrub, and tree) using percent area cover. There were no woody vine strata present. The dominant species in each of the three strata are determined separately. The species within each stratum are ranked in descending order of estimated percent cover. The species that provide the most cover are totaled until 50% of the total coverage is exceeded; these are considered dominant species. If any additional species comprise at least 20% of the total coverage in each stratum, they are also considered dominant species. When more than 50% of the dominant species have wetland indicators of OBL, FACW, or FAC (excluding FAC-), the area is considered to support hydrophytic (wetland) vegetation.

5.2.4 Plot Location, Boundary Determination, and Mapping Accuracy

Due to the arid and well-drained nature of the site, few areas would be expected to contain wetlands or other waters of the state and/or U.S. Although the entire wetland analysis area was reviewed for the presence of these features, this delineation took a focused approach when determining sample plot locations. Ravine bottoms, depressions, and other areas that could potentially collect water were purposely sampled, as these areas would have the highest probability of containing waters of the state or wetlands. Specifically, sample plots were placed in areas mapped as wetlands by the NWI and areas mapped as intermittent or perennial drainages by the USGS. These areas had the highest probability of containing wetlands or other waters of the state, and U.S. Data sheets were completed at each sample plot, which document the vegetation, soils, and hydrology.

Areas in which wetland hydrology, hydric soils, and hydrophytic vegetation were all present were considered wetlands. In areas experiencing atypical situations, only the combined presence of hydric soils and hydrology were required to delineate an area as jurisdictional wetland. Areas where a defined channel was present, regardless of presence of flowing water, were considered to be other waters of the state and/or U.S. Areas where such features may have existed in the past, but have since been plowed through and no channel exists were not delineated as other waters of the state and/or U.S.

Wetland plot locations and potential crossings of jurisdictional waters were collected using a Trimble GeoExplorer Global Positioning System (GPS) receiver. Post processing of GPS data was used to increase the accuracy of collected data. Accuracy of the GPS collected data is estimated at plus or minus three feet.

6 RESULTS

Preliminary research results are graphically displayed on Figure 4. Text description of the delineation results follows.

6.1 PRELIMINARY RESOURCE REVIEW

6.1.1 Precipitation Record

Table 2 provides precipitation data for the day of the site visits (May 22 and 23, 2007), as well as the 14 days prior to each visit. Total precipitation recorded between May 8 and May 23, 2007 0.14 inches. Historical average rainfall for this same period is 0.61 inches. Significant snow accumulation, approximately 10 inches, was noted the week prior to the site visit and is not captured by the Pendleton data. This snow pack melted off several days prior to the site visit during a warming trend and would have contributed to site hydrology in a manner not readily observable by just looking at the precipitation data.

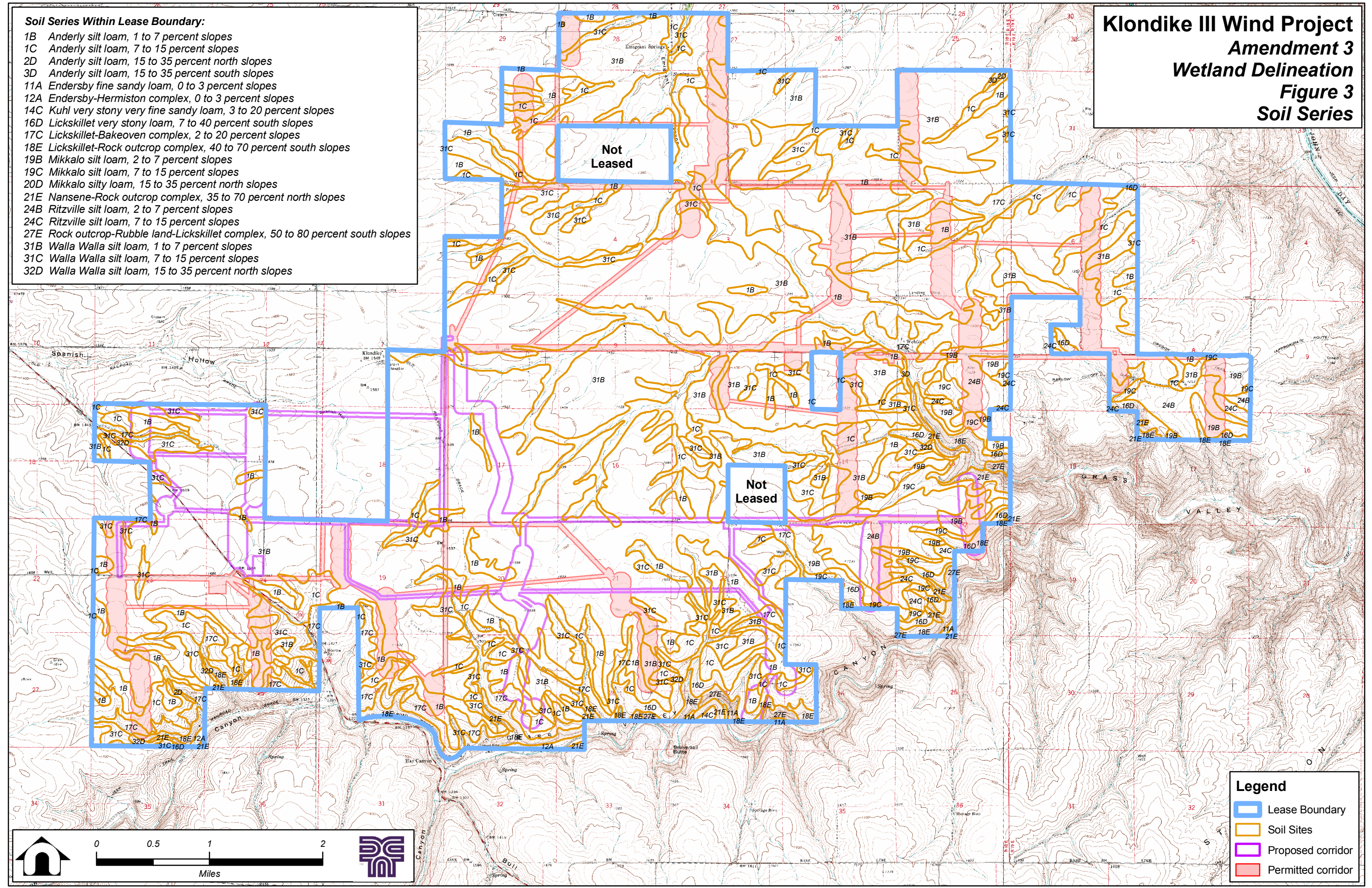
Table 2. May 22 and 23, 2007 (including 14 days prior) Daily Precipitation Measurements for Pendleton, Oregon (in inches, precipitation as snowfall noted in italics but measurement provided as water equivalent in inches)

May 8	May 9	May 10	May 11	May 12	May 13	May 14
0.01	0.0	0.0	0.0	T	0.0	0.0
May 15	May 16	May 17	May 18	May 19	May 20	May 21
0.0	0.0	0.0	0.0	T	0.09	0.01
May 22	May 23	Total				
0.03	0.0	0.14				

Source: Oregon Climate Service website, 2007

Klondike III Wind Project Amendment 3 Wetland Delineation Figure 3 Soil Series

- Soil Series Within Lease Boundary:**
- 1B Anderly silt loam, 1 to 7 percent slopes
 - 1C Anderly silt loam, 7 to 15 percent slopes
 - 2D Anderly silt loam, 15 to 35 percent north slopes
 - 3D Anderly silt loam, 15 to 35 percent south slopes
 - 11A Endersby fine sandy loam, 0 to 3 percent slopes
 - 12A Endersby-Hermiston complex, 0 to 3 percent slopes
 - 14C Kuhl very stony very fine sandy loam, 3 to 20 percent slopes
 - 16D Lickskillet very stony loam, 7 to 40 percent south slopes
 - 17C Lickskillet-Bakeoven complex, 2 to 20 percent slopes
 - 18E Lickskillet-Rock outcrop complex, 40 to 70 percent south slopes
 - 19B Mikkalo silt loam, 2 to 7 percent slopes
 - 19C Mikkalo silt loam, 7 to 15 percent slopes
 - 20D Mikkalo silty loam, 15 to 35 percent north slopes
 - 21E Nansene-Rock outcrop complex, 35 to 70 percent north slopes
 - 24B Ritzville silt loam, 2 to 7 percent slopes
 - 24C Ritzville silt loam, 7 to 15 percent slopes
 - 27E Rock outcrop-Rubble land-Lickskillet complex, 50 to 80 percent south slopes
 - 31B Walla Walla silt loam, 1 to 7 percent slopes
 - 31C Walla Walla silt loam, 7 to 15 percent slopes
 - 32D Walla Walla silt loam, 15 to 35 percent north slopes



6.1.2 Wetland Inventory Maps

The NWI shows three palustrine emergent, persistent, seasonal wetlands (PEM1C) mapped within the wetland analysis area. All three features are mapped in close proximity to Klondike Lane and are associated with a drainage feature that appears on the USGS quadrangle map. The USGS mapped drainage feature runs from west to east within the vicinity of Klondike Lane, eventually running underneath Klondike Lane via a bridge crossing near the vicinity of Webfoot. It then heads south-southeast out of the wetland analysis area and towards Grass Valley. This drainage feature does not show up on the NWI map within the wetland analysis area; however, it is mapped as a palustrine emergent, persistent, seasonal wetland down gradient of Webfoot, just outside of the wetland analysis area.

No other wetlands or waterways are mapped by the NWI as occurring within the wetland analysis area (Figure 4). None of the intermittent drainages that appear on the USGS quad maps within the wetland analysis area are mapped as wetlands or watercourses by the NWI.

6.1.3 Soils

Figure 3 shows soil types within the wetland analysis area, as mapped by the County soil survey. Table 3 provides a list of soils mapped by the Soil Survey of Sherman County Area (USDA 1988) that occur within the wetland analysis area and overall project area. There are no hydric soils mapped within the wetland analysis area or the greater project area.

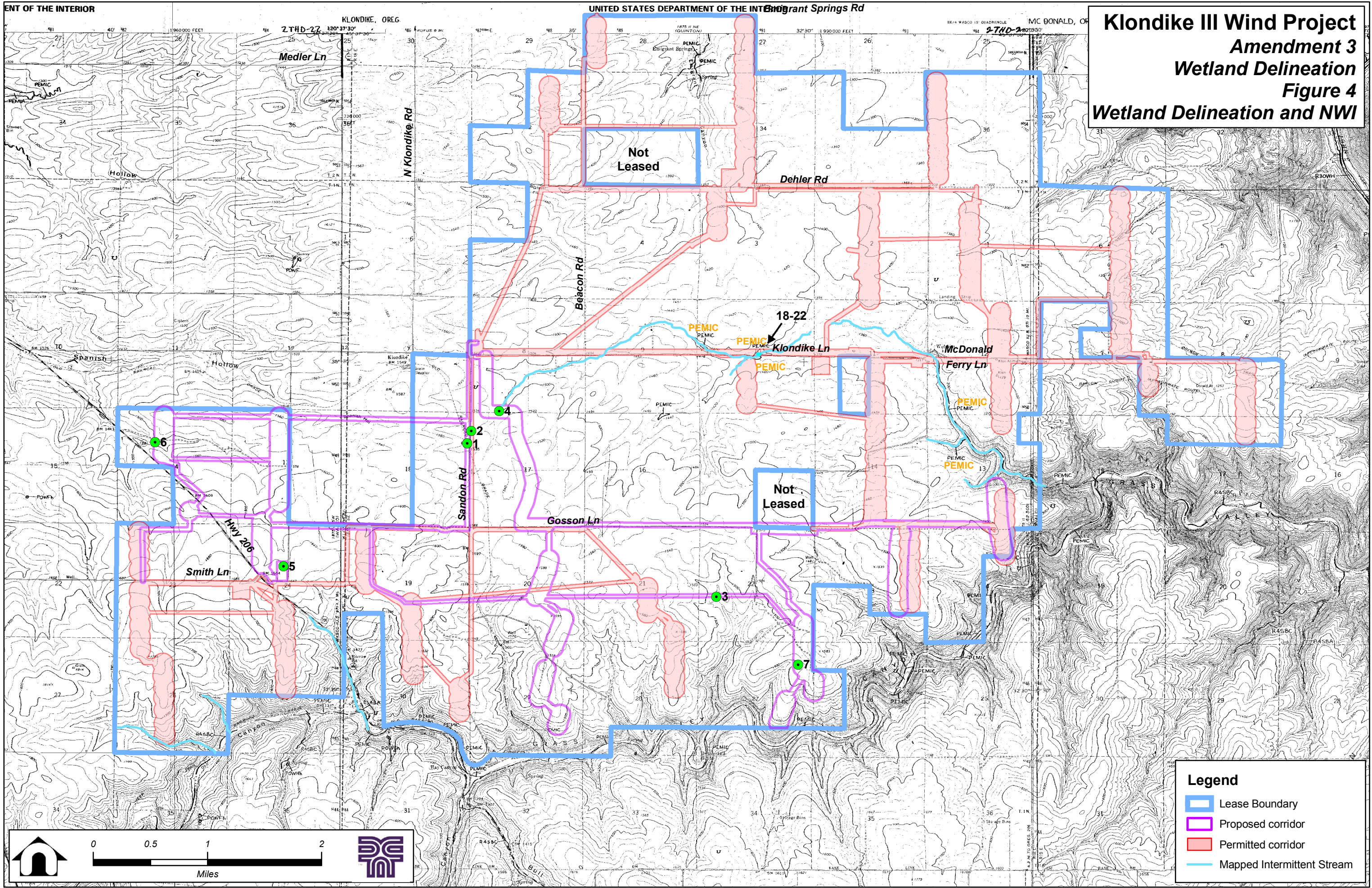
6.2 FIELD RESULTS

Site visits were conducted on May 22 and 23, 2007. Ravine bottoms, depressions, and other areas that could potentially collect water were purposely sampled, as these areas would have the highest probability of containing waters of the state or wetlands. A total of 7 sample plots were conducted (Figure 4). Data forms are contained in Appendix 1; photos of the data plots are contained in Appendix 2.

6.2.1 Vegetation

Four general plant communities were identified within the wetland analysis area. No wetland communities were identified. Plant communities were as follows:


- Cultivated Wheat (*Triticum aestivum*) Community
- CRP Community
- Upland Grass and CRP Community
- Upland Shrub (non-CRP) Community



**Klondike III Wind Project
Amendment 3
Wetland Delineation
Figure 4
Wetland Delineation and NWI**

Legend

- Lease Boundary
- Proposed corridor
- Permitted corridor
- Mapped Intermittent Stream



0

0.5

1

2

Miles




Table 3. Soils mapped by Soil Survey of Sherman County Area that occur within the wetland analysis area.

Soil Series	Hydric Status	Hydric Inclusions
1B - Anderly silt loam, 1 to 7 percent slopes	Non-hydric	None
1C - Anderly silt loam, 7 to 15 percent slopes	Non-hydric	None
2D - Anderly silt loam, 15 to 35 percent south slopes	Non-hydric	None
11A - Endersby fine sandy loam, 0 to 3 percent slopes	Non-hydric	Riverwash
12A - Endersby-Hermiston complex, 0 to 3 percent slopes	Non-hydric	Riverwash
14C - Kuhl very stony very fine sandy loam, 3 to 20 percent slopes	Non-hydric	None
16D - Lickskillet very stony loam, 7 to 40 percent south slopes	Non-hydric	None
17C - Lickskillet-Bakeoven complex, 2 to 20 percent slopes	Non-hydric	None
18C - Lickskillet-Rock outcrop complex, 40 to 70 percent south slopes	Non-hydric	None
19B - Mikkalo silt loam, 2 to 7 percent slopes	Non-hydric	None
19C - Mikkalo silt loam, 7 to 15 percent slopes	Non-hydric	None
21E - Nansene-Rock outcrop complex, 35 to 70 percent north slopes	Non-hydric	None
24B - Ritzville silt loam, 2 to 7 percent slopes	Non-hydric	None
24C - Ritzville silt loam, 7 to 15 percent slopes	Non-hydric	None
27E - Rock outcrop-Rubble land-Lickskillet complex, 50 to 80 percent south slopes	Non-hydric	None
31B - Walla Walla silt loam, 1 to 7 percent slopes	Non-hydric	None
31C - Walla Walla silt loam, 7 to 15 percent slopes	Non-hydric	None
32D - Walla Walla silt loam, 15 to 35 percent north slopes	Non-hydric	None
34B - Wato very fine sandy loam, 3 to 7 percent slopes	Non-hydric	None
34C - Wato very fine sandy loam, 7 to 15 percent slopes	Non-hydric	None

All communities were considered to be non-hydrophytic plant communities. As would be expected, the cultivated wheat community was dominated by cultivated wheat. These areas were considered to fall under the atypical situation category and so the plant community parameter was not factored in when determining wetland status for these areas. Only soils and hydrology were used. Nonetheless, no area containing the cultivated wheat community was delineated as wetland.

6.2.1.1 CRP Community

The CRP community consisted of planted bunch grasses, as well as more weedy species. Sage and rabbitbrush were occasionally found within this community, but not at high enough percentages to be considered dominant species. Table 4 provides a listing of dominant plant species found within the CRP community. This community was considered to be non-hydrophytic.

Table 4. CRP Community

Common Name	Scientific Name	Indicator Status
Intermediate wheatgrass	<i>Agropyron intermedium</i>	NOL
Sandberg bluegrass	<i>Poa secunda</i>	NOL
Bulbous bluegrass	<i>Poa bulbosa</i>	FAC

6.2.1.2 Upland Grass and CRP Community

The upland grass community was primarily found in uncultivated areas. This community was comprised of native and non-native upland species. Table 5 provides a listing of dominant plant species found within the upland grass community. This community was considered to be non-hydrophytic.

Table 5. Upland Grass and CRP Community

Common Name	Scientific Name	Indicator Status
Bulbous bluegrass	<i>Poa bulbosa</i>	FAC
Redstem stork's bill	<i>Erodium cicutarium</i>	NOL
Basin wildrye	<i>Elymus cinereus</i>	FAC
Cheat grass	<i>Bromus tectorum</i>	NOL
Carey's balsamroot	<i>Balsamorhiza careyana</i>	NOL
Dusty maidens	<i>Chaenactis douglassii</i>	NOL
Cultivated wheat	<i>Triticum aestivum</i>	NOL

6.2.1.3 Upland Shrub (Non-CRP) Community

The upland shrub community was identified in a few small patches primarily along the banks of the drainage that runs in close proximity to Klondike Lane. This community was comprised of a mix of native and non-native shrub and herbaceous species. Table 6 provides a listing of dominant plant species found within the upland shrub community. This community was considered to be non-hydrophytic.

Table 6. Upland Shrub (Non-CRP) Community

Common Name	Scientific Name	Indicator Status
Big sagebrush	<i>Artemisia tridentata</i>	NOL
Lupine sp.	<i>Lupinus sp.</i>	UPL
Rubber rabbitbrush	<i>Ericameria nauseosa</i>	NOL
Russian thistle	<i>Salsola kali</i>	UPL
Russian olive	<i>Elaeagnus angustifolia</i>	FAC
Tall tumbled mustard	<i>Sisymbrium altissimum</i>	FACU
Black locust	<i>Robinia pseudoacacia</i>	FACU

Common Name	Scientific Name	Indicator Status
Sandberg bluegrass	<i>Poa secunda</i>	NOL
Bulbous bluegrass	<i>Poa bulbosa</i>	FAC
Cheat grass	<i>Bromus tectorum</i>	NOL
Basin wildrye	<i>Elymus cinereus</i>	FAC
Prickly lettuce	<i>Lactuca serriola</i>	FACU
Cultivated wheat	<i>Triticum aestivum</i>	NOL
Bedstraw	<i>Galium aparine</i>	FAC

6.2.2 Soils

Soils were relatively homogeneous throughout the project site area. The typical soil profile consisted of light brown (10YR 5/4) silt loam from 0 to 16 inches depth, with no primary or secondary indicators of hydric soils present. This profile was observed throughout the project site. These soils have no appearance of having been formed under conditions of saturation, flooding, or ponding long enough to develop anaerobic conditions. These soils were determined to be non-hydric.

6.2.3 Hydrology

In general, field observations of wetland hydrology were absent from the entire wetland analysis area. There was no evidence of primary or secondary indicators. Surface water, the water table, or saturation was not observed. All other drainages mapped on the USGS quadrangle maps that occur within the wetland analysis area have either been plowed through or have no channel.

7 DISCUSSION

7.1 SUMMARY OF FINDINGS

The project site did not have any locations with a prevalence of hydrophytic vegetation, hydric soils, and wetland hydrology. There were no positive indicators of any of these parameters, therefore criteria for jurisdictional wetlands was not satisfied. In general, the wetland analysis area consists almost entirely of areas under agricultural production, with a lesser extent of upland plant communities. There were no wetlands or waterways identified within the wetland analysis area. All drainages mapped on the USGS quadrangle maps that occur within the wetland analysis area have been plowed through and no channel exists. The wetlands mapped by the NWI fell outside of the wetland analysis area.

8 REGULATORY REQUIREMENTS AND IMPLICATIONS

Federal, State and local governmental regulations control activities in and near wetlands and other water bodies. Therefore, the wetland analysis was undertaken to determine the

location and extent of wetlands within the proposed project site (wetland analysis area specifically) that may be regulated. This analysis is intended to facilitate review of project plans by Klondike III and the appropriate regulatory authorities in conjunction with any applicable permit applications.

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APPENDIX 1 - WETLAND DELINEATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Klondike III City/County: Sherman Sampling Date: 5/22/07
 Applicant/Owner: Klondike Wind Power III LLC State: OR Sampling Point: DP1
 Investigator(s): Licia Stragis, Suzanne Pattinson Section, Township, Range: Section 18, T1N, R 18E
 Landform (hillslope, terrace, etc.): plateau Local relief (concave, convex, none): concave Slope (%): 0-3
 Subregion (LRR): B- Columbia /Snake River Plateau Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Walla Walla silt loam NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation x, Soil _____, or Hydrology _____ significantly disturbed? **yes** Are "Normal Circumstances" present? Yes _____ No x
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? **no** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>x</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>x</u>
Hydric Soil Present? Yes _____ No <u>x</u>	
Wetland Hydrology Present? Yes _____ No <u>x</u>	
Remarks: Wheat cultivation	

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
Total Cover: _____				Prevalence Index worksheet: _____ Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
Total Cover: _____				
<u>Herb Stratum</u>				
1. <u>TRAE Triticum aestivum</u>	<u>80</u>	<u>yes</u>	<u>NOL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Total Cover: <u>80</u>				¹ Indicators of hydric soil and wetland hydrology must be present.
<u>Woody Vine Stratum</u>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
Total Cover: _____				Hydrophytic Vegetation Present? Yes _____ No <u>x</u>
% Bare Ground in Herb Stratum <u>20</u> % Cover of Biotic Crust _____				
Remarks:				

SOIL

Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 5/4	100	NA				silt loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No x _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____

Water Table Present? Yes _____ No x Depth (inches): _____

Saturation Present? Yes _____ No x Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No x _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Klondike III City/County: Sherman Sampling Date: 5/22/07
 Applicant/Owner: Klondike Wind Power III LLC State: OR Sampling Point: DP2
 Investigator(s): Licia Stragis, Suzanne Pattinson Section, Township, Range: Section 17, T1N, R 18E
 Landform (hillslope, terrace, etc.): plateau Local relief (concave, convex, none): concave Slope (%): 0-3
 Subregion (LRR): B- Columbia /Snake River Plateau Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Walla Walla silt loam NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation x, Soil _____, or Hydrology _____ significantly disturbed? **yes** Are "Normal Circumstances" present? Yes _____ No x
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? **no** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>x</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>x</u>
Hydric Soil Present?	Yes _____ No <u>x</u>		
Wetland Hydrology Present?	Yes _____ No <u>x</u>		
Remarks: Wheat cultivation			

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)	
4. _____	_____	_____	_____		
Total Cover: _____					
<u>Sapling/Shrub Stratum</u>				Prevalence Index worksheet:	
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____	
2. _____	_____	_____	_____	OBL species _____ x 1 = _____	
3. _____	_____	_____	_____	FACW species _____ x 2 = _____	
4. _____	_____	_____	_____	FAC species _____ x 3 = _____	
5. _____	_____	_____	_____	FACU species _____ x 4 = _____	
Total Cover: _____				UPL species _____ x 5 = _____	
<u>Herb Stratum</u>				Column Totals: _____ (A) _____ (B)	
1. <u>TRAE Triticum aestivum</u>	<u>80</u>	<u>yes</u>	<u>NOL</u>	Prevalence Index = B/A = _____	
2. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
3. _____	_____	_____	_____	___ Dominance Test is >50%	
4. _____	_____	_____	_____	___ Prevalence Index is ≤3.0 ¹	
5. _____	_____	_____	_____	___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
6. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
Total Cover: <u>80</u>					
<u>Woody Vine Stratum</u>				¹ Indicators of hydric soil and wetland hydrology must be present.	
1. _____	_____	_____	_____	Hydrophytic Vegetation Present?	
2. _____	_____	_____	_____	Yes _____ No <u>x</u>	
Total Cover: _____					
% Bare Ground in Herb Stratum <u>20</u> % Cover of Biotic Crust _____					
Remarks:					

SOIL

Sampling Point: DP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 5/4	100	NA				silt loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) (Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____

Water Table Present? Yes _____ No x Depth (inches): _____

Saturation Present? Yes _____ No x Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No x

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Klondike III City/County: Sherman Sampling Date: 5/23/07
 Applicant/Owner: Klondike Wind Power III LLC State: OR Sampling Point: DP3
 Investigator(s): Licia Stragis, Suzanne Pattinson Section, Township, Range: Section 22, T1N, R 18E
 Landform (hillslope, terrace, etc.): plateau Local relief (concave, convex, none): concave Slope (%): 0-5
 Subregion (LRR): B- Columbia /Snake River Plateau Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Walla Walla silt loam or Licksillet –Bakeoven complex NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? no Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? no (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>x</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>x</u>
Hydric Soil Present? Yes _____ No <u>x</u>	
Wetland Hydrology Present? Yes _____ No <u>x</u>	
Remarks: CRP area Photo included	

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>30</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
Total Cover: _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present.
Total Cover: _____				
Herb Stratum				
1. <u>AGIN Agropyron intermedium</u> <u>Intermediate wheatgrass</u> <u>20</u> <u>yes</u> <u>NOL</u>				
2. <u>POBU Bulbous bluegrass</u> <u>Poa bulbosa</u> <u>25</u> <u>yes</u> <u>FAC</u>				
4. <u>POSA Sandberg's bluegrass</u> <u>Poa sanbergii</u> <u>20</u> <u>yes</u> <u>NOL</u>				
3. <u>BACA Carey's balsamroot</u> <u>Balsamorhiza careyana</u> <u>10</u> <u>no</u> <u>NOL</u>				Hydrophytic Vegetation Present? Yes _____ No <u>x</u>
5. <u>ELCI Basin wildrye</u> <u>Elymus cinereus</u> <u>5</u> <u>no</u> <u>FAC</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Total Cover: <u>90</u>				
Woody Vine Stratum				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
Total Cover: _____				
% Bare Ground in Herb Stratum <u>3</u> % Cover of Biotic Crust _____				
Remarks:				

SOIL

Sampling Point: DP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 5/4	100	NA				silt loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5) (**LRR C**)
☐ 1 cm Muck (A9) (**LRR D**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)

☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

☐ 1 cm Muck (A9) (**LRR C**)
☐ 2 cm Muck (A10) (**LRR B**)
☐ Reduced Vertic (F18)
☐ Red Parent Material (TF2)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No x _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1) (**Nonriverine**)
☐ Sediment Deposits (B2) (**Nonriverine**)
☐ Drift Deposits (B3) (**Nonriverine**)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Water-Stained Leaves (B9)

☐ Salt Crust (B11)
☐ Biotic Crust (B12)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Plowed Soils (C6)
☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (**Riverine**)
☐ Sediment Deposits (B2) (**Riverine**)
☐ Drift Deposits (B3) (**Riverine**)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Thin Muck Surface (C7)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____

Water Table Present? Yes _____ No x Depth (inches): _____

Saturation Present? Yes _____ No x Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No x _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Klondike III City/County: Sherman Sampling Date: 5/22/07
 Applicant/Owner: Klondike Wind Power III LLC State: OR Sampling Point: DP4
 Investigator(s): Licia Stragis, Suzanne Pattinson Section, Township, Range: Section 8, T1N, R 18E
 Landform (hillslope, terrace, etc.): plateau Local relief (concave, convex, none): concave Slope (%): 0-3
 Subregion (LRR): B- Columbia /Snake River Plateau Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Walla Walla silt loam NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation x, Soil _____, or Hydrology _____ significantly disturbed? **yes** Are "Normal Circumstances" present? Yes _____ No x
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? **no** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>x</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>x</u>
Hydric Soil Present?	Yes _____ No <u>x</u>		
Wetland Hydrology Present?	Yes _____ No <u>x</u>		
Remarks: Wheat cultivation			

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)	
4. _____	_____	_____	_____		
Total Cover: _____					
Sapling/Shrub Stratum				Prevalence Index worksheet:	
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____	
2. _____	_____	_____	_____	OBL species _____ x 1 = _____	
3. _____	_____	_____	_____	FACW species _____ x 2 = _____	
4. _____	_____	_____	_____	FAC species _____ x 3 = _____	
5. _____	_____	_____	_____	FACU species _____ x 4 = _____	
Total Cover: _____				UPL species _____ x 5 = _____	
Herb Stratum				Column Totals: _____ (A) _____ (B)	
1. <u>TRAE Triticum aestivum</u>	<u>85</u>	<u>yes</u>	<u>NOL</u>	Prevalence Index = B/A = _____	
2. <u>ELCI Basin wildrye</u>	<u>2</u>	<u>no</u>	<u>FAC</u>		
3. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
4. _____	_____	_____	_____	___ Dominance Test is >50%	
5. _____	_____	_____	_____	___ Prevalence Index is ≤3.0 ¹	
6. _____	_____	_____	_____	___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
7. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation ¹ (Explain)	
8. _____	_____	_____	_____		
Total Cover: <u>90</u>					
Woody Vine Stratum				¹ Indicators of hydric soil and wetland hydrology must be present.	
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>x</u>	
2. _____	_____	_____	_____		
Total Cover: _____					
% Bare Ground in Herb Stratum <u>10</u> % Cover of Biotic Crust _____					
Remarks:					

SOIL

Sampling Point: DP4

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
Primary Indicators (any one indicator is sufficient)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Shallow Aquitard (D3)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Klondike III City/County: Sherman Sampling Date: 5/22/07
 Applicant/Owner: Klondike Wind Power III LLC State: OR Sampling Point: DP5
 Investigator(s): Licia Stragis, Suzanne Pattinson Section, Township, Range: Section 24, T1N, R 17E
 Landform (hillslope, terrace, etc.): plateau Local relief (concave, convex, none): concave Slope (%): 0-3
 Subregion (LRR): B- Columbia /Snake River Plateau Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Walla Walla silt loam NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation x, Soil _____, or Hydrology _____ significantly disturbed? **yes** Are "Normal Circumstances" present? Yes _____ No x
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? **no** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>x</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>x</u>
Hydric Soil Present?	Yes _____ No <u>x</u>	
Wetland Hydrology Present?	Yes _____ No <u>x</u>	
Remarks: Wheat cultivation. Photo included.		

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
Total Cover: _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present.
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Total Cover: <u>50</u>				Hydrophytic Vegetation Present? Yes _____ No <u>x</u>
Herb Stratum				
1. <u>TRAE Triticum aestivum</u>	<u>50</u>	<u>yes</u>	<u>NOL</u>	Hydrophytic Vegetation Present? Yes _____ No <u>x</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>x</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>x</u>
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>x</u>
8. _____	_____	_____	_____	
Total Cover: _____				Hydrophytic Vegetation Present? Yes _____ No <u>x</u>
Woody Vine Stratum				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>x</u>
2. _____	_____	_____	_____	
Total Cover: _____				Hydrophytic Vegetation Present? Yes _____ No <u>x</u>
% Bare Ground in Herb Stratum <u>50</u> % Cover of Biotic Crust _____				
Remarks:				

SOIL

Sampling Point: DP5

[illegible]

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Nearby unvegetated depression had drift deposits			

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Klondike III City/County: Sherman Sampling Date: 5/23/07
 Applicant/Owner: Klondike Wind Power III LLC State: OR Sampling Point: DP6
 Investigator(s): Licia Stragis, Suzanne Pattinson Section, Township, Range: Section 14, T1N, R 17E
 Landform (hillslope, terrace, etc.): plateau Local relief (concave, convex, none): concave Slope (%): 3-10
 Subregion (LRR): B- Columbia /Snake River Plateau Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Walla Walla silt loam, Licksillet-Bakeoven Complex NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation x, Soil _____, or Hydrology _____ significantly disturbed? **yes** Are "Normal Circumstances" present? Yes _____ No x
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? **no** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>x</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>x</u>
Hydric Soil Present?	Yes _____ No <u>x</u>		
Wetland Hydrology Present?	Yes _____ No <u>x</u>		
Remarks: Wheat cultivation. Photo included.			

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
Total Cover: _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum				
1. <u>ARTR Artemisia tridentata</u>	<u>5</u>	<u>no</u>	<u>NOL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____	_____	_____	_____	
Total Cover: <u>5</u>				
Herb Stratum				
1. <u>TRAE Triticum aestivum</u>	<u>45</u>	<u>yes</u>	<u>NOL</u>	
2. <u>BRTE Bromus tectorum cheatgrass</u>	<u>5</u>	<u>no</u>	<u>NOL</u>	¹ Indicators of hydric soil and wetland hydrology must be present.
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>x</u>
8. _____	_____	_____	_____	
Total Cover: <u>55</u>				
Woody Vine Stratum				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	Remarks:
Total Cover: _____				
% Bare Ground in Herb Stratum <u>45</u> % Cover of Biotic Crust _____				

SOIL

Sampling Point: DP6

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
Primary Indicators (any one indicator is sufficient)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Shallow Aquitard (D3)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

APPENDIX 2 - DATA PLOT PHOTOS



DP 1 and 2



DP 3



DP 4



DP 5



DP 6



DP 7

EXHIBIT K

LAND USE

OAR 345-021-0010(1)(k)

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APPENDIX

K-1 LAND USE ANALYSIS AREA MAP

K.1 INTRODUCTION AND LAND USE REVIEW PATH

OAR 345-021-0010(1)(k) *Information about the proposed facility’s compliance with the statewide planning goals adopted by the Land Conservation and Development Commission, providing evidence to support a finding by the Council as required by OAR 345-022-0030. The applicant shall state whether the applicant elects to address the Council’s land use standard by obtaining local land use approvals under ORS 469.504(1)(a) or by obtaining a Council determination under ORS 469.504(1)(b). An applicant may elect different processes for an energy facility and a related or supporting facility but may not otherwise combine the two processes. Notwithstanding OAR 345-021-0090(2), once the applicant has made an election, the applicant may not amend the application to make a different election. In this subsection, “affected local government” means a local government that has land use jurisdiction over any part of the proposed site of the facility.*

Response: To issue a site certificate, the Oregon Energy Facility Siting Council (Council) must find that the proposed facility complies with the statewide land use planning goals (Goals) adopted by the Land Conservation and Development Commission (LCDC). The Certificate Holder elected to seek a Council determination of compliance with the Council’s land use standard under ORS 469.504(1)(b) when it sought issuance and was granted a Site Certificate for the original project and First Request for Amendment to the original application. A Second Request for Amendment has been submitted to the Council for approval. The Certificate Holder seeks a similar Council determination for this Third Request for Amendment. Under ORS 469.504(1)(b)(A)-(C), the application complies with the Council’s land use standard if the Council determines that:

- A. *The proposed facility complies with applicable substantive criteria from the affected local government’s acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and in effect on the date the application is submitted, and with any Land Conservation and Development Commission administrative rules and goals and any land use statutes directly applicable to the facility under ORS 197.646(3);*
- B. *For an energy facility or a related or supporting facility that must be evaluated against the applicable substantive criteria pursuant to subsection (5) of this section, that the proposed facility does not comply with one or more of the applicable substantive criteria but does otherwise comply with the applicable statewide planning goals, or that an exception to any applicable statewide planning goal is justified under subsection (2) of this section; or*
- C. *For a facility that the council elects to evaluate against the statewide planning goals pursuant to subsection (5) of this section, that the proposed facility complies with the applicable statewide planning goals or that an exception to any applicable statewide planning goal is justified under subsection (2) of this section.*

Pursuant to ORS 469.504(1)(b)(A) above, this Exhibit K demonstrates that the amended facility complies with the applicable substantive criteria from the Sherman County

(County) acknowledged comprehensive plan and land use ordinances, with applicable LCDC administrative rules and Goals, and with any land use statutes directly applicable to the amended facility. Pursuant to ORS 469.504(1)(b)(B) above, this Exhibit K also demonstrates that an exception to statewide planning Goal 3, agriculture, for purposes of this amendment request, is justified under ORS 469.504(2).

K.2 LAND USE ANALYSIS AREA AND MAP

OAR 345-021-0010(1)(k)(A) *Include a map showing the comprehensive plan designations and land use zones in the analysis area.*

Response: Figure K-1 shows the facility's location, the Sherman County Comprehensive Plan ("SCCP" or "Comprehensive Plan") designations and County land use zone of the facility site, all areas of the site that may be temporarily disturbed during the design, construction or operation of the proposed facility, and property adjacent to the site.

K.3 ENERGY FACILITY AND RELATED OR SUPPORTING FACILITIES

With this Third Amendment Request, the Klondike III Project would be amended to add six turbine corridors with a total of up to 43 turbines within the expanded project boundary. Temporary disturbance from construction would affect approximately 169 acres; permanent impacts would be approximately 24 acres, of which 21 would be in agricultural land. The new turbines will be connected to an expanded underground collector system located near the new private access roads to be constructed within the turbine corridors. The expanded collector system may be connected to the collector system approved in the original ASC.

The project site consists of relatively level privately owned agricultural land, primarily in dry land wheat production. Farming operations will continue directly adjacent to the new turbines and new access roads. The amended project will preclude farming on approximately 21 acres of farmland. The following table shows the loss of agricultural land during the life of the amended project caused by each project component:

Turbines/turbine towers/turbine pads (acres):	<u>2.0</u>
Underground collector lines not in roads (acres):	<u>0</u>
New access roads and upgrades/associated underground collector lines (acres):	<u>18.88</u>
TOTAL acres:	<u>20.88</u>

The amended project components are described in more detail in Section 1.c of the Amendment Request.

K.4 COUNCIL DETERMINATION ON LAND USE

OAR 345-021-0010(1)(k)(C) *If the applicant elects to obtain a Council determination on land use:*

a. *Identify the affected local government(s);*

Response: The amended facility is entirely within the existing Klondike III lease area located solely in Sherman County, which is the affected local government.

b. *Identify the applicable substantive criteria from the affected local government's acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and that are in effect on the date the application is submitted and describe how the proposed facility complies with those criteria;*

Response: The amended facility and all related or supporting facilities will be located within the Exclusive Farm Use (F-1) base zone (EFU zone). See Figure K-1. The Natural Hazards Combining District (Combining District) associated with Grass Canyon extends slightly into an area south of Webfoot. The amended project would not be built on any identified hazard area so the Combining District does not apply. Approximately 2.06 acres of Conservation Reserve Program (CRP) areas will be affected by construction of the project. Impacts within CRP areas are addressed in Exhibit P.

The amended facility complies with the applicable review criteria set forth in the SCCP and in the Sherman County Zoning Ordinance (SCZO or Zoning Ordinance) in the manner described below.

c. *Identify all Land Conservation and Development Commission administrative rules, statewide planning goals and land use statutes directly applicable to the facility under ORS 197.646(3) and describe how the proposed facility complies with those rules, goals and statutes;*

Response: The acknowledged Comprehensive Plan and Zoning Ordinance incorporate all of the LCDC administrative rules, Goals and statutes that are applicable to the project.

d. *If the proposed facility might not comply with all applicable substantive criteria, identify the applicable statewide planning goals and describe how the proposed facility complies with those goals;*

Response: As is described below, the amended project complies with all of the applicable substantive criteria and, thus, this amendment request does not directly apply the statewide planning Goals to the project. At the same time, in the event an exception to Goal 3 is required, this amendment request provides the justification for such an exception.

e. *If the proposed facility might not comply with all applicable substantive criteria or applicable statewide planning goals, describe why an exception to any*

applicable statewide planning goal is justified, providing evidence to support all findings by the Council required under ORS 469.504(2).

Response: The amended project complies with all of the applicable substantive criteria and applicable statewide planning Goals. At the same time, because the turbines and access roads will occupy approximately 21 acres of non-high value farm land, which is more than the 20 acre threshold for requiring an exception to statewide land use Goal 3, it could be argued that an exception to Goal 3 is required. While the Certificate Holder does not concede this point, in the event it is determined that an exception to Goal 3 is required, this amendment request provides justification for such an exception. This Third Request for Amendment provides evidence herein why this amendment justifies construction on non-high value farmland. This evidence is the same evidence that the Council relied on in approving the original project and First Request for Amendment, which were in compliance with the land use standard. It is also the same justification used for the Second Request for Amendment submitted to the Council for review in April 2007.

K.5 ZONING ORDINANCE CRITERIA

1. SCZO Section 3.1.3—Conditional Uses Permitted in County EFU Zone

SCZO Section 3.1.3(e) and (f), respectively, allow commercial utility facilities and transportation improvements to be developed in the EFU zone as conditional uses. Specifically, these sections provide as follows:

2. *Conditional Uses Permitted. In an F-1 zone the following uses are permitted when authorized in accordance with the requirements of Article 5 of this Ordinance and this Section:*

** * **

(e) Operations conducted for the following uses:

** * **

17) Commercial utility facilities.

** * **

(f) Transportation Improvement.

*1) Construction, reconstruction, or widening of highways, roads, bridges or other transportation projects that are (1) not improvements designated in the Transportation System Plan; or (2) not designed and constructed as part of a subdivision or planned development subject to site plan and/or conditional use review. Transportation projects shall comply with the Transportation System Plan and applicable standards, and shall address the following criteria. * * **

A. The project is designed to be compatible with existing land use and social patterns including noise generation, safety, and zoning.

B. The project is designed to minimize unavoidable environmental impacts to identified wetlands, wildlife habitat, air and water quality, cultural resources, and scenic qualities.

C. The project preserves or improves the safety and function of the facility through access management, traffic calming, or other design features.

D. The project includes provision for bicycle and pedestrian circulations as consistent with the comprehensive plan and other requirements of this ordinance.

* * *

Response:

A. Commercial Utility Facilities. With this Third Amendment Request, the Klondike III Project would be amended to add 24.13 acres to the expanded site boundary. The turbines will be connected to an expanded underground collector system located primarily within the proposed turbine corridors. For the same reasons that the Council already determined that the Project and the related and supporting facilities as previously proposed were conditionally permitted by the County as “commercial utility facilities,” the amended project facilities are also conditionally permitted. See ASC, Exhibit K.

B. Transportation Improvements. Zoning Ordinance 3.1.3(f) allows the “construction, reconstruction, or widening of highways, roads, bridges or other transportation projects that are (1) not improvements designated in the Transportation System Plan; or (2) not designated and constructed as part of a subdivision or planned development subject to site plan and/or condition use review” Transportation projects must comply with the Transportation System Plan (TSP) and applicable standards and must address four criteria: (i) the project’s compatibility with existing land use and social patterns including noise generation, safety and zoning; (ii) the project’s design must minimize unavoidable environmental impacts to wetlands, wildlife habitat, air and water quality, cultural resources, and scenic qualities; (iii) the project must preserve or improve the safety and function of the facility through access management, traffic calming, or other design features; and (iv) the inclusion of bicycle and pedestrian circulations as consistent with the Comprehensive Plan and other requirements of the Zoning Ordinance.

The proposed access roads are not improvements designated in the TSP, and are not being constructed as part of a subdivision or planned development. The amended project continues to be compatible with existing land uses and social patterns including with respect to its level of noise generation, its safety and its zoning. This amendment will have no impact to wetlands, water quality, and will have minimal impact to scenic qualities of the area. Non-significant impacts to

wildlife habitats and cultural resources will be mitigated in consultation with ODFW and SHPO, respectively. The construction anticipated by this amendment will use existing public roads to access the construction areas prior to entering the private road system within the proposed turbine corridor areas. Bicycle and pedestrian circulation is not appropriate for the project area roads and, therefore, none is proposed.

2. Provisions Applicable to All Permitted and Conditionally Permitted Uses (All Facility Components)

The SCZO contains provisions that are applicable to all development proposals. The amended Facility complies with these provisions as provided below.

A. SCZO § 3.1.4(c)—Dimensional Standards/Setback Requirements

In an F-1 (EFU) Zone, the minimum setback requirements shall be as follows:

1) The front and rear setbacks from the property line shall be 30 feet, except that the front yard setback from the right-of-way of an arterial or major collector or road shall be 50 feet unless approved otherwise by the Planning Commission.

2) Each side yard setback from a property line shall be a minimum of 25 feet, and for parcels or lots involving a non-farm residential use with side yard(s) adjacent to farm lands, said adjacent side yards shall be a minimum of 50 feet unless approved otherwise by the Planning Commission.

Response: No new lots will be created by the amended facility. Consistent with the Council's prior Final Order and the current Site Certificate, all facility structures will comply with applicable setback requirements set forth in SCZO 3.1.4(c).

B. SCZO § 4.9(1) – Compliance with State and Federal Agency Rules and Regulations

Approval of any use or development proposal pursuant to the provisions of this Ordinance shall require compliance with and consideration of all applicable State and Federal agency rules and regulations.

Response: The Council's rules governing this amendment request are designed to identify all applicable permits, approvals and regulations needed for construction of the amended facility. In particular, the ASC Exhibit E identifies all of the federal, state and local permits and approvals needed to construct the facility. ASC Exhibit E provides evidence demonstrating that the construction and operation of the facility will comply with all state and local statutes, rules and standards applicable to the permit. ASC Exhibit E also provides evidence that for

federal permits, the relevant federal agencies have received or will receive the information needed to allow the facility to comply with all applicable federal rules and regulations. This amendment request does not trigger any additional permitting or approval process not already described in the ASC Exhibit E. Note that as described in Exhibit I, Attachment 3, the Certificate Holder is pursuing an amended 1200-C permit.

C. SCZO § 4.13 Additional Conditions to Development Proposals

The County may require additional conditions for development proposals

1) The proposed use shall not reduce the level of service (LOS) below a D rating for the public transportation system. For developments that are likely to generate more than a V/C ratio of .75 or greater, the applicant shall provide adequate information, such as a traffic impact study or traffic counts, to demonstrate the level of impact to the surrounding road system. The developer shall be required to mitigate impacts attributable to the project.

2) The determination of the scope, area, and content of the traffic impact study shall be coordinated with the provider of the affected transportation facility, i.e., city, county, state.

3) Dedication of land for roads, transit facilities, sidewalks, bikeways, paths or accessways shall be required where necessary to mitigate the impacts to the existing transportation system caused by the proposed use.

4) Construction of improvements such as paving, curbing, installation or contribution to traffic signals, construction of sidewalks, bikeways, accessways, paths or roads that serve the proposed use where necessary to mitigate the impacts to the existing transportation system caused by the proposed use.

Response: The Certificate Holder will comply with all conditions of approval imposed by the Council should the Council approve this amendment request. Klondike III addresses the transportation and access provisions under the applicable review criteria set forth below. The amended project will not reduce the level of service for public transportation below a D rating, or generate a volume-to-capacity (V/C) ratio of .75 or greater. Improvements to existing roads required for construction of the facility will improve the existing condition of the public road system over what currently exists within the expanded project boundary. This amendment does not propose to dedicate any land for transportation facilities, nor for any road mitigation improvements other than the reconstruction of existing roads proposed in the original application.

D. SCZO § 11.1 Design & Improvement Standards and Requirements, Compliance Required

Any land division or development and the improvements required, whether by subdivision, partitioning, creation of a street or other right of way, zoning

approval, or other land development requiring approval pursuant to the provisions of this Ordinance, shall be in compliance with the design and improvement standards and requirements set forth in this Article, in any other applicable provisions of this Ordinance, in any other provisions of any other applicable County or affected City ordinance, and in any applicable provision of State statutes or administrative rules.

Response: The Council's rules governing the amendment process are designed to identify all applicable design and improvement standards, permits, approvals, and regulations needed for construction of the amended facility. In particular, ASC Exhibit E identifies all of the federal, state, and local permits and approvals needed to construct the facility, and elsewhere in this Exhibit K all of the applicable County design standards are identified. No land division, subdivision, or partition approval or creation of a public street is required in order to site the amended project. For the reasons described in this Exhibit K and elsewhere in this amendment request, the amended facility complies with this provision.

E. SCZO § 11.2 Design & Improvement Standards and Requirements, Zoning or Other Land Development Permit or Approval

Prior to the construction, alteration, reconstruction, expansion or change of use of any structure, lot or parcel for which a permit or other land development approval is required by this Ordinance, a permit or approval shall be obtained from the County or the designated official.

Response: The Council has exclusive jurisdiction to issue site certificates for energy facilities that are under its jurisdiction, such as the proposed facility. Klondike III elected to seek a Council determination of compliance with the Council's land use standard for purposes of the original ASC and for purposes of this amendment request. This Exhibit K demonstrates compliance with that standard for this amendment request. Upon the Council's approval of an amended Site Certificate for the facility and prior to any development activities authorized by the amendment, the Council will direct the County to issue all necessary land use permits approved by the Council. See ORS 469.401(3). No construction, alteration, reconstruction, expansion or change of use of any structure, lot or parcel as authorized by an Amended Site Certificate will occur until the County issues the required permits.

3. SCZO Section 5.2 General Conditional Use Provisions (Energy Facility, Access Roads, and Associated Equipment)

In determining whether or not a Conditional Use proposal shall be approved or denied, it shall be determined that the following criteria are either met or can be met through compliance with specific conditions of approval.

1) The proposal is compatible with the applicable provisions of the County Comprehensive Plan and applicable Policies.

2) The proposal is in compliance with the requirements set forth by the applicable primary zone, by any other applicable combining zone, and other provisions of this Ordinance that are determined applicable to the subject use.

3) That, for a proposal requiring approval or permits from other local, state and/or federal agencies, evidence of such approval or permit compliance is established or can be assured prior to final approval.

4) The proposal is in compliance with specific standards, conditions and limitations set forth for the subject use in this Article and other specific relative standards required by this or other County Ordinance.

5) That no approval be granted for any use which is or expected to be found to exceed resource or public facility carrying capacities, or for any use which is found to not be in compliance with air, water, land, and solid waste or noise pollution standards.

6) That no approval be granted for any use violation of this Ordinance.

Response: Each criterion is addressed separately below.

K.6 COMPLIANCE WITH APPLICABLE COMPREHENSIVE PLAN PROVISIONS

1. SCZO § 5.2.1. Compliance with Applicable Comprehensive-Plan Goals and Policies

The proposal is compatible with the applicable provisions of the County Comprehensive Plan and applicable policies.

Response: The amended facility complies with all relevant provisions of the Comprehensive Plan as set forth below.

A. SCCP § VIII Planning Process and Citizen Involvement

Finding I. This Plan was drafted to conform with the State-wide planning goals relating to citizen involvement (goal 1) and land use planning (goal 2).

Response: The Council's process for considering and approving a request to amend a site certificate provides significant opportunity for citizen involvement that complies with statewide Goals 1 and 2.

Goal II. To provide the opportunity for all citizens and effected [sic] agencies to participate in the planning process.

Policy I. All land use planning meetings shall be advertised in a general circulation newspaper and be open to the public.

Policy II. All effected [sic] agencies and effected [sic] landowners shall be notified by written notice of any proposed site specific land use change.

Response: Because the Certificate Holder has elected to seek a Council determination of compliance with the land use standard for purposes of this amendment request, the Council's procedures (rather than the County's specific procedures at SCZO § 5.6) will apply to the land use determination. The Council's process includes opportunities for interested persons and governmental agencies to comment on the amendment request.

B. SCCP § XI Physical Characteristics

Goal V. Improve or maintain the existing quality of the physical environment within the County.

Policy I. The County Court recognizes the Policy Advisory Committee and the Agricultural Sub-Committee recommendations for a state-wide non-point source pollution control program as the appropriate implementation technique to achieve the intent of Public Law 95.217.

Policy II. Erosion control provisions shall be incorporated into the subdivision ordinance. These shall require that the best practical methods be used to control erosion from road and building construction sites as well as other changes in land use which may degrade the quality of the land, air and water.

Response: The amended facility will maintain the existing quality of the physical environment within the County. Construction of the amended facility will not create a pollution source. The majority of the amended project site consists of agricultural fields where bare soils are often exposed to wind and water. The amended project will not significantly increase the amount of exposed soils in the project area. See ASC Exhibit I; Exhibit I, Attachment 3.

Temporary impacts to land within the project area will occur with the creation of the staging areas, excavation for the turbine pads, and excavation for the underground collector lines. To minimize soil exposure during installation of the collector lines, the Council has already imposed conditions on the Certificate Holder, and those conditions are equally applicable to the additional site boundary area requested in the Third Request for Amendment. See Exhibit I, Attachment 3.

The four new proposed 250-foot by 250-foot laydown areas will involve stripping and temporarily stockpiling topsoil before placing gravel on the laydown area. Construction of the amended facility will be conducted pursuant to a NPDES General Construction Stormwater (1200-C) Permit issued by the DEQ. The NPDES permit will require the use of best management practices to minimize the potential for erosion.

As with the currently authorized project, best management practices will be used to minimize the impacts of wind erosion to the expanded area. In actively farmed areas, the wheat crop will protect the stockpiles from wind erosion. In other areas, hay bales or other similar containment features will be used during construction of the project. As needed, water from water trucks will be sprayed on disturbed areas to keep wind borne erosion losses to a minimum. After the need for the staging areas end, the staging areas will be brought back to their original contours, topsoil will be spread in these areas, and they will be revegetated or prepared for planting of wheat or barley, or for use as range land.

Impacts associated with washdown are discussed in ASC Exhibit V and are addressed in existing conditions. No additional impacts are anticipated from this Third Request to Amend the Site Certificate.

Goal VI. To protect life and property from natural disasters and hazards.

Response: The amended project site involves no designated hazard areas.

Goal VII. Provide for the rational development and conservation of the aggregate resources within the County.

Response: No known aggregate resource sites are located within or immediately adjacent to the amended project site.

Goal VIII. To provide a detailed investigation of the County's groundwater resources.

Response: Construction will require some groundwater from existing sources for concrete mixing, equipment washdown, and dust control. During operations, an exempt well may be used to provide water to the amended project area. No permanent impact to groundwater resources will occur.

Goal IX. To maintain the multiple use management concept on Bureau of Land Management Lands within Sherman County.

Response: The amended project site does not include any BLM lands.

Goal X. Preserve the integrity of the Sherman County Landscape.

Policy I. Trees should be considered an important feature of the landscape and therefore the County Court shall encourage the retention of this resource when practical.

Response: The amended facility site, including the expanded site boundary area, occurs in a largely treeless landscape. The facility changes proposed in this Amendment 3 are not expected to impact trees. Upland trees were located near Emigrant Springs, Webfoot, and scattered residences throughout the study area,

but do not exist within the footprint of the amended project. See Exhibit P, Attachment 3.

Goal XI. To maintain all species of fish and wildlife at optimum levels and prevent the serious depletion of any indigenous species.

Policy I. Fish and Wildlife management policies should be implemented to enhance the public enjoyment of wildlife and fish in a manner that is compatible with the primary uses of the lands and waters.

Response: The Energy Facility Siting process requires the Certificate Holder to consider and comply with the ODFW Fish and Wildlife Habitat Mitigation Policy as set forth in OAR 635-415-0000 through -0025 in seeking this amendment. As part of the process, the Certificate identified and categorized all fish and wildlife habitats within the habitat analysis area for the expanded analysis area. The additional site boundary area requested in this Third Request for Amendment is primarily within Category 6 habitat. However, 3.25 acres of category 2, 3 and 4 habitats will be permanently impacted by the expansion. These impacts will be mitigated in accordance with ODFW habitat mitigation policies, as described in Exhibit P, Attachment 3.

Moreover, based on field reviews and the fish and wildlife habitat analysis, there are no anticipated impacts to threatened and endangered species from the construction, operation, and retirement of the amended project as described in Exhibit P (Fish and Wildlife Habitat) and Exhibit Q (Threatened and Endangered Species), Attachment 3.

Policy III. Fence rows, ditch banks and brush patches should be considered for retention of wildlife use.

Response: No fence rows, ditch banks or brush patches would be affected by the amended project as the amended project site is primarily in large-scale wheat crop production.

Policy IV. The existing habitat plantings and water developments constructed for wildlife use shall be maintained by the Oregon Department of Fish and Wildlife. Additional planting and guzzler developments will be encouraged. Long-term agreements between landowners and the Department of Fish and Wildlife for the maintenance of such sites shall be encouraged.

Policy V. The County Extension agent shall encourage the use of pesticides, which have a low toxicity to wildlife, fish and people.

Response: As described in Exhibit P, Attachment 3, the expanded site boundary area will include approximately 2.06 acres of CRP-designated land. Mitigation for impacts to these areas is described in Exhibit P, Attachment 3, which will reduce the impact the amended project will have on wildlife populations.

Goal XII. Provide for the rational use of all resources within the designated Deschutes and John Day Oregon State Scenic Waterways.

Response: ASC Exhibit T evaluates impacts to recreation resources. The amended project site is not located in or near either the Deschutes or John Day scenic waterway. Primary traffic routes for construction will continue to originate near the I-84/US 97 Biggs Junction. Increased construction traffic would likely result in short-term traffic delays on these roads, particularly on hill climbs on US 97, but would not be detrimental to recreational opportunities near the Deschutes or the John Day scenic waterway. Long-term detrimental impacts (i.e., increased traffic as a result of operation) are not anticipated, and the expanded site boundary should not affect the prior traffic analysis in any manner.

Goal XIII. Attempt to maintain the diversity of plan[t] and animal species within the County.

Policy I. The following sites or areas shall be considered as critical habitat, unique vegetative and/or natural areas: Department of Fish and Wildlife plantings and guzzlers; and areas containing plant species listed on either the Provisional List of Endangered or Threatened Plant Species or the listing of Endangered and Threatened Plant Species in the United States.

*Policy II. The County Court shall encourage the preservation of these critical habitats, unique vegetative and/or natural areas. Landowners will be encouraged to provide long term protection to these areas. * * *.*

Response: As described in Exhibit P and Q of Attachment 3 of this Third Request for Amendment, the amended facility is not expected to affect any listed endangered or threatened species or adversely affect fish and wildlife species or habitat. As described in Exhibit Q, Attachment 3, there are no direct project-related impacts to any federal or state listed species, and there is no habitat in the amended project area to support such species.

C. SCCP § XII Social Characteristics

Goal XIV. To improve or maintain the current level of social services available within the County and to assure the provision of public facilities consistent with the intensity of land use.

Policy I. The County Court shall encourage the location of industries, businesses and commercial service agricultural developments within the County consistent with the desired population growth and other goals and policies herein contained.

* * *

Policy XIX. The continuing loss of economic opportunities for residents of the County is of great concern to the citizenry. The reduction of need for agricultural based jobs due to improved farming technology and practices, the inability to keep families employed or offer employment opportunities to attract new citizens or the children of existing residents results in a stagnant or declining population. It is therefore a matter of great urgency that the County Court make every effort to streamline its land use approval and amendment process. It is likewise a matter of great urgency that the Court give increased consideration to land use applications which will increase economic diversity and employment opportunities. This increased consideration shall not be made to the detriment of existing residential structures. This consideration should focus on long term job creation and should not be used as a means to allow residential and commercial uses to locate outside urban growth and rural service center (communities) boundaries.

Response: The project change proposed in this Third Request for Amendment will increase the number of permanent employees by two to five compared with the currently approved project. The amended project should have no effect on the prior ASC Exhibit U or First Request for Amendment analysis.

[Goal XIV] Policy IV. The County will support and assist efforts to secure adequate hospital or emergency clinic facilities to serve the needs of the local residents.

* * *

Policy VI. The County Court shall continue to cooperate with the school districts within the County to assure the provision of educational facilities in an efficient manner consistent with the demands of the Sherman County populace.

* * *

Policy VIII. Sanitary landfills shall continue to be provided for the use of the County citizenry. The County will continue to provide the leadership in the location and development of such sites.

Response: The amended facility will not have any adverse impacts on the availability of social services, such as hospital or emergency service facilities, educational facilities or sanitary landfills. The proposed expansion of the facility site boundary should not affect the prior analysis in any meaningful way.

[Goal XIV] Policy X. The County road system shall be maintained and improved consistent with the needs of the Sherman County citizenry.

Policy XII. The construction of new public roads and highways shall be located whenever possible to avoid dividing existing farming units.

Response: No new public roads or highways will be constructed as part of the amended project. The design for the private access road to the proposed turbine location has been developed by the Certificate Holder. Existing roads that will be used to access the project location have already been approved under the Site Certificate and approval for the First Request for Amendment. There are no additional effects to the public road system as a result of the Third Request for Amendment.

[Goal XIV] Policy XX. Transportation Planning Policies (Ord No. 21-05-2003

A. The Transportation System Plan and Land Use Review Policies.

- 2. All development proposals, plan amendments, or zone changes shall conform with the adopted Transportation System Plan.*
- 3. Operation, maintenance, repair, and preservation of existing transportation facilities shall be allowed without land use review, except where specifically regulated.*

** * **

Response: No new public roads are proposed with this amendment request and, thus, no roads that would not conform to the County's Transportation System Plan. The currently approved project, absent this amendment, will result in upgrades to existing public and private roads, which either meet or exceed the road classification standards for the roads that have a classification. This outcome is unchanged by the amendment request.

B. Local-State Coordination Policies

- 2. The County shall provide notice to ODOT of land use applications and development permits for properties that have direct frontage or direct access onto a state highway. Information that should be conveyed to reviewers includes project location, proposed land use action, and location of project access points.*

** * **

C. Protection of Transportation Facilities Policies

** * **

- 2. The County shall include a consideration of a proposal's impact on existing or planned transportation facilities in all land use decisions.*

3. *The County shall protect the function of existing or planned roadways or roadway corridors through the application of appropriate land use regulations.*

Response: All ground disturbing activities associated with this amendment will be conducted in compliance with the amended project's erosion control plan as part of the facility's NPDES Construction Stormwater (1200-C) Permit. The erosion control plan includes "best management practices" for erosion control during and after construction, and permanent drainage and erosion control facilities as necessary to allow stormwater passage without damage to local roads or to adjacent areas and without increasing sedimentation to any intermittent streams in the vicinity of the project. See Exhibit I, Attachment 3 of this Third Request for Amendment.

Constructing the access roads will require sand and gravel. The Certificate Holder will contract with one or more construction companies to construct the new access roads. The construction contractor will be responsible for locating and providing aggregate for construction.

Goal XV. To protect historical, cultural and archeological resources from encroachment by incompatible land uses and vandalism.

Policy I. The following areas and structures shall be considered historically, archaeologically or culturally significant: all archeological sites; the Sherman County Courthouse; portions of the Old Oregon Trail which are visible and pass over rangeland; and the old Union Pacific Railroad bed through DeMoss Park.

Policy II. The County Court shall encourage the preservation of these archaeologically or culturally significant areas. Landowners will be encouraged to provide long term protection to these areas.

Response: Exhibit S, Attachment 3 sets forth the results of the cultural resources survey conducted for the expanded project area. Based on the survey and the amended project developments, the Certificate Holder will avoid any newly identified sites. Therefore, the Certificate Holder is proposing no additional impact and no additional mitigation measures. The survey results and approach satisfies the applicable Goal and Policy requirements as well.

D. SCCP § XIII Housing

Goal XVI. To encourage the provision of sound affordable housing units for the citizenry of the County.

Response: As described in ASC Exhibit U and previous amendment requests, the facility is not expected to affect long-term housing availability in the County. The amended facility will employ two to five more workers than the currently permitted facility; however, the impact to housing availability would be minor.

E. SCCP § XIV Economics

Goal XVII. Diversify the economic base of the County and maintain the viability of the agricultural sector.

** * **

Policy II. Appropriate provisions shall be incorporated into the zoning, subdivision and other necessary ordinances to assure conservation and retention of agricultural lands in agricultural uses. At a minimum, agricultural lands shall be zoned as exclusive farm use and taxed accordingly.

Response: The amended project will improve upon the previous analyses for the ASC and subsequent amendments because it will provide additional income to the landowners where the turbines are located as well as provide revenue for Sherman County from additional taxes paid by the Certificate Holder. This will help preserve agricultural land by providing additional income for local farmers, and because the project allows farming activities to occur adjacent to the project, it provides an additional benefit for landowners that would not otherwise be earned if the amended project were not to occur. Allowing the development of the amended project is consistent with the purposes of the EFU zone, which allows for the development of commercial utility facilities as a conditional use. The minimal loss of farm income based on the limited amount of land that the amended project proposes to withdraw from farm production will be more than offset by revenue to local farmers from wind turbine leases. The analyses used in the ASC Exhibit K and subsequent amendment requests are also applicable to the proposed amended facility.

F. SCCP § XV Energy

Goal XVIII. Conserve energy resources.

Policy I. Cooperate with public agencies and private individuals in the use and development of renewable resources.

Policy III. New high voltage electrical transmission lines with nominal voltage in excess of 230 kV and gas transmission line shall be constructed within or adjacent to the existing electrical and gas transmission line right-of-way, respectively. Upon approval of the County Court, the General Standards for Issuance of Site Certificates, Energy Facility Siting Council (OAR 345-80-010 through OAR 345-80-051) may be utilized for proposals deviating from the existing rights-of-way will be considered a plan amendment and subject to the approval of the Sherman County Court.

Response: The amended project is a renewable wind resource project. The County has recognized that it has “solar and wind resources which have not been utilized since

widespread use of electricity was introduced.” Comprehensive Plan § XV Finding III. This amendment request represents a further opportunity to develop these resources.

Wind power is a clean and renewable source of energy. Wind facilities do not emit greenhouse gases or particulates, do not produce hazardous wastes, and do not deplete other natural resources. The construction of the amended project represents an implementation of Policy I.

This amendment request does not propose a high voltage electrical transmission line as that term is defined at ORS 469.300(11)(a)(C).

G. SCCP § XVI Land Use

Goal XIX. To provide an orderly and efficient use of the lands within Sherman County.

* * *

Policy IV. Commercial businesses, except those related to agricultural uses, should be located within the incorporated cities or within areas served by the Biggs or Kent special service districts.

Response: The County’s EFU zone expressly permits the amended project as a conditional use. The amended project is locationally dependent and, accordingly, cannot be located within any of the area’s incorporated cities. Furthermore, the amended facility will not have a large impact on services in the County. Its co-location and compatibility with existing and ongoing agricultural activities provides an example of orderly and efficient land use.

H. Section XVII Comprehensive Land Use Plan Map

Cropland. Cropland is the “prime agricultural” lands within the County. Lands so designated shall be preserved for exclusive farm use. All uses, which are not directly or indirectly related to farm use shall be limited to those, which provide public service and could not be provided for within other lands.

Response: As noted above, the County’s EFU zone expressly permits the amended project as a conditional use in the EFU zone. The amended facility is dependent on optimal wind resources and proximity to transmission facilities. Accordingly, it cannot be located within any of the nearby cities. The amended project will be co-located and compatible with existing and ongoing agricultural activities and other wind energy generating facilities.

K.7 COMPLIANCE WITH ADDITIONAL ZONING ORDINANCE PROVISIONS

1. SCZO § 5.2.2 Compliance with Applicable Zoning Ordinance Provisions

The proposal is in compliance with the requirements set forth by the applicable primary zone, by any other applicable combining zone, and other provisions of this Ordinance that are determined applicable to the subject use.

Response: The following criteria are applicable to the facility as described below.

A. SCZO § 3.1.3(f)(1)—Transportation Standards (Access Roads)

*1) Construction, reconstruction, or widening of highways, roads, bridges or other transportation projects that are (1) not improvements designated in the Transportation System Plan; or (2) not designed and constructed as part of a subdivision or planned development subject to site plan and/or conditional use review. Transportation projects shall comply with the Transportation System Plan and applicable standards, and shall address the following criteria. * * **

a. The project is designed to be compatible with existing land use and social patterns including noise generation, safety, and zoning.

Response: The amendment request proposes to construct private access roads within the proposed turbine corridors that connect to the public road system and staging areas. The proposed private access roads are a conditionally permitted use in the EFU zone and will be compatible with the existing agricultural uses in the project area. Private access roads will be 20 feet wide. During construction, an additional 10 feet on either side of the 20-foot road section will be temporarily disturbed in order to construct the private access roads, but will be returned to prior condition upon completion of road construction. To the extent reasonably possible, these roads will be located adjacent to the turbine strings to minimize the road's length. The private access roads will not increase traffic in the area because they will terminate at the end of the turbine strings. The analysis in the ASC Exhibit K is equally applicable for the amended facility and construction of the access roads.

b. The project is designed to minimize unavoidable environmental impacts to identified wetlands, wildlife habitat, air and water quality, cultural resources, and scenic qualities.

Response: As described in Exhibit P, Attachment 3 of the Third Request for Amendment, construction of the proposed private access roads will affect approximately 2.06 acres of CRP land. Impacts to wildlife will be minimized to the greatest extent practicable and in the mitigation measures described in Exhibit P of this Third Request for Amendment, which are proposed to offset unavoidable impacts. Based on the wetland assessment, no impacts to wetlands and other waters of the State or waters of the United States are anticipated as a result of the amended project. As demonstrated in Exhibit Q, Attachment 3, there is no suitable habitat for federal or state listed species. An updated cultural resource survey was conducted, and results are described in Exhibit S, Attachment 3. There will be no substantial adverse impacts on air quality from the construction or

operation of the amended project. The construction activities for the amended project will create dust but this would not be significant in a rural area where farming also creates dust. Standard best management practices to control dust and wind erosion will be used, such as spraying areas of the site with water periodically. See Exhibit I, Attachment 3.

c. The project preserves or improves the safety and function of the facility through access management, traffic calming, or other design features.

Response: Several local roadways will be improved or completely reconstructed to accommodate project construction vehicles as part of the original Site Certificate, and the amendment request does not alter the planned improvements. Many of the existing local roads are in poor condition, so the planned improvements to existing roads will have a long-term beneficial effect for all of those who use these roads. There is little traffic on roads in the area, so access management, traffic calming or other such features designed to reduce traffic conflicts are not necessary.

d. The project includes provision for bicycle and pedestrian circulations as consistent with the comprehensive plan and other requirements of this ordinance.

Response: No bicycle or pedestrian facilities are required by the County to permit the amended project and none are appropriate for the project area. The access roads will be located in a rural agricultural area where pedestrian and bicycle facilities are not appropriate, safe, or required by the County's ordinances or plans.

B. SCZO § 4.13 Additional Conditions to Development Proposals (Access Roads)

The County may require additional conditions for development proposals.

1) The proposed use shall not reduce the level of service (LOS) below a D rating for the public transportation system. For developments that are likely to generate more than a V/C ratio of 75 or greater, the applicant shall provide adequate information, such as a traffic impact study or traffic counts, to demonstrate the level of impact to the surrounding road system. The developer shall be required to mitigate impacts attributable to the project.

2) The determination of the scope, area, and content of the traffic impact study shall be coordinated with the provider of the affected transportation facility, i.e., city, county, state.

3) Dedication of land for roads, transit facilities, sidewalks, bikeways, paths or accessways shall be required where necessary to mitigate the impacts to the existing transportation system caused by the proposed use.

4) Construction of improvements such as paving, curbing, installation or contribution to traffic signals, construction of sidewalks, bikeways, accessways,

paths or roads that serve the proposed use where necessary to mitigate the impacts to the existing transportation system caused by the proposed use.

Response: The Certificate Holder will comply with all conditions of approval necessary to achieve compliance with the Zoning Ordinance and the Council's land use standard for purposes of this amendment request. Once completed, the amended project will not generate a significant number of trips. Traffic levels on area roads are low and will not increase beyond the network capacity with the addition of amended project traffic. Thus, the amended project will not reduce the LOS in the area, will not generate V/C ratios of .75 or greater, and will not require the dedication of land for transportation facilities or the construction of mitigation improvements. According to the County, no traffic analysis was required due to the small expected impact on the transportation system of the original ASC, and this conclusion does not change with the changes requested in the Third Request for Amendment of the Site Certificate.

C. SCZO § 4.14 Access Management (Access Roads)

Response: The access management provisions of the Zoning Ordinance do not apply to the amended project.

D. SCZO § 11.8 Design & Improvement Standards and Requirements, Streets and Other Public Facilities (Access Roads)

Response: The Council's rules governing the application are designed to identify all applicable design and improvement standards, permits, approvals and regulations needed for construction of the facility. ASC Exhibit E identifies all of the federal, state and local permits and approvals needed to construct the facility, and elsewhere in this Exhibit K all of the applicable County design standards are identified. No land division, subdivision or partition approval, or zone change is required in order to site the amended project. For the reasons described in this Exhibit K and in the application, the amended facility complies with this provision.

E. SCZO § 5.2.3 Other Permits

That, for a proposal requiring approval or permits from other local, state and/or federal agencies, evidence of such approval or permit compliance is established or can be assured prior to final approval.

Response: The Council's rules governing the application are designed to identify all applicable permits, approvals and regulations needed for construction of the facility. In particular, ASC Exhibit E identifies all of the federal, state and local permits and approvals needed to construct the project. ASC Exhibit E also provides evidence that for federal permits, approvals and regulations, the responsible agency has received that permit information. The amendment request does not result in additional permits not already described in ASC Exhibit E. Note that as described in Exhibit I, Attachment 3, the Certificate Holder is pursuing an amended 1200-C permit.

The Certificate Holder will send the following required notice to the FAA:

Federal Aviation Administration Notice. Prior to beginning construction of the project, the Certificate Holder will send the FAA a Notice of Proposed Construction or Alteration to the FAA with the proposed relocation of the turbine and related or supporting facilities.

The Certificate Holder is likely to receive the following state and local approvals for construction of the amended project:

Oregon Department of Environmental Quality. The Certificate Holder will apply for an amended NPDES General Construction Stormwater (1200-C) Permit before beginning construction under the amendment that is not already authorized by the current Site Certificate and the existing 1200-C Permit.

F. SCZO § 5.2.3 Compliance with Specific Standards

The proposal is in compliance with specific standards, conditions and limitations set forth for the subject use in this Article and other specific relative standards required by this or other County Ordinance.

Response: The facility complies with this criterion as described below.

2. SCZO § 5.8(14)—Specific Requirements for Nonfarm Uses in F-1 Zone, Public Facilities and Services (Energy Facility, Access Roads)

- (a) Public facilities including, but not limited to, utility substations, * * * electrical generation and transmission devices * * * shall be located so as to best serve the County or area with minimum impact on neighborhoods, and with consideration for natural or aesthetic values.*
- (b) Structures shall be designed to be as unobtrusive as possible. Wherever feasible, all utility components shall be placed underground.*
- (c) Public facilities and services proposed within a wetland or riparian area shall provide findings that: Such location is required and a public need exists; and Dredge, fill and adverse impacts are avoided or minimized.*

Response: No public facilities or services, and no project elements proposed in this Third Request for Amendment will be located within a wetland or riparian area.

3. SCZO § 5.8(16)—Specific Requirements for Nonfarm Uses in F-1 Zone, Nonfarm Uses (Energy Facility, Access Roads and associated construction areas)

*Nonfarm uses * * * may be approved upon a findings [sic] that each such use:*

- (a) Is compatible with farm uses described in ORS 215.203(2);*

Response: SCZO section 5.8(16) provides criteria for conditional uses.

As previously noted, the amended facility is consistent with the purposes of the EFU zone, which allows for the development of commercial utility facilities as a conditional use.

Based on interviews with the farm owners and operators of parcels directly impacted by the project, the project would not be incompatible with farm uses. A technical memorandum included as ASC Appendix K-1 identifies adjacent agricultural crops, practices, impacts and mitigation measures. The current farm use is dry land wheat and barley farming. The expanded boundary and the additional impacts mostly involve the same owners and operators, and the prior findings are directly applicable to the expanded boundary and additional impact. The amended project adds a maximum of 20.88 acres of permanent impact to agricultural lands currently used to grow dry land wheat. Farmers will be compensated for loss of crops from any temporary impacts from construction.

The amended project is compatible with the farm uses of the property just as the project as currently authorized is compatible due to the small amount of land being permanently disturbed and the mitigation measures taken by the Certificate Holder.

(b) Does not interfere seriously with accepted farming practices on adjacent lands devoted to farm use;

Response: Adjacent EFU lands contain primarily dry land wheat and barley crop farming. The amended project will not seriously interfere with accepted farming practices on adjacent lands. “Accepted farming practices” is defined at ORS 215.203(2)(c) as “a mode of operation that is common to farms of a similar nature, necessary for the operation of such farms to obtain a profit in money, and customarily utilized in conjunction with farm use.” Farm practices for farming wheat and barley in the area are described in the technical memorandum at ASC Appendix K-1. For the same reasons that the Council determined the original project did not interfere seriously with accepted farming practices on adjacent lands devoted to farm use, the Council can make this same determination for the expanded areas. See ASC Exhibit K.

(c) Does not materially alter the overall land use pattern of the area;

Response: The overall land use pattern of the area consists of wheat or barley crops and CRP areas. The analysis area for the amended project is described above. Beyond the analysis area, and except for incorporated towns and rural nodes, the topography consists of similar rolling hills and drainages with wheat farming as the main use, and was previously analyzed as part of the ASC. There are no non-farm dwellings in the expanded area, thus the amended project will not materially alter the overall land use pattern in the area. The project will require approximately 20 acres of land to be permanently removed from farm use, while approximately 169 acres of farmland will be affected temporarily (by staging areas, temporary construction for road and pad construction, and underground collectors). Approximately 11,000 acres are farmed in the immediate area by the initial survey respondents (and the landowners potentially affected by the expanded project area were included in the larger group of landowners potentially affected by the original ASC), so the amount removed from production is about 0.2 percent of that total, a very

small amount of agricultural land. Any financial impacts on the affected farmers resulting from removal of lands from farm production will be offset by the lease payments they will receive for use of their land to site the project, as demonstrated in the technical memorandum supporting the original ASC Exhibit K (ASC Appendix K-2) and elsewhere in the original ASC.

The amended project will not materially alter the stability of the existing land use pattern that prevails over this area and much of the County. Local farmers will be able to maneuver around the turbines and across the gravel access roads, although minor changes in sowing and harvesting patterns in the immediate vicinity of the turbines will be necessary. Since the farming in the area is dry land farming, no irrigation patterns will be affected. The average size of farms in Sherman County is over 2,000 acres, although several in the area are significantly smaller. The small amount of land required for the turbines and access roads will not have a significant impact on the landowners' use of the property.

The amended project will not materially alter the stability of the existing land use pattern because the amended facility and all of the related or supporting facilities are compatible with farming when they are limited to a reasonably small percentage of the area farmed. Land uses may be induced to change by altering factors that affect value, either lowering or raising it. In this case, some of the optimum sites for the wind energy generation will be taken by this amended project and will maximize the value of this land for energy generation. The land lease provides an additional source of private income without creating major obstacles to farming. The stability of this lease income will help stabilize the inherent volatility associated with farming.

(d) Is situated upon generally unsuitable land for the production of farm crops and livestock, considering the terrain, adverse soil or land conditions, drainage and flooding, vegetation, location and size of the tract, and the availability of necessary support resources for agriculture;

Response: The roads, turbines, and underground collector lines as set forth in this amendment request are generally proposed on land that is currently being farmed for wheat and barley, except for the portion of the amended facility that will be located on CRP land. The soils in the area, absent sufficient rainfall or irrigation, would not support any other crops except perhaps hay. Soils that support the wheat and barley farming are not top quality soils; they are Class IIc soils. The chief positive characteristics of these soils are their depth and that they are well drained. These soils, however, do not support a diversity of crops, nor crops that are high value. They also do not generally support livestock in the County. The price of wheat has dropped steadily over the last 10 years, and there is increasing evidence that maintaining production of wheat and barley on such lands is becoming uneconomic. The wind turbines displace minor amounts of land on parcels that vary in size, but are generally large enough to accommodate both farm and wind energy uses. As a result the displacement impacts are minor and are offset by the lease allowances, which create stability in the economy of each farmer and compensate for the volatility of crop production and prices. Thus, the Certificate Holder submits that the amended project would be sited on property that is “generally unsuitable” for the

production of farm crops and livestock. In the alternative, the Certificate Holder has submitted a proposal for a Goal 3 exception to allow the amended project to be located on additional EFU land in the County.

(e) Complies with other applicable significant resource provisions; and

Response: There are no known other significant resource provisions applicable to the amended facility.

(f) Complies with such other conditions as deemed necessary.

Response: The Certificate Holder will comply with all conditions of approval imposed by the Council in granting this Third Request for Amendment of the Site Certificate.

3. SCZO § 5.2.5. Resource Carrying Capacities

That no approval be granted for any use which is or expected to be found to exceed resource or public facility carrying capacities, or for any use which is found to no be in compliance with air, water, land, and solid waste or noise pollution standards.

Response: As described above, the amended project will not exceed resource or public facility carrying capacities, and the Certificate Holder will comply with all applicable air, water, land, solid waste and noise pollution standards. See ASC Exhibit E (listing permits needed for construction and operation), Exhibit I, Attachment 3 (soils), Exhibit J, Attachment 3 (wetlands and other waters), ASC Exhibit O (water resources), Exhibit P, Attachment 3 (fish and wildlife habitat), Exhibit Q, Attachment 3 (threatened and endangered species), ASC Exhibit V (waste minimization), and Exhibit X, Attachment 3 (noise).

4. SCZO § 5.2.6. Violation of Ordinance

That no approval be granted for any use violation of this Ordinance.

Response: There are no use violations related to the amended project.

K.8 DIRECTLY APPLICABLE STATUTES, GOALS AND LCDC RULES

1. ORS 215.283(g)(2) and 215.296 – Development on EFU Land

Response: ORS 215.283(2)(g) conditionally permits commercial utility facilities for the purpose of generating power for public use by sale, subject to ORS 215.296. Similarly, the conditional use criteria in ORS 215.296 are also applicable to the access roads as required by ORS 215.283(3)(b) and OAR 660-012-0065 which are discussed below.

A. Energy Facility. ORS 215.296(1) requires a use allowed under ORS 215.283(2), such as the proposed project, to be approved if it does not: (i) force a significant change in accepted farm or forest practices on “surrounding lands” devoted to farm or forest use,

or (ii) significantly increase the cost of accepted farm or forest practices on “surrounding lands” devoted to farm or forest use. A logical boundary for the project’s “surrounding lands” is Oregon Highways 97 and 206 and Dehman Road on the west, Baseline Road and Grass Valley Canyon on the south, Canyon Road on the north, and the John Day River on the east. Within this area, land that is devoted to farm use is used to grow wheat or barley. There is no forest use within this area. Very little land in this area is irrigated, rainfall is low, and soils and terrain are consistent in type. Accepted farm practices include soil preparation in the spring and fall, sowing, fertilizing, pest and weed management, and harvesting.

The development and operation of the proposed amended facility has the potential to minimally and temporarily affect these practices. The development of the amended project may cause small changes in harvest patterns, access to farm fields, processes for delivering and applying fertilizers and other products to crops, and the harvesting of crops. Development of the amended facility will also displace up to approximately 21 acres of land from agricultural use during the life of the proposed facility. Ground disturbance during construction can encourage weeds that temporarily interfere with crop yields until eradicated. The development of the access roads and turbine tower pads creates margins in the wheat fields that may also temporarily cause the spread of weeds. In conjunction with the Sherman County Weed District, the Certificate Holder will develop and implement a weed control management plan within the project boundary to minimize the growth of weed species in the areas in which the facility will be built, pursuant to the conditions in the current Site Certificate.

Construction of the amended facility will take approximately nine to 12 months to complete. During construction, there will be a temporary disturbance of approximately 137 acres of agriculture and CRP land. Once the amended facility is completed, it will preclude approximately 21 acres of agricultural land from being used for farming during the life of the project and approximately 2.06 acres of CRP land. The size of the area taken for facility use is small in comparison to the amount of land in the project area that will otherwise be available for continued farming uses.

Upon completion of construction of the amended project, staging areas used to construct the energy facility will be rehabilitated and made available for agricultural use. The Certificate Holder will undertake measures to avoid or mitigate impacts to soil, such as employing dust-control and erosion-control measures. The Certificate Holder will also consult with the landowner during construction and operation of the facility to minimize or avoid any adverse impacts to surrounding agricultural practices. The Certificate Holder will use existing access roads to minimize the project’s impact to resource land. New private access roads will be necessary from existing public roads to the new turbine corridors. Roads will be placed as near to the turbine pads as possible to reduce the impact to farming practices and not increase farming costs, either during the construction or use of these roads. During operation of the facility, these roads will be used infrequently by facility employees, thus producing minimal, if any, impact on surrounding farming practices or costs. Landowners will also be able to use the private access roads on their property to access their fields.

The Certificate Holder submits that the development and operation of the amended facility will not force a significant change in accepted farm practices on surrounding lands devoted to farm use.

The amended facility will also not significantly increase the cost of accepted farm practices on surrounding farmland. The Certificate Holder surveyed area farmers to determine the impact of the facility on the cost of farming as part of the ASC. The survey results showed that, while development and operation of the project would cause some minor change to harvesting patterns or various farming practices associated with the application of fertilizers and other products, representing some slight loss of efficiency in some cases, the changes would not significantly increase the cost of farming in the surrounding area. In fact, any slight cost increase to area farmers associated with these minor changes in farming practices would be more than offset by compensatory lease payments paid to farmers in the area by the Certificate Holder in order to develop the project. The survey results are equally applicable to the expanded project boundary and amended facility.

The Certificate Holder intends to mitigate any impacts to area farmers, including coordination with farmers concerning timely and adequate access during construction of the amended project, weed management during construction and operation of the amended facility, restoration of disturbed areas during construction and after construction is completed, and lease payments to lessor-farmers.

B. Access Roads Compliance with ORS 215.283(3).

ORS 215.283(3) authorizes the proposed access roads as a conditional use. The Zoning Ordinance does not expressly incorporate ORS 215.283(3). Accordingly, under ORS 197.646(3), ORS 215.283(3) applies to the application directly.

ORS 215.283(3) provides in pertinent part:

(3) Roads, highways and other transportation facilities and improvements not allowed under subsections (1) and (2) of this section may be established, . . . in areas zoned for exclusive farm use subject to:

(a) Adoption of an exception to the goal related to agricultural lands and to any other applicable goal with which the facility or improvement does not comply;

(b) ORS 215.296 for those uses identified by rule of the Land Conservation and Development Commission as provided in section 3, chapter 529, Oregon laws 1993.

Response: LCDC rules OAR 660-033-0120 and 660-033-0130(13) identify as allowed uses “transportation improvements on rural lands allowed by OAR 660-012-0065.” OAR 660-012-0065(1) identifies transportation facilities, services and improvements that may be permitted on rural lands without a Goal 3, 4, 11 or 14 exception. OAR 660-012-0065(3)(o) permits transportation facilities, services and improvements “that serve local travel needs” on rural lands without a Goal 3,

4, 11 or 14 exception. Under that rule, the travel capacity and level of service of facilities and improvements serving local travel needs are limited to “that necessary to support rural land uses identified in the acknowledged comprehensive plan or to provide adequate emergency access.” OAR 660-012-0065(5) requires that when such facilities or improvements are within an EFU zone, as is the case with the proposed project, the facilities or improvements must: (a) comply with ORS 215.296; (b) identify reasonable build design alternatives, such as alternative alignments, that are safe and can be constructed at a reasonable cost; (c) assess the effects of the identified alternatives on farm and forest practices, movement of farm and forest vehicles and equipment, and effects on access to farm and forest parcels; and (d) select the alternative that will have the least impact on farm or forest lands in the immediate vicinity.

Wind energy is a rural land use identified in the Comprehensive Plan at Section XV, Finding III. The proposed access road would serve the local travel needs of the project and farmers who operate in the project area. ORS 215.296(1) requires a use allowed under ORS 215.283(3) to be approved if it does not: (i) force a significant change in accepted farm or forest practices on “surrounding lands” devoted to farm or forest use, or (ii) significantly increase the cost of accepted farm or forest practices on “surrounding lands” devoted to farm or forest use. A logical boundary for the project’s “surrounding lands” is Oregon Highways 97 and 206 and Dehman Road on the west, Baseline Road and Grass Valley Canyon on the south, Canyon Road on the north, and the John Day River on the east. Within this area, land that is devoted to farm use is used to grow wheat or barley. There is no forest use within this area. Very little land in this area is irrigated, rainfall is low, and soils and terrain are consistent in type. Accepted farm practices include soil preparation in the spring and fall, sowing, fertilizing, pest and weed management, and harvesting.

The Certificate Holder will use existing roads to minimize the amended project’s impact to resource land. New private access roads are necessary from public roads to construct and maintain the turbines and underground collector system. Private access roads will not significantly adversely affect farming practices or increase farming costs, either during the construction or use of the roads. During operation of the amended facility the new roads will be used infrequently by facility employees, thus producing minimal, if any, impact on surrounding farming practices or costs. The Certificate Holder submits that the development and use of the proposed road will not force a significant change in accepted farm practices on surrounding lands devoted to farm use.

The proposed access roads also will not significantly increase the cost of accepted farm practices on surrounding farm land. The Certificate Holder surveyed area farmers to determine the impact of the project, including the proposed roads, on the cost of farming as part of the ASC. The survey results show that while development and operation of the project would cause some minor change to harvesting patterns or various farming practices associated with the application of fertilizers and other products, representing some slight loss of efficiency in some

cases, the changes would not significantly increase the cost of farming in the surrounding area. In fact, any slight cost increase to area farmers associated with these minor changes in farming practices would be more than offset by compensatory lease payments paid to farmers in the area by the Certificate Holder in order to develop the project. (See ASC Appendix K-1). The survey results are equally applicable to the expanded project boundary and amended facility.

The Certificate Holder considered alternative locations for the proposed wind turbine and related or supporting facilities, but determined that the proposed site plan would maximize the efficiency of the project and have the least possible impact on adjacent farm practices, including the movement of farm vehicles and equipment, and on access to farm parcels. The Certificate Holder thus submits that pursuant to ORS 215.283(3), 215.296 and OAR 660-0120-0065, the proposed new private road may be built without taking an exception to Goal 3. In the alternative, Klondike III proposes that the realigned roads be allowed under a Goal 3 exception.

C. Compliance with OAR 660-012-0065—Transportation Improvements on Rural Lands (Access Roads)

In pertinent part, OAR 660-012-0065 provides:

(3) *The following transportation improvements are consistent with goals 3, 4, 11, and 14 subject to the requirements of this rule:*

“* * *”

(o) *Transportation facilities, services and improvements other than those listed in this rule that serve local travel needs. The travel capacity and level of service of facilities and improvements serving local travel needs shall be limited to that necessary to support rural land uses identified in the acknowledged comprehensive plan or to provide adequate emergency access.*

* * *.

(5) *For transportation uses or improvements listed in subsection (3)(d) to (g) and (o) of this rule within an exclusive farm use (EFU) or forest zone, a jurisdiction shall, in addition to demonstrating compliance with the requirements of ORS 215.296:*

(a) *Identify reasonable build design alternatives, such as alternative alignments, that are safe and can be constructed at a reasonable cost, not considering raw land costs, with available technology. Until adoption of a local TSP pursuant to the requirements of OAR 660-012-0035, the jurisdiction shall consider design and operations alternatives within the project area that would not result in a substantial reduction in peak hour travel time for projects in the urban fringe that would significantly reduce*

peak hour travel time. A determination that a project will significantly reduce peak hour travel time is based on OAR 660-012-0035(10). The jurisdiction need not consider alternatives that are inconsistent with applicable standards or not approved by a registered professional engineer.

(b) Assess the effects of the identified alternatives on farm and forest practices, considering impacts to farm and forest lands, structures and facilities, considering the effects of traffic on the movement of farm and forest vehicles and equipment and considering the effects of access to parcels created on farm and forest lands; and

(c) Select from the identified alternatives, the one, or combination of identified alternatives that has the least impact on lands in the immediate vicinity devoted to farm or forest use.

Response: No new public road alignments are proposed as part of this amendment request, and no changes to road capacity would result from the amendment request. The proposed new private access roads are intended to serve local travel needs of project personnel and local farmers. In view of the location of the wind resource and of the existing public road system, there are no reasonable build design alternatives for the proposed roads. The proposed roads will have no impact on peak or non-peak travel time. Any alternative road alignments would not reduce the anticipated minor impacts, if any, to farm lands, structures and facilities, or on the movement of farm vehicles and equipment and still facilitate the construction and operation of the amended project. The Certificate Holder considered the possible locations of the new roads and has proposed them in those locations that would have the least impact to adjacent farm and other existing land uses.

K.9 GOAL 3 EXCEPTION

State law permits “commercial utility facilities for the purpose of generating power for public use by sale” that preclude 20 acres or less of non-high-value-farmland from commercial agricultural enterprise. OAR 660-033-0130(22). If such a facility exceeds this limit, the provision permits the use of an exception to Goal 3 to allow the siting of the project. The Zoning Ordinance does not contain a similar criterion. Under ORS 197.646(3), the administrative rule criteria directly apply to the proposed project.

ORS 469.504(2) provides that the Council may find Goal compliance for a facility that does not otherwise comply with one or more of the statewide planning Goals by taking an exception to the applicable Goal. Notwithstanding the requirements of ORS 197.732, the statewide planning Goal pertaining to the exception process or any rules of LCDC pertaining to an exception process Goal, the Council may take an exception to a Goal. In pertinent part, ORS 469.504(2)(c)(A)-(C) provides that the Council may take a “reasons” exception if the Council finds:

- (A) Reasons justify why the state policy embodied in the applicable goal should not apply;
- (B) The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with the rules of the council applicable to the siting of the proposed facility; and
- (C) The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

A. Exception for Energy Facility and Related or Supporting Facilities.

The general state policy embodied in Goal 3 is “to preserve and maintain agricultural lands.” As discussed above, the amended facility will not have significant adverse effects on accepted farm or forest practices and demonstrates why the policy contained in the 20-acre limitations should not apply to the amended project. As is explained above, the amended project will preclude approximately 21 acres of EFU land from use as a commercial agricultural enterprise. Justification for why this Third Request for Amendment would not have significant adverse effects on accepted farm or forest practices is described below.

1. Reasons that Justify the Exception. The Certificate Holder has chosen the overall project site because it offers an optimal wind energy resource to produce the desired energy production. Extensive evaluation of wind resources in various areas within Sherman County indicates that the project site has among the best wind resources for the development of wind energy generating facilities. This conclusion is further supported by the successful operation of the nearby Klondike I project. Klondike III and other energy development companies have collected substantial information about wind energy resources, and have determined that the Klondike area possesses among the most optimal, accessible wind energy resources in the area.

In addition, area farmers are willing to enter into land leases to allow the amended project to be built and control properties of a sufficient size and appropriate configuration to accommodate the amended project. Further, any alternative site in the County would involve the leasing of EFU land, because the areas of the County with the best wind resources are all located on EFU land.

The site is also located to take advantage of BPA’s upgraded Klondike Schoolhouse substation and new 230kV transmission line which are being built by BPA as general system upgrades. BPA’s facilities are also being built on EFU land. The new BPA substation and transmission line will be the only transmission facilities in Sherman County with the capacity to carry the project’s power, and the only point of interconnection to the energy grid available to Klondike III. The proposed collector lines, substations, staging areas and operation and maintenance facility are all necessary to operate the project, and must be located in the project area. The collector lines between the turbines will be built next to the access roads to minimize EFU land disturbance.

The amended project will minimize impacts from constructing new access roads by using existing roads where possible and designing the new roads for the minimum size possible that can provide safe and adequate access to the turbine string sites.

The only non-EFU land in the area is located in the cities of Moro, Wasco, Rufus and Biggs Junction. None of these locations has the necessary wind resource, adequate parcels of land, or proximate transmission system necessary to build the project. Hence, the amended facility must be sited on EFU land in order to provide the service.

The topography and remote location of the amended project site will minimize visual impacts to the surrounding community. Further, the agricultural value of the site is generally marginal, and the project will not displace highly productive agricultural activity.

As described in the Certificate Holder's responses to the applicable criteria above, the amended project encourages the efficient siting of land uses. The facility will facilitate the multiple use of land. The project will allow access to farmland on those acres occupied by turbine facilities.

The overall project will benefit the local economy through employment opportunities, particularly during construction, and contributions to the local tax base. This amendment will increase the number of employees by two to five compared to the currently authorized project and will increase the amount of taxes Sherman County will receive from the expanded project.

The affected landowners will also benefit. In return for granting leases and easements over small amounts of their farmland, the landowners will receive significant financial compensation.

In sum, the Certificate Holder is proposing the Third Request for Amendment to maximize the benefits of the site and available wind resources while also considering impacts to the site. An exception in this instance is justified given the very minor incremental impacts.

2. ESEE Consequences Favor the Exception.

Environmental. The project's environmental consequences are discussed primarily in Exhibits J, Attachment 3 (Wetlands and Other Waters), ASC Exhibit L (Protected Areas), Exhibit P, Attachment 3 (Fish and Wildlife), and Exhibit Q, Attachment 3 (Threatened and Endangered Species), and the First and Second Requests for Amendment of the Site Certificate. These exhibits demonstrate that the amended facility will not cause significant adverse environmental consequences. Indeed, by and large, the amended facility will avoid impacts to such resources altogether. The amended project will mitigate for any unforeseen impacts to wildlife habitat based on habitat categorization, as is required under ODFW policy (discussed above), and for any unforeseen impacts to the visual setting in which the Oregon Trail alignment occurs (discussed in Exhibit R, Attachment 3). In short, the Certificate Holder does not anticipate any

unmitigated adverse impacts to soils, wetlands, protected areas, water resources, threatened and endangered species, scenic and aesthetic resources, historic and cultural and archaeological resources as a result of this proposed expansion.

Socioeconomic. The amended project's socioeconomic consequences will not be adverse because the additional income generated by siting the new turbines will improve the local tax base and landowners' income where the turbines are located. The amended facility will not have significant adverse impacts on scenic, cultural, historical, archeological, or recreational resources.

Although some farming will be displaced within the expanded site boundary, the amended project will be compatible with area farming, as is true with the Klondike I project adjacent to the amended project area.

Energy. The additional turbines will increase the energy generating capacity of the project from an approved 285 MW to up to 375 MW, an increase of up to 90 MW. The additional energy output may be connected to the Schoolhouse substation, which has adequate capacity to handle the new energy production. The energy produced by the project will be clean energy that will help Oregon and the northwest region meet increasing energy demands.

As stated in the ASC and subsequent amendment requests, the facility will use existing electric energy capacity from the Wasco Electric Cooperative to operate the new or alternate O& M building. This amendment request will not require any significant amount of additional energy to operate the expanded facility.

3. The Facility Is Compatible with Other Adjacent Uses. As discussed in detail above, the amended facility is compatible with adjacent land uses. The amended project will not significantly alter the farming land use pattern or practices in the area, nor will it significantly increase farming costs.

In sum, there are compelling reasons that justify siting the amended facility at the proposed location within the expanded boundary, and that doing so will not create any significant adverse economic, social, environmental or energy consequences. The facility will be compatible with adjacent land uses, as is the existing adjacent wind energy facility (Klondike I). The Certificate Holder therefore requests approval of a Goal 3 exception for the energy generating facility and all related or supporting facilities, including the new (realigned) roads, to the extent such an exception is necessary for the amendment request.

K.10 FEDERAL LAND MANAGEMENT PLANS

OAR 345-021-0010(1)(k)(D) *If the proposed facility will be located on federal land:*

1. *Identify the applicable land management plan adopted by the federal agency with jurisdiction over the federal land;*

Explain any differences between state or local land use requirements and federal land management requirements;

Describe how the proposed facility complies with the applicable federal land management plan;

Describe any federal land use approvals required for the proposed facility and the status of application for each required federal land use approval;

Provide an estimate of time for issuance of federal land use approvals; and

If federal law or the land management plan conflicts with any applicable state or local land use requirements, explain the differences in the conflicting requirements, state whether the applicant requests Council waiver of the land use standard described under paragraph (B) or (C) of this subsection and explain the basis for the waiver.

Response: These provisions are not applicable to the amended project. No portion of the amended project will be located on federal land.

K.11 REFERENCES

- Allan, S., Buckley, A., and Meacham, J. 2001. Atlas of Oregon. Second Edition. William Loy, Ed. University of Oregon Press.
- Renewable Northwest Project. 2004. Windfall from the Wind Farm, Sherman County, Oregon. Ouderkirk, B. and Pedden, M. August 2004 (Revised December 2004).
- Soil Conservation Service. 1964. Soil Survey of Sherman County, Oregon.
- USDA National Agricultural Statistics Service. 2002. Census of Agriculture. <http://www.nass.usda.gov/census/census02/volume1/or/index2.htm>

Appendix K-1

Land Use Analysis Area Map

Klondike III Wind Project Amendment 3 Figure K-1 Land Use

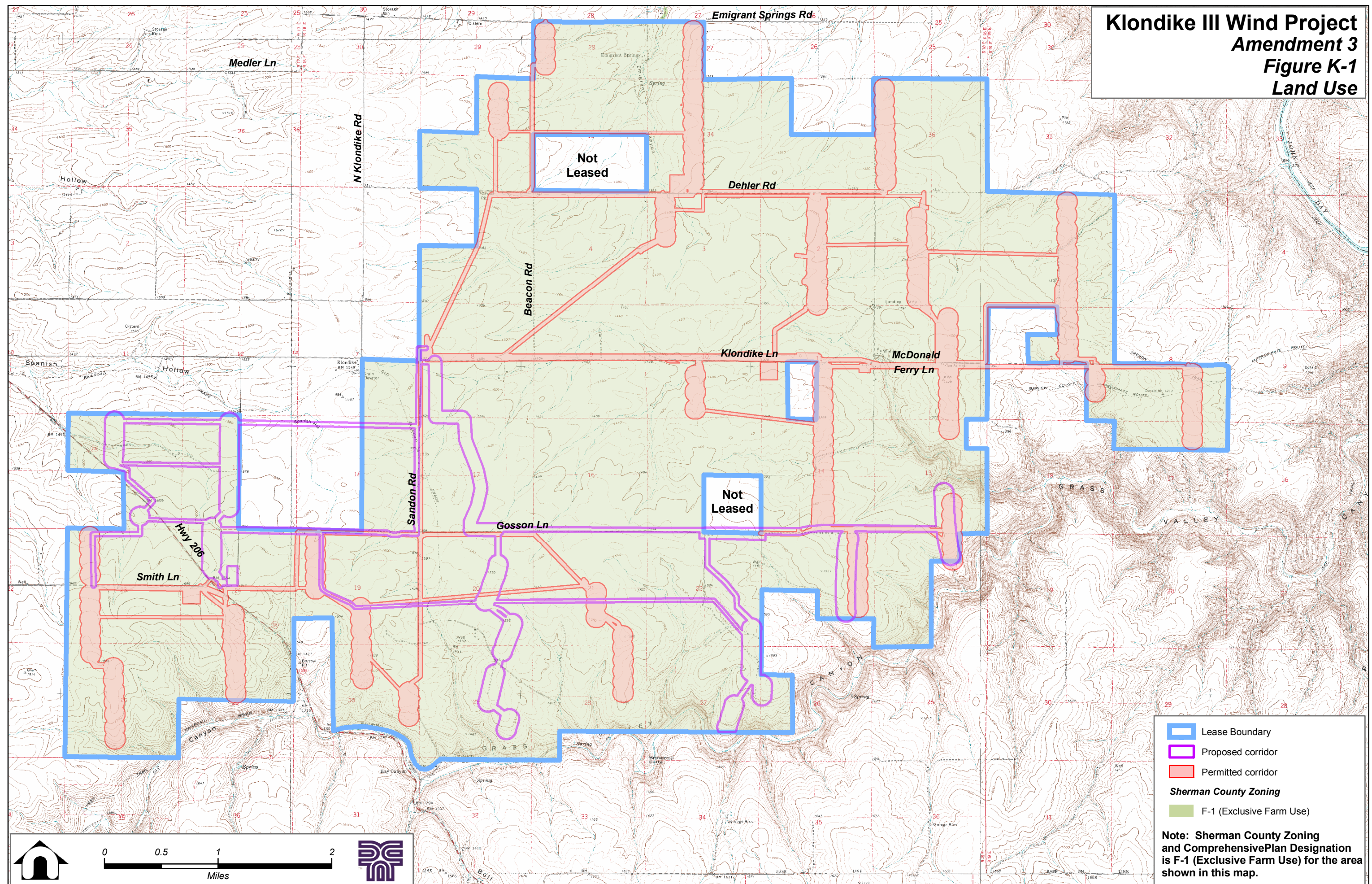


EXHIBIT P

FISH AND WILDLIFE HABITATS AND SPECIES

OAR 345-021-0010(1)(p)

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P-2 AVIAN BASELINE REPORT	

P.1 INTRODUCTION

OAR 345-021-0010(1)(p) *Information about the fish and wildlife habitat and the fish and wildlife species, other than the species addressed in subsection (q) that could be affected by the proposed facility, providing evidence to support a finding by the Council as required by OAR 345-022-0060. The applicant shall include:*

P.2 DESCRIPTION OF BIOLOGICAL AND BOTANICAL SURVEYS

OAR 345-021-0010(1)(p)(A) *A description of biological and botanical surveys performed that support the information in this exhibit, including a discussion of the timing and scope of each survey.*

Response: Protocols for the biological surveys, habitat typing, and habitat categorization were approved by ODFW during review of the ASC. Methods for surveying the additional area within the expanded site boundary are the same, and the appropriateness of their use for analyzing the expanded site boundary was confirmed with ODFW and DOE during a conference call prior to the surveys.

P.2.1 Vegetation

Vegetation mapping for the expanded site boundary shows the impact area is primarily agricultural, but also includes some CRP, shrub steppe, and grassland areas. Based on the wetland delineation conducted for the expanded site, there are no intermittent channels or other water features in this area. According to approved protocols, plant surveys were not conducted in agricultural areas; plant surveys were performed in non-agricultural habitats.

P.2.2 Wildlife

According to approved wildlife protocols, transects are not required in agricultural lands. Transects were completed in all non-agricultural habitats, per the protocol approved for the ASC. Surveys for white-tailed jackrabbits, plants, and target species were conducted along these transects. In addition, biologists surveyed areas within ¼ mile of all turbine strings for raptor nests during April 2007. Avian point counts were conducted to describe use of the expanded area by birds, in accordance with the protocols approved by ODFW for the ASC.

P.3 IDENTIFICATION OF FISH AND WILDLIFE HABITATS IN THE ANALYSIS AREA

OAR 345-021-0010(1)(p)(B) *Identification of all fish and wildlife habitat in the analysis area, classified by the habitat categories as set forth in OAR 635-415-0025 and a description of the characteristics and condition of that habitat in the analysis area.*

Response: The habitat types impacted by this amendment request are shown on Figures P-1 and P-2. Agricultural lands in non-irrigated wheat production comprise the vast

majority of the expanded site boundary. A few areas of shrub-steppe habitat similar to that described in the ASC are present, generally found on the lower slopes of drainages. Vegetation is comprised of big sagebrush (*Artemisia tridentata*) with various degrees of invasion by cheatgrass (*Bromus tectorum*).

The remainder of habitat within the analysis area for the expanded site boundary consists of grassland with varying amounts of cheatgrass and bulbous bluegrass (*Poa bulbosa*). Much of this grassland is in good condition, with only a minor weed component, and is dominated by needle and thread (*Hesperostipa comata*) and Sandberg bluegrass (*Poa secunda*) mixed with much smaller amounts of Idaho fescue (*Festuca idahoensis*) and other native species. In the shallower soil areas native species such as buckwheat (*Erigonium* sp.), arrowleaf balsamroot (*Balsamorhiza sagittata*), and phlox (*Phlox* sp.), are present.

Weed cover by cheatgrass and bulbous bluegrass is common in all areas, although relatively few other weeds exist compared to agricultural margins in other areas. In general, recent grazing has been kept to a minimum, although grazing appears to have altered vegetation communities significantly in the past. As expected, cover by cheatgrass is heaviest in the deeper soil leeward areas, generally on slopes with an eastern aspect. Cereal rye (*Secale cereale*) was the other most common noxious weeds present, with diffuse knapweed (*Centaurea diffusa*) present in some areas as well. These species could present mitigation opportunities since their populations are currently minor.

CRP condition is fairly similar to that described in the ASC, with most areas providing good structure for wildlife, and only a few areas dominated by cheatgrass between planted species. It was noted that native bluebunch wheatgrass (*Pseudoroegneria spicata*), as well as some potentially native fescue (*Festuca* sp.) has been planted in some CRP fields rather than the typical non-native intermediate wheatgrass (*Thinopyrum intermedium*) and crested wheatgrass (*Agropyron crestatum*).

Slopes (non-agricultural) leading to Grass Valley Canyon are of excellent quality, with large Pacific willow shrubs browsed fairly heavily by deer. Native species such as watercress (*Rorippa* sp.), slender rush (*Juncus tenuis*), American brooklime (*Veronica americana*), stinging nettle (*Urtica dioica*), and yellow monkeyflower (*Mimulus guttatus*) are mixed with non-native grasses (*Poa* sp.), and small amounts of Canada thistle (*Cirsium arvense*), alfalfa (*Medicago sativa*) and others. Grass Valley Canyon riparian area within the analysis area is generally emergent rather than shrub-dominated, with species such as reed canarygrass, cattail, stinging nettle, and other grasses mixed with scattered big sagebrush, pacific willow, and a very few Russian olive (*Eleagnus angustifolium*).

Upland trees were present in a few scattered areas, and consisted of black locust (*Robinia pseudacacia*) over a near monoculture of cheatgrass.

P.4 MAP OF HABITAT LOCATION

OAR 345-021-0010(1)(p)(C) *A map showing the locations of habitat identified in (B).*

Response: The habitat types and categories within the expanded site boundary, as described in Section P.3 above, are illustrated in Figure P-1 and P-2 in Appendix P-1.

P.5 IDENTIFICATION OF ALL STATE SENSITIVE SPECIES

OAR 345-021-0010(1)(p)(D) *Based on consultation with the Oregon Department of Fish and Wildlife (ODFW) and appropriate field study and literature review, identification of all State Sensitive Species that might be present in the analysis area and a discussion of any site-specific issues of concern to ODFW.*

Response: No state sensitive species would be present in the agricultural areas of the expanded site boundary. Because the habitats to be temporarily or permanently impacted by the site expansion contemplated by the Third Request for Amendment are identical to those previously described in the ASC and First Request for Amendment, the list of state sensitive species is the same.

P.6 BASELINE SURVEY OF HABITAT USE IN ANALYSIS AREA

OAR 345-021-0010(1)(p)(E) *A baseline survey of the use of habitat in the analysis area by species identified in (D) performed according to a protocol approved by the Department and ODFW.*

Response: A report detailing the results of the avian baseline survey for the expanded area is included as Appendix P-2 (because fieldwork continued into the month of June, this report is expected to be submitted by July 15, 2007).

Surveys for target species were also conducted. The most common species noted were Western meadowlark, as well as the horned larks and magpie. Few grasshopper sparrows were noted within either the native grasslands or the CRP lands. Few black locust trees or other trees suitable for loggerhead shrike were present, and no individuals were found. Similarly low numbers of savannah sparrow were noted as well. California quail, chukar, rock wren, and canyon wren were all found on slopes leading to Grass Valley Canyon, with redwinged blackbirds dominant downslope in the riparian areas. Pacific tree frogs were found in a riparian drainage east of Sandon road. In addition, a few common raptor species were noted, including northern harrier, American kestrel, and red-tailed hawk. Only one raptor nest was found within the analysis area for this Third Request for Amendment, which was an active great-horned owl nest northwest of turbine Z5 in a black locust tree within a low area between large agricultural fields.

Very few burrows were found, with little, if any, habitat for ground squirrels or burrowing owl. Other wildlife, such as gopher snakes, porcupine (in rock talus), and deer were observed during the surveys. A coyote den with 4 pups was found near Grass Valley Canyon.

P.7 DESCRIPTION OF SIGNIFICANT POTENTIAL IMPACTS ON IDENTIFIED HABITATS

OAR 345-021-0010(1)(p)(F) *A description of the nature, extent, and duration of potential adverse impacts on the habitat identified in (B) and species identified in (D) that could result from construction, operation and retirement of the proposed facility.*

Response: This section describes potential significant impacts of the changes to the project to habitats and associated wildlife during construction, operation, and retirement.

P.7.1 Impacts to Wildlife Habitat

Potential impacts to wildlife habitat primarily include temporary and permanent loss of agricultural land during construction and operation, but also some impacts to grassland, CRP and shrub steppe habitat. No mitigation is required for Category 6 habitat impacts. After facility retirement, a site restoration plan will ensure conversion of the expanded site boundary to its pre-construction condition. Table P-1 summarizes the temporary and permanent impacts to wildlife habitat as a result of the amended project.

Table P- 1. Habitat Types and Categories in the Klondike III Wind Project Expanded Site Boundary with Area of Impact

	IMPACTS (in acres)	
	Temporary	Permanent
Category 1	0.0	0.0
Category 2		
Grassland	4.64	0.43
Shrub-steppe	0.0	0.0
Category 3		
CRP	16.63	2.06
Grassland	1.52	0.16
Shrub-steppe	2.35	0.26
Intermittent streams	0.0	0.0
Upland trees	0.0	0.0
Category 4		
Grassland	5.66	0.34
Category 5	0.0	0.0
Category 6		
Developed	0.49	0.0
Agricultural	137.66	20.88
TOTAL	168.95	24.13

Approximately 24.13 acres of permanent impact and 168.95 acres of temporary impact will occur; 20.88 acres of permanent impact and 137.66 acres of temporary impact will

occur in Category 6 agricultural land. Because of the low quality of the habitat to be disturbed, impacts to wildlife habitat will not be significant; however, 3.25 acres of non-agricultural habitat impacts (total impact to categories 2, 3 and 4), will need to be mitigated in accordance with ODFW habitat mitigation requirements.

P.7.2 Impacts to Special Status/Sensitive Species

P.7.2.1 Plants

No plant surveys are required in agricultural land because no special status/sensitive plant species could exist there. No sensitive plants were identified in non-agricultural lands that would be temporarily or permanently impacted by the expanded site boundary proposed in the Third Request for Amendment.

P.7.2.2 Mammals and Other Special Status/Sensitive Wildlife Species

The expanded site boundary area is anticipated to provide some suitable habitat for target species, although no individuals of these species were found. Very few burrows were found, with little, if any, habitat for ground squirrels or burrowing owl. Other wildlife, such as gopher snakes, porcupine (in rock talus), and deer were observed during the surveys.

White-tailed jackrabbit surveys, conducted entirely on the evening of May 30, 2007, during perfect weather conditions and a full moon, resulted in the detection of no jackrabbits.

No sensitive or listed plant or wildlife species were detected during the surveys.

P.7.2.3 Bats

Neither bats nor their suitable habitat occur in agricultural lands or the surveyed habitats that are the subject of Amendment 3; therefore, no impact to bats is expected as a result of this amendment.

P.7.2.4 Birds

Potential impact to bird species within the expanded site boundary will be similar to that described in the ASC. Impacts could occur as a result of potential fatalities from construction equipment, and disturbance/displacement effects from construction activities.

Most temporary and permanent impacts due to this amendment would occur within Category 6 agricultural lands, with only approximately 3.25 acres of previously unevaluated permanent impacts to occur within category 2, 3 and 4 habitats in the expanded site boundary. The scale of these additional impacts due to the expanded area is minor in comparison to the available habitat in the vicinity, and no measurable effect on impacts to avian species is anticipated.

Potential mortality from construction equipment and turbine operation is expected to be very low, and is the same as described in the ASC and Amendment 1 and 2, because the same equipment will be used in the expanded site boundary.

P.8 MITIGATION MEASURES

OAR 345-021-0010(1)(p)(G) *A description of any measures proposed by the applicant to avoid, reduce or mitigate the potential adverse impacts described in (F) in accordance with the ODFW mitigation goals described in OAR 635-415-0025 and a discussion of how the proposed measures would achieve those goals.*

Response:

P.8.1 Mitigation for Habitat Impacts

Approximately 30.8 acres of temporary impact will occur in habitat categories 2, 3 and 4. These areas will be restored to their pre-construction condition by seeding and un-compacting the ground if needed.

Approximately 3.25 acres of previously unevaluated permanent impacts will occur within category 2, 3 and 4 habitats in the expanded site boundary. Therefore, compensatory mitigation or enhancement of habitat is required or proposed as a result of this amendment request.

Mitigation will be conducted for direct impacts to habitat categories 2, 3, and 4, and for displacement impacts (defined as areas within 50 meters of the wind turbines) identified in this Third Request for Amendment. Mitigation will occur at one or two conservation areas, shown on Figures P-1 and P-2. The means and methods for implementing mitigation will be the same as those described in the First Amended Site Certificate, Attachment C, Klondike III Habitat Mitigation Plan.

Displacement impacts were calculated according to the formulas in Section III of that Mitigation Plan. Because the conservation area previously authorized for mitigation may not be large enough for the additional impacts identified in this amendment request, a second proposed conservation area may be used. The area is just southeast of string BB and consists of approximately 15.3 acres. The area is currently Category 4 grassland, dominated by weedy species such as tumble mustard and cheatgrass.

In summary, approximately 10.02 acres of land within the conservation area(s) will be enhanced to mitigate for wildlife habitat impacts of this Third Request for Amendment.

P.8.2 Mitigation for Impacts to Special Status/Sensitive Species

As noted above, no direct impacts to special status or sensitive species were identified by the wildlife surveys. However, displacement impacts could occur from loss of habitat, and would be mitigated by the enhancement of habitats within the conservation easement.

The impacts to approximately 21 acres of Category 6 lands need not be mitigated under ODFW mitigation goals. The impacts in Categories 2, 3, and 4 will be mitigated in accordance with the formula set out in the First Amended Site Certificate. Therefore, the amended project complies with the ODFW mitigation goals.

P.9 MONITORING PROGRAM

OAR 345-021-0010(1)(p)(H) *A description of the applicant's proposed monitoring plans to evaluate the success of the measures described in (G).*

Response: A monitoring program for mitigation was developed and approved as a condition of the existing Site Certificate. Although a new mitigation area is proposed for compensating for habitat impacts for the expansion contemplated by this Third Request for Amendment, no change to the monitoring program is proposed, except that it will be applied to the additional mitigation within the conservation areas. In addition, mortality monitoring will take into account the additional micro-siting area proposed by this amendment.

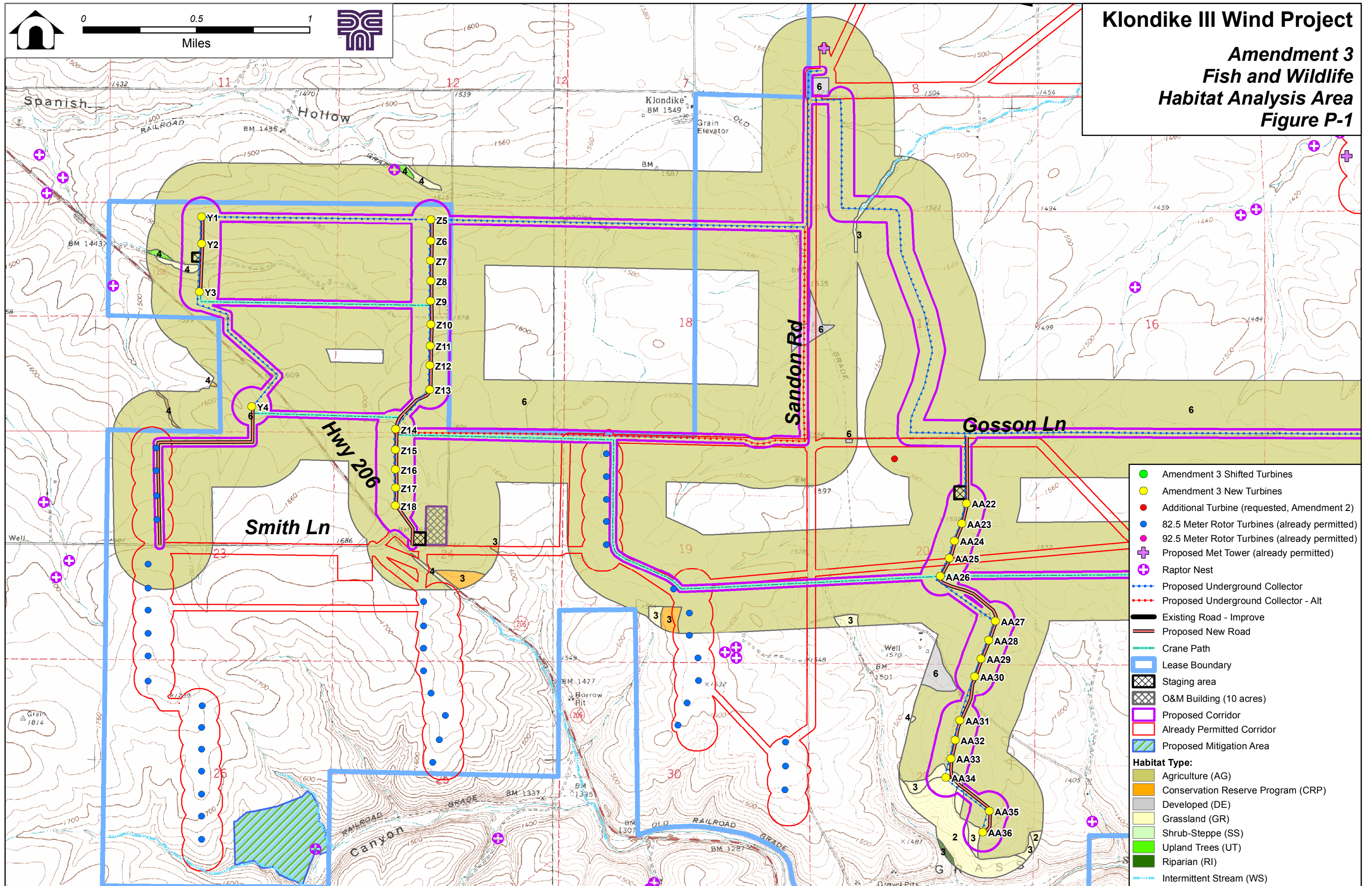
P.10 CONCLUSION

The amended project has considered and complied with the ODFW Fish and Wildlife Habitat Mitigation Policy as set forth in OAR 635-415-0000 through -0025. The fish and wildlife habitats within the expanded site boundary were identified and categorized according to the ODFW Policy. Temporary and permanent impacts will occur primarily in agricultural lands. Temporary impacts will be restored. Approximately 3.25 acres of permanent impact to category 2, 3 and 4 habitats are anticipated as a result of this amendment, and these impacts will be mitigated as described above. There are no anticipated impacts to special status/sensitive plants and wildlife species within the expanded boundary.

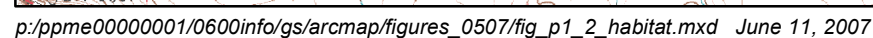
Based on the above information, the Certificate Holder satisfies the requirements in OAR 345-021-0010(1)(p), and the Council may find that the design, construction, operation, and retirement, taking into account mitigation, will be consistent with fish and wildlife habitat mitigation goals and standards pursuant to OAR 345-022-0060.

APPENDIX P-1

Figures P- 1 and P-2 Distribution of Habitat Types and Categories within the Expanded Project Analysis Area



***Amendment 3
Fish and Wildlife
Habitat Analysis Area
Figure P-2***



APPENDIX P-2

Avian Baseline Report

EXHIBIT Q

THREATENED AND ENDANGERED SPECIES

OAR 345-021-0010(1)(q) and OAR 345-022-0070

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Q.1 INTRODUCTION

OAR 345-021-0010(1)(q) *Information about threatened and endangered plant and animal species that may be affected by the proposed facility, providing evidence to support a finding by the Council as required by OAR 345-022-0070. The applicant shall include:*

Response: Because the database searches covered a 5-mile area, the listed, candidate and proposed species within the expanded site boundary are the same as for the permitted project. The expanded site boundary consists of approximately 18.5 acres of agricultural land. In this area, up to 43 additional turbines and approximately 9.1 miles of new access roads will be constructed, resulting in approximately 24 acres of permanent impact. Underground collector lines and crane paths will also be constructed, resulting in approximately 169 acres of temporary disturbance.

Q.2 ANALYSIS AREA

This section describes the analysis area with regard to threatened and endangered species in the expanded site boundary. The project vicinity of the expanded area is the same as for the permitted project.

Q.3 METHODOLOGY

OAR 345-021-0010(1)(q)(A) *Based on appropriate literature and field study, identification of all threatened or endangered species listed under ORS 496.172(2), ORS 564.105(2) or 16 USC § 1533 that may be affected by the proposed facility;*

Response:

Q.3.1 Wildlife

During April 2007, biologists searched for raptor nests within one quarter mile of the expanded site boundary; one nest of a great horned owl was observed near proposed turbine Z5. If construction of facilities proposed in this amendment begin after breeding season begins, a raptor nest surveys for the site expanded site boundaries will be conducted by helicopter prior to construction.

Q.3.2 Plants

Rare plants were surveyed within the non-agricultural areas. No individuals or populations of rare plants were observed in non-agricultural areas. A report documenting the surveys is expected to be submitted by July 15, 2007.

Q.4 EXISTING CONDITIONS AND POTENTIAL IMPACTS TO STATE AND FEDERAL LISTED, CANDIDATE AND PROPOSED SPECIES

OAR 345-021-0010(1)(q)(B) *For each species identified under (A), a description of the nature, extent, locations and timing of its occurrence in the analysis area and how the facility might adversely affect it;*

Response: No state or federal listed, candidate or proposed species are expected to occur in or depend on the expanded site boundary area.

Q.4.1 Potential Impacts to Wildlife

A site visit to verify the vegetation type and habitat category did not locate any individuals or their supporting habitats.

Q.4.2 Potential Impacts to Plants

Because no listed, proposed or candidate plants were found in non-agricultural areas of the proposed expanded site boundary, no direct project-related impacts would be anticipated to any listed, threatened, proposed, or candidate plant species.

Q.5 DESCRIPTION OF MEASURES PROPOSED TO AVOID OR REDUCE ADVERSE IMPACTS TO SPECIES

OAR 345-021-0010(1)(q)(C) *For each species identified under (A), a description of measures proposed by the applicant, if any, to avoid or reduce adverse impact;*

Response:

Q.5.1 Wildlife

No direct project-related impacts are anticipated within the expanded site boundary to any listed, threatened, proposed, or candidate wildlife species as a result of amended activities. Therefore, no additional mitigation is required.

Q.5.2 Plants

Because no direct project-related impacts to any federal or state endangered, threatened, sensitive, proposed, or candidate plant species are anticipated, no species-specific mitigation measures are proposed.

Q.6 FINDINGS THAT THE PROPOSED FACILITY WILL NOT LIKELY CAUSE A SIGNIFICANT REDUCTION IN THE LIKELIHOOD OF SURVIVAL OR RECOVERY OF THE PLANT SPECIES IDENTIFIED

OAR 345-021-0010(1)(q)(D) *For each plant species identified under (A), a description of how the proposed facility, including any mitigation measures, complies with the*

protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3);

Q.6.1 Identified Plant Species with an ODA protection and conservation program

Response: No impacts to these species would result from project activities within the expanded area, because they do not occur there.

Q.6.2 Identified Plant Species without an ODA protection and conservation program

OAR 345-021-0010(1)(q)(E) *For each plant species identified under (A), if the Oregon Department of Agriculture has not adopted a protection and conservation program under ORS 564.105(3), a description of significant potential impacts of the proposed facility on the continued existence of the species and on the critical habitat of such species and evidence that the proposed facility, including any mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of the species;*

Response: Because there were no anticipated occurrences of state or federal listed species within the expanded analysis area, the construction and operation of the expanded area are not likely to cause a significant reduction in the likelihood of survival or recovery of these species.

Q.7 FINDINGS THAT THE PROPOSED FACILITY WILL NOT LIKELY CAUSE A SIGNIFICANT REDUCTION IN THE LIKELIHOOD OF SURVIVAL OR RECOVERY OF THE FISH AND WILDLIFE SPECIES IDENTIFIED

OAR 345-021-0010(1)(q)(F) *For each animal species identified under (A), a description of significant potential impacts of the proposed facility on the continued existence of such species and on the critical habitat of such species and evidence that the proposed facility, including any mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and*

Response: No direct project-related impacts would be anticipated to any listed, threatened, proposed, or candidate wildlife species as a result of amended activities. Therefore, the amended activities will not cause a significant reduction in the likelihood of survival or recovery of the species.

Q.8 MONITORING PROGRAM

OAR 345-021-0010(1)(q)(G) *The applicant's proposed monitoring program, if any, for impacts to threatened and endangered species;*

Response: Any programs to monitor the potential impacts to the individual listed species, if required, will be extended to cover appropriate areas within the expanded site boundary. Such programs will be developed in coordination with ODFW for fish and wildlife species and with ODA for plant species.

EXHIBIT R

SCENIC AND AESTHETIC VALUES

OAR 345-021-0010(l)(r)

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APPENDIX

R-1 VISUAL ANALYSIS FOR AMENDMENT 3	
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R.1 INTRODUCTION

This Exhibit addresses impacts that placement of up to 43 additional turbines within the additional micro-siting areas would have on Scenic and Aesthetic Values in the analysis area. The analysis assumed the turbines have a hub height of approximately 328 feet and overall height, including blades, of 492 feet (i.e., the tallest authorized turbine). The Exhibit responds to the requirements of OAR 345-021-0010(1)(r), as follows:

OAR 345-021-0010(1)(r) *An analysis of the potential impacts of the proposed facility, if any, on scenic resources identified as significant or important in local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area, providing evidence to support a finding by the Council as required by OAR 345-022-0080, including;*

R.2 LOCAL, TRIBAL AND FEDERAL PLANS

OAR 345-021-0010(1)(r)(A) *A list of the local, tribal and federal plans that address lands within the analysis area.*

Response: The analysis area is the same as in the ASC. Applicable federal land management plans and local land use plans have not changed from the ASC.

R.3 IDENTIFICATION AND DESCRIPTION OF SCENIC RESOURCES IDENTIFIED AS SIGNIFICANT OR IMPORTANT

OAR 345-021-0010(1)(r)(B) *Identification and description of the scenic resources identified as significant or important in the plans listed in (A).*

Response: Significant or important scenic and aesthetic values are the same as identified in the ASC.

R.4 SIGNIFICANT POTENTIAL ADVERSE IMPACTS TO SCENIC RESOURCES

OAR 345-021-0010(1)(r)(C) *A description of significant potential adverse impacts to the scenic resources identified in (B), including, but not limited to, impacts such as:*

- (i) *Loss of vegetation or alteration of the landscape as a result of construction or operation; and*

Response: Impacts of placing the tallest potential turbines within the additional micro-siting area on the landscape are minor, and are generally the same as described in the ASC and First and Second Amendment requests (Figure R-1 of Appendix R-1). The proposed changes will result in additional temporary impacts of up to approximately 169 acres and permanent impacts of up to approximately 24 acres. Temporary impacts would be restored to their existing condition. Permanent impacts would affect primarily dry land winter wheat habitat; however, 3.25 acres of habitat categories 2, 3, and 4 would also be impacted.

There would be no impacts to trees or rock outcroppings. Therefore, there will be no significant adverse impacts to vegetation or alteration of the landscape.

(ii) *Visual impacts of facility structures or plumes.*

Response: DEA used the same means and methods to determine potential changes in impacts from siting the tallest potential turbines within the additional micro-siting area as used in the ASC (i.e., Revised Exhibit R, September 16, 2005), and in Requests for Amendments 1 and 2.

Considering the large viewing distances, the proposed turbines would result in negligible changes, if any, in impacts to Columbia River Gorge National Scenic Area (CRGNSA). Considering the proposed turbine locations occur within the existing lease boundary, the turbines would result in negligible changes, if any, in impacts to the Journey Through Time Scenic Byway. The proposed turbines would not affect impacts to the Oregon National Historic Trail (i.e., Fourmile Canyon, Biggs Junction, Deschutes River Crossing, The Dalles Complex, and McDonald Ferry), Lower Deschutes River Canyon, or Lower Klickitat River Canyon because the additional turbines would not be seen.

Given the proximity and presence of scenic and visual resources in the John Day River corridor, DEA mapped the visibility of locating the tallest potential turbines within the additional micro-siting corridors (Appendix R-1, Figure R-1). Turbines at these proposed locations would also not be visible from the John Day River.

R.5 OPPORTUNITY FOR MITIGATION

OAR 345-021-0010(1)(r)(D) *The measures the applicant proposes to avoid, reduce or otherwise mitigate any significant adverse impacts;*

Response: Locating the additional turbines in the additional micro-siting area will not have visual impacts to the John Day River scenic corridor or the bottom of the John Day River canyon. Therefore, no additional mitigation, over and above that required by the Site Certificate as amended, is proposed or necessary.

R.6 MAP

OAR 345-021-0010(1)(r)(E) *A map or maps showing the location of the scenic resources described under (B).*

Response: See Appendix R-1 Figure R-1.

R.7 MONITORING

OAR 345-021-0010(1)(r)(F) *The applicant's proposed monitoring program, if any, for impacts to scenic resources.*

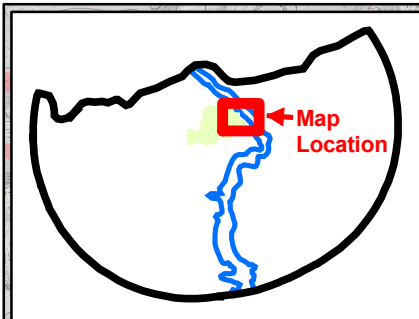
Response: Because the proposed project change would not result in significant adverse impacts to scenic and aesthetic values, the Applicant does not propose any monitoring program specific to this Third Request for Amendment.

R.8 CONCLUSION

The project will comply with all applicable regulatory guidelines concerning scenic and aesthetic resources as discussed in the responses above to the criteria contained in OAR 345-021-0010(1)(r)(A), (B), (C), (D), (E) and (F). Based on the above information, the Applicant has satisfied the requirements in OAR 345-021-0010(1)(r), and the Council may find that the standards contained in OAR 345-022-0080 are satisfied.

APPENDIX R-1

VISUAL ANALYSIS FOR AMENDMENT 3



Klondike Amendment 3

Figure R-1

Visibility

John Day Corridor

- Amendment 3 Shifted Turbines
 - Amendment 3 New Turbines
 - KIII Turbines (permitted)
 - ▬ Areas of High Visual Quality (BLM, Prineville Dist.)
 - Areas where turbines are likely visible
- Note:
Visible areas were modeled using a 10 Meter DEM.

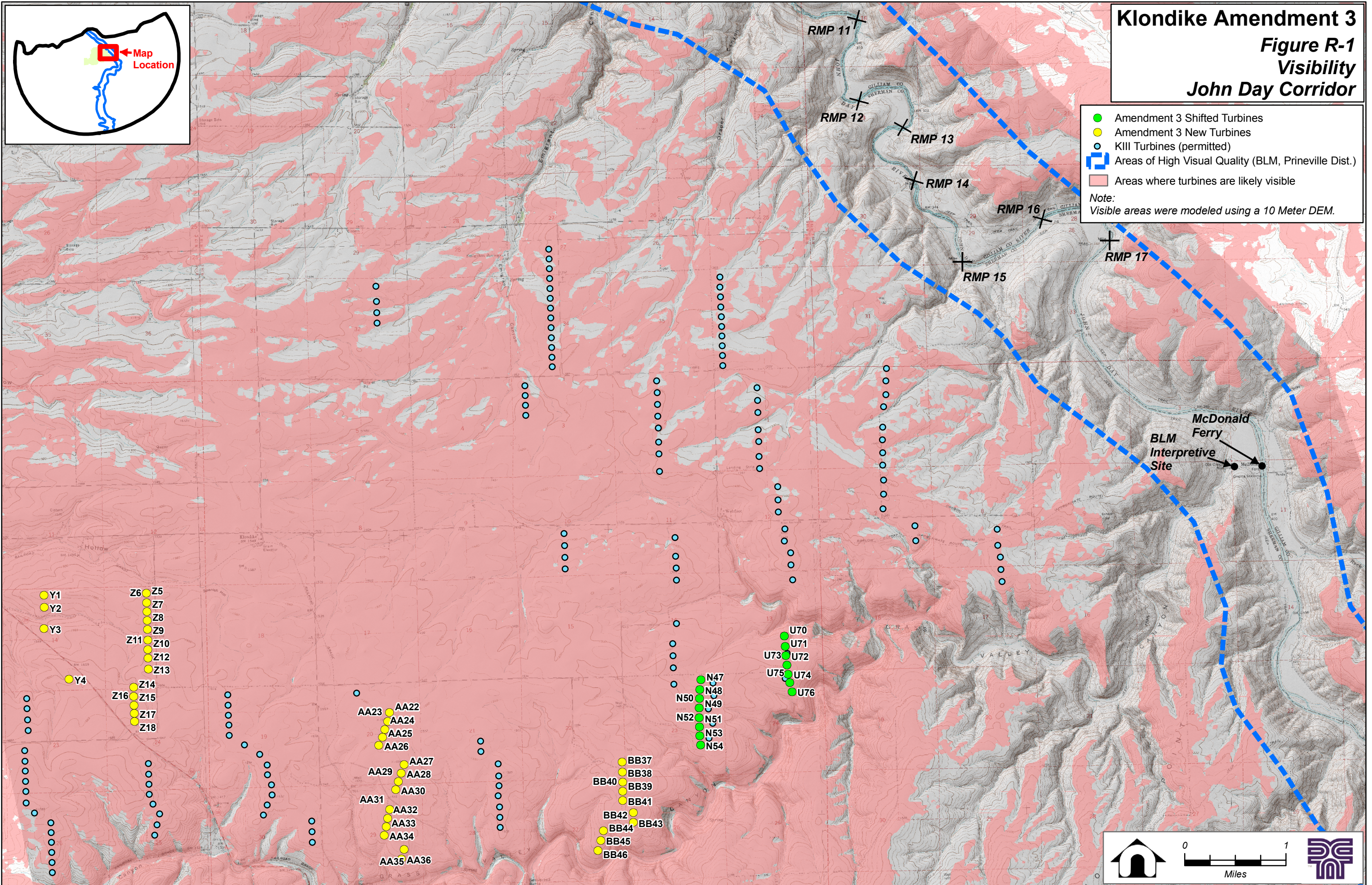


EXHIBIT S

HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES

OAR 345-021-0010(1)(s)

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APPENDIX

S-1 CULTURAL RESOURCES ANALYSIS REPORT	
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S.1 INTRODUCTION

OAR 345-021-0010(1)(s) *Information about historic, cultural and archaeological resources. Information concerning the location of archaeological sites or objects may be exempt from public disclosure under ORS 192.502(4) or ORS 192.501(11). The applicant shall submit such information separately, clearly marked as “confidential,” and shall request that the Department and the Council keep the information confidential to the extent permitted by law. The applicant shall include information in Exhibit S or in confidential submissions providing evidence to support a finding by the Council as required by OAR 345-022-0090, including:*

Response: OAR 345-022-0090 states in full:

(1) *Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:*

(a) *Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;*

(b) *For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and*

(c) *For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c)*

(2) *The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.*

(3) *The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.*

This Exhibit provides information about historic, cultural, and archaeological resources within the expanded site boundary that will support a finding by the Council as set forth above. The methods used in the historic, cultural, and archaeological investigation performed for this amendment are the same as those used for the permitted site boundary; detail is provided in the technical report prepared for the project, which is included as Appendix S-1.

S.2 RESOURCES LISTED OR ELIGIBLE FOR LISTING UNDER NATIONAL REGISTER OF HISTORIC PLACES

OAR 345-021-0010(1)(s)(A) *Historic and cultural resources within the analysis area that have been listed, or would likely be eligible for listing, on the National Register of Historic Places;*

Response: Fifty-six archaeological resources and 7 historic-period buildings were identified in the survey performed for the Klondike III Third Request for Amendment. Of the 56 archaeological resources, 2 were previously recorded and revisited during the current survey. Of the 7 historic-period buildings, 6 were newly record, while one was revisited. As a result of the survey, three Key Activity Areas (KAAs) were identified that include 24 isolates which, while typically not eligible individually for the NRHP, should be tested as part of the larger KAAs. Additional testing is also recommended at site 04/1145 A2-39 due to its association with a homestead complex that is recommended to be eligible for listing in the NRHP. One of the 7 above ground resources, the Potter-Gosson homestead (04/1145 A2-H4) is recommended as being eligible for listing in the NRHP under Criterion A, local significance.

S.3 ARCHAEOLOGICAL OBJECTS AND SITES ON PRIVATE LANDS

OAR 345-021-0010(1)(s)(B) *For private lands, archaeological objects, as defined in ORS 358.905(1)(a), and archaeological sites, as defined in ORS 358.905(1)(c), within the analysis area;*

Response: The survey of the area within the expanded site boundary resulted in identification of 56 archaeological resources, two of which were previously recorded. Additional surveys or testing prior to construction are recommend in high probability areas where ground visibility interfered with detection of potential resources; these additional locations recommended for surveys are identified in appendix S-1.

S.4 ARCHAEOLOGICAL OBJECTS AND SITES ON PUBLIC LANDS

OAR 345-021-0010(1)(s)(C) *For public lands, archaeological sites, as defined in ORS 358.905(1)(c), within the analysis area;*

Response: The expanded site boundary is located entirely on private lands; therefore, an investigation of public lands was not conducted.

S.5 IMPACTS OF PROPOSED PROJECT ON HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES

OAR 345-021-0010(1)(s)(D) *The significant potential impacts, if any, of the construction, operation and retirement of the proposed facility on the resources described in paragraphs (A), (B) and (C) and a plan for protection of those resources that includes at least the following:*

- (i) *A description of any discovery measures, such as surveys, inventories, and limited subsurface testing work, recommended by the State Historic Preservation Officer or the National Park Service of the U.S. Department of Interior for the purpose of locating, identifying and assessing the significance of resources listed in OAR paragraphs (A), (B), and (C).*
- (ii) *The results of the discovery measures described in subparagraph (i), together with an explanation by the applicant of any variations from the survey, inventory, or testing recommended.*
- (iii) *A list of measures to prevent destruction of the resources identified during surveys, inventories and subsurface testing referred to in subparagraph (i) or discovered during construction.*
- (iv) *A completed copy of any permit applications submitted pursuant to ORS 358.920.*

Response: No State of Oregon Archaeological Permit was required for the pedestrian field study within the expanded site boundary, as no subsurface probes were excavated, either in an identified archaeological site or as exploratory probes.

Of the 28 archaeological resources identified within the Amendment 3 survey area, 15 resources are recommended for avoidance if feasible. The avoidance area would include a 30-meter (100-foot) buffer around the defined resource boundaries. Those resources are 04/1145 A2-8 IF, 04/1145 A2-9, 04/1145 A2-10, 04/1145 A2-11, 04/1145 A2-12 IF, 04/1145 A2-13, 04/1145 A2-14 IF, 04/1145 A2-16, 04/1145 A2-17, 04/1145 A2-30, 04/1145 A2-31 IF, 04/1145 A2-32, 04/1145 A2-33, 04/1145 A2-34, and 04/1145 A2-39. In addition, the Potter-Gosson Homestead Ensemble, a historic-period farmstead, has been recommended as eligible for listing on the National Register of Historic Places.

The applicant will avoid all of these resources, including the recommended 30-meter buffer. The avoidance areas will be marked on construction drawings and will be flagged in the field prior to any ground-disturbing activity in the vicinity associated with the Klondike III project. If micro-siting of facilities is done to avoid these areas and is within previously surveyed areas, no additional cultural resource surveys will be conducted. If avoidance these cultural resources requires micro-siting of facilities outside of previously surveyed areas, supplemental cultural resource surveys will be conducted to address the relocated elements. The results of any supplemental surveys, if required, will be submitted to the Oregon Department of Energy.

S.6 PROPOSED MONITORING PROGRAM

OAR 345-021-0010(1)(s)(E) *The applicant's proposed monitoring program, if any, for impacts to historic, cultural and archaeological resources during construction and operation of the proposed facility.*

Response: Survey results have shown that there are potentially significant cultural resources within the expanded site boundary; these resources will be avoided. The

avoidance areas will be regularly monitored by the applicant's construction inspectors to ensure no inadvertent disturbance.

S.7 CONCLUSION

As demonstrated in this Exhibit, the facility is not likely to result in significant adverse impacts to archaeological resources, because cultural resources identified by the survey will be avoided. The expanded project is not likely to have direct effects on the Oregon Trail, because no intact sections remain within the expanded site boundary.

Based on above information, the applicant has satisfied the requirements in OAR 345-0021-0010(1)(s), and the Council may find that the requirements in OAR 345-022-0090 are satisfied.

S.8 REFERENCES

Archaeological Investigations Northwest, Inc. 2007. Cultural Resource Survey for the Proposed Klondike III Wind Project Sherman County Oregon: Supplement III.

APPENDIX S-1

Cultural Resources Analysis Report

[Do not distribute to public]

CONFIDENTIAL

**CULTURAL RESOURCE SURVEY
FOR THE PROPOSED KLONDIKE III WIND PROJECT,
SHERMAN COUNTY, OREGON: SUPPLEMENT III**

By
Mini Sharma, M.S., R.P.A.
David V. Ellis, M.P.A.
and
Elizabeth J. O'Brien, B. Architecture

Prepared for
David Evans and Associates, Inc.
Portland, Oregon

June 21, 2007

Archaeological Investigations Northwest, Inc. Report No. 1932

EXHIBIT W

FACILITY RETIREMENT AND SITE RESTORATION

OAR 345-021-0010(1)(w)

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W.1 INTRODUCTION

OAR 345-021-0010(1)(w) *Information about site restoration, providing evidence to support a finding by the Council as required by OAR 345-022-0050(1). The applicant shall include:*

Response: The requested change in the project will change the cost to retire the site to a useful, non-hazardous condition that allows continued use for agriculture, because it proposes additional turbines, roads and other permanent impacts. Restoring the expanded site area to a useful, non-hazardous condition would require simple removal of all project features to below grade and subsequent soil restoration and revegetation, as previously proposed and approved. The same methods of site restoration as described in the ASC would be used to retire the facilities anticipated in this Third Amendment.

W.2 USEFUL LIFE

OAR 345-021-0010(1)(w)(A) *The estimated useful life of the proposed facility;*

Response: No change to the estimated useful life of the facility will result from the requested change. It is anticipated to have a useful life of 25 to 30 years.

W.3 RETIREMENT AND SITE RESTORATION

OAR 345-021-0010(1)(w)(B) *Specific actions and tasks to restore the site to a useful, non-hazardous condition;*

Response: There is no change in the type of facilities proposed by this amendment, and therefore, there is no change in the type of actions the certificate holder would have to take to retire the facility and reclaim the site to useful condition. For example, the additional turbine foundations will be removed to at least 3 feet below ground level, unwanted farm roads would be removed, and turbines and other structures would be dismantled and removed from the site. However, because the requested change would add turbines and create additional permanent impacts, the cost of retirement would increase. Retirement cost calculations are provided as an appendix to this Exhibit.

W.4 ESTIMATED COST OF RETIREMENT

OAR 345-021-0010(1)(w)(C) *The estimated cost, in current dollars, of the total and unit costs of restoring the site to a useful, non-hazardous condition; and*

Response: The Certificate Holder has calculated the retirement costs for the additional facilities anticipated by this amendment; the proposed project changes resulting from this Third Amendment request result in an additional retirement cost of \$1,625,000.

W.5 METHODS AND ASSUMPTIONS USED IN ESTIMATE

OAR 345-021-0010(1)(w)(D) *A discussion and justification of the methods and assumptions used to estimate the site restoration costs.*

Response: The retirement cost calculated by the Certificate Holder is based on a formula provided by the Department of Energy (see Table W-1).

W.6 PROPOSED MONITORING PLAN FOR HAZARDOUS MATERIALS

OAR 345-021-0010(1)(w)(D) *For facilities that might produce site contamination by hazardous materials, a proposed monitoring plan, such as periodic environmental site assessment and reporting, or an explanation why a monitoring plan is unnecessary.*

Response: A monitoring plan, such as periodic environmental site assessment and reporting would be unnecessary at the expanded site because the facility will not produce any site contamination by hazardous materials.

Appendix W–1

Table W-1

Table W-1

Cost Estimate for Site Restoration	KIIIIa (Cost Guide, 6/6/07)		
	Quantity	Unit Cost	Extension
Turbines			
Disconnect electrical and ready for disassembly (per turbine)	73	\$1,001	\$73,073
Remove turbine blades, hubs and nacelles (per turbine)	73	\$5,206	\$380,038
Remove turbine towers (per net ton of steel)	16060	\$67	\$1,076,020
Remove and load pad transformers (per turbine)	73	\$2,249	\$164,177
Foundation and transformer pad removal (per cubic yard)	2847	\$32	\$91,104
Restore turbines pads and turnouts (per turbine)	73	\$1,297	\$94,681
Met Towers			
Dismantle and dispose of met towers (per tower)	0	\$9,635	\$0
Substation and O&M Building			
Dismantle and dispose of substation	1	\$133,585	\$133,585
Dismantle and dispose of O&M Building	1	\$58,936	\$58,936
Transmission Line			
Removal of 230 kV transmission line (per mile)	0	\$16,031	\$0
Removal of 34.5 kV aboveground transmission line (per mile)	0	\$3,389	\$0
Junction boxes - remove electrical to 4' below grade (each)	5	\$1,321	\$6,605
Access Roads			
Road removal, grading and seeding (per mile)	9.3	\$74,474	\$692,608
Temporary Areas			
Regrading and reseeding area disturbed during restoration work (per acre)	198	\$2,775	\$549,450
Gross Cost Estimate			\$3,320,277
Performance Bond		1%	\$33,203
Administration and Project Management		10%	\$332,028
Future Developments Contingency		10%	\$332,028
Subtotal			\$4,017,535
Total (full cost)			\$4,017,535
Total financial assurance amount (rounded to nearest \$1,000)			\$4,018,000
<i>scrap value</i>	16060	\$149	\$2,392,940
<i>Total (less scrap value)</i>			<i>\$1,624,595</i>
Total (less scrap value) rounded to nearest \$1,000			\$1,625,000

Appendix W–2

Comfort Letter

June 13, 2007

Oregon Energy Facility Siting Council
Oregon Department of Energy
Salem, OR

Global Banking & Markets

101 Park Avenue
New York, NY 10178

Telephone: 212 401 3200
Facsimile: 212 401 3607

Website: www.rbos.com

Ladies and Gentlemen:

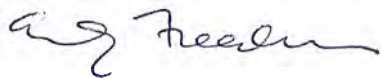
PPM Energy, Inc., is an affiliate of Scottish Power Finance (US) Inc., and Iberdrola SA. Iberdrola SA and its affiliates/subsidiaries are valued clients of The Royal Bank of Scotland plc ("the Bank").

The Bank has provided a letter of credit in the amount of \$2,524,000 on behalf of PPM Energy, Inc., for the project known as the Klondike III Wind Power Facility. It is our understanding that an increase in this letter of credit could be required to the amount of Eight Million (\$8,000,000) dollars, inflation adjusted on an annual basis according to the Gross Domestic Product Implicit Price Deflator Index, subject to a cap of Fifteen Million (\$15,000,000) dollars.

PPM Energy, Inc., has sufficient available letter of credit capacity to support this request under its existing uncommitted financing arrangements with the Bank. There is a reasonable likelihood that the Bank would increase the amount of the letter of credit for this project as stated above, should it be required. This proposal does not constitute a commitment and is subject to our review and acceptance of the terms and conditions of the final contract and required letter of credit form or forms.

You understand, of course, that any arrangement for the final letter of credit or letters of credit is a matter between PPM Energy, Inc., and the Bank and we assume no liability to third parties or to you, if for any reason, we do not execute said increase in the letter of credit.

Sincerely,



The Royal Bank of Scotland plc

EXHIBIT X

NOISE

OAR 345-021-0010(1)(x)

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APPENDIX

- X-1 NOISE ANALYSIS REPORT FOR THE THIRD AMENDMENT TO THE
KLONDIKE III WIND PROJECT

X.1 INTRODUCTION

OAR 345-021-0010(1)(x) *Information about noise generated by construction and operation of the proposed facility, providing evidence to support a finding by the Council that the proposed facility complies with the Oregon Department of Environmental Quality's noise control standards in OAR 340-035-0035. The applicant shall include:*

Response: This amendment seeks to add micro-siting corridors which add up to 43 turbines and shift two existing corridors. For the purposes of this noise analysis, it was assumed that the turbines have a maximum sound power level of 110 dBA and hub height of 100 meters. The noise analysis and turbine layout configuration for this change are provided in Appendix X-1.

X.2 PREDICTED NOISE LEVELS

OAR-345-021-0010(1)(x)(A) *Predicted noise levels resulting from construction and operation of the proposed facility.*

X.2.1 Construction Noise

Response: Noise during construction is not anticipated to change as a result of the project changes, because the same types of equipment will be used.

X.2.2 Operations Noise

Response: The turbines that were evaluated for the new turbine strings will generate 3.0 MW of power and have a maximum sound power level of 110 dBA. The turbines will be located within the 900-foot micro-siting corridor shown in appendix X-1 of this Third Request for Amendment.

X.3 COMPLIANCE WITH OAR 340-035-0035

OAR 345-021-0010(1)(x)(B) *An analysis of the proposed facility's compliance with the applicable noise regulations in OAR 340-035-0035, including a discussion and justification of the methods and assumptions used in the analysis.*

Response: The applicable noise regulations have not changed since submittal of the ASC and are the standards against which the amended project is compared. The analysis for this amendment was performed using the CadnaA Computer Aided Noise Abatement model (DataKustik). The analysis for the First Amended Site Certificate was performed using the SPM9613 model (Power Acoustics, Inc.). CadnaA is a more sophisticated model than the SPM 9613 model. In particular, the CadnaA model has the capability to easily address complex topography and provides more options for addressing ground effects. As a result, some changes are proposed in parameters for ground effects for this amendment relative to the First Amended Site Certificate. The amended facility will comply with noise regulations because no sensitive receptor was modeled as experiencing more than 50 dBA. According to the analysis, noise waivers would be

required at receptors R-1 through R-3 and R-6 through R-10. Waivers at Receptors R-2, R-3, R-6, and R-7 have already been executed. Evidence that waivers for Receptors R-1, R-8, R-9, and R-10 have been acquired will be provided to the Department when received, or the Certificate Holder micro-sites the turbines in such a way that waivers are not necessary, in which case an analysis demonstrating that the 10 dBA increase criteria is met will be provided to the Department.

X.4 DESCRIPTION OF PROPOSED MITIGATION MEASURES

OAR 345-021-0010(1)(x)(C) *Any measures the applicant proposes to reduce noise levels or noise impacts or to address public complaints about noise from the facility.*

Response: As noted above, 8 receptors will require noise waivers because noise will exceed the 10 dBA increase criteria. Evidence of these waivers will be provided to the Department prior to Council action on this amendment request.

X.5 MONITORING PROGRAM

OAR 345-021-0010(1)(x)(D) *Any measures the applicant proposes to monitor noise generated by operation of the facility.*

Response: Because no significant noise impacts are predicted, no monitoring program is proposed.

X.6 CONCLUSION

The noise levels anticipated to be generated by the facility do not exceed specific regulatory levels and are not expected to be significant. To the extent that the project will increase the L₁₀ or L₅₀ by 10 dBA or more at 8 receptors, the Certificate Holder will obtain noise waivers.

X.1 REFERENCES

TW Environmental, Inc. (TWE). 2007. Unpublished Memorandum. Amendment 3 to Klondike III Noise Analysis.

APPENDIX X-1

NOISE ANALYSIS REPORT FOR THE THIRD AMENDMENT TO THE KLONDIKE III WIND PROJECT

Noise Analysis Report for the Klondike IIIa Wind Project



prepared for

David Evans and Associates, Inc.

prepared by

TW Environmental, Inc.
136 NE 28th Avenue
Portland, Oregon 97232

June 2007

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A	Klondike IIIa Wind Project Worst-Case Turbine Locations	
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1.0 Introduction

The Klondike III Wind Project is located in rural, northeast Sherman County, Oregon, approximately seven miles east of the town of Wasco. It is located one mile west of the John Day River at its closest point, approximately five miles south of the Columbia River, and twelve miles east of the Deschutes River. Agriculture, particularly dryland wheat, is the predominant land use and there are very few residential dwellings and agriculture related structures in the vicinity of the project area. An addition to the project, the Klondike IIIa phase is proposed. The Klondike IIIa phase will add or relocate 58 wind turbines in the existing Klondike III project area.

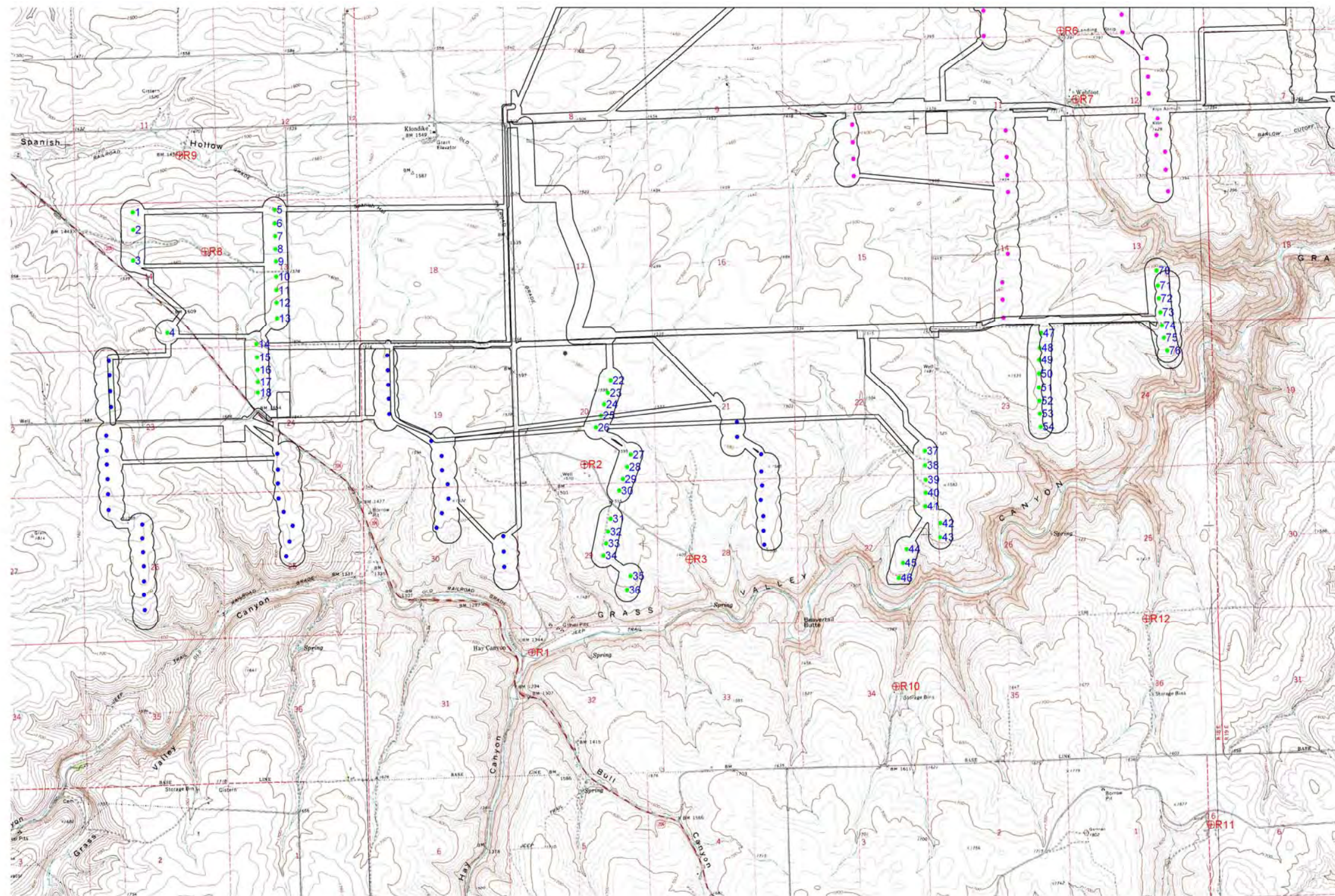
Figure 1 and Figure 1A show the Klondike III and Klondike IIIa turbine configurations. Turbines in previously permitted corridors are now at fixed locations. New turbines and turbines in newly proposed corridors could be micro-sited within the corridors. Figure 1A shows turbines in the northern portion of the project area.

This report presents the analysis of potential sound levels resulting from turbine operations and compares the results to the Oregon Administrative Regulation (OAR) noise source standards.

2.0 Existing Conditions

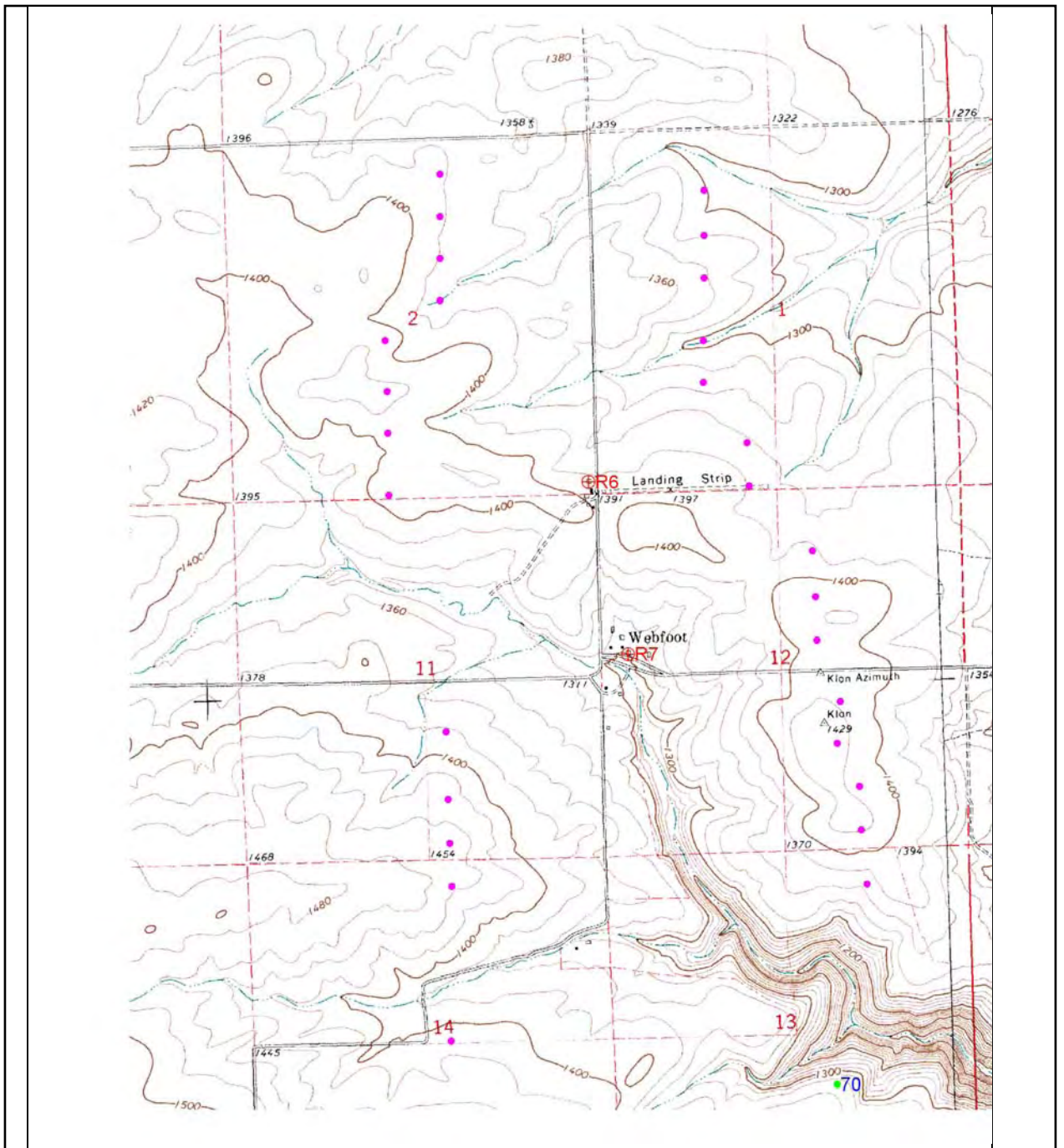
Chapter 340, Division 35 of the Oregon Administrative Rules (OAR 340-035-0035) specifies use of an assumed background L_{50} (sound level exceeded 50 percent of the time or 30 minutes in any hour) ambient noise level of 26 dBA or the actual measured ambient background level. For this project, the assumed background noise level of 26 dBA was used as baseline to represent existing noise conditions.

The project area is rural in nature and existing noise levels can be expected to be low with infrequent noise from agricultural activities.



- Klondike IIIa Turbines
(proposed and shown in
proposed corridors)
- Klondike III Turbines
● GE 1.5 MW (permitted and
shown in permitted corridors)
- Klondike III Turbines
● Siemens 2.3 MW (permitted
and shown in permitted
corridors)
- Klondike III, Amendment 2
Turbine Mitsubishi 2.4 MW
(requested)
- RXX - Receiver Location

Figure 1
Klondike IIIa Noise Analysis
Turbine and Receiver Locations
TW Environmental, Inc.



- Klondike IIIa Turbines (proposed and shown in proposed corridors)
- Klondike III Turbines GE 1.5 MW (permitted and shown in permitted corridors)
- Klondike III Turbines Siemens 2.3 MW (permitted and shown in permitted corridors)
- Klondike III, Amendment 2 Turbine Mitsubishi 2.4 MW (requested)

Figure 1-A
Klondike IIIa Noise Analysis
Turbine Locations
Northern Area

TW Environmental, Inc.

3.0 Methods

3.1 REGULATIONS

Proposed wind energy facilities subject to the jurisdiction of the Energy Facility Siting Council (EFSC) must be shown to comply with the Oregon Department of Environmental Quality's (DEQ) noise control regulations. DEQ regulations in OAR 340-035-0035 establish noise standards for the following three general categories: existing noise sources, new noise sources, and new noise sources located in quiet areas. The project area does not include any areas that would currently be considered quiet areas.

The standards for existing and new sources are the same, but new sources on sites that have not previously been used for commercial or industrial purposes have an additional limit on the allowable increase over existing ambient noise levels. Sources on new sites may not increase the L_{10} or L_{50} statistical noise levels by more than 10 dBA over existing ambient levels. New wind energy facilities may not increase the L_{10} or L_{50} by more than 10 dBA unless the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind energy facility is located. In cases where an easement is not obtained, OAR 340-35-0035(1)(b)(B)(iii)(IV) states:

“For purposes of determining whether a proposed wind energy facility would satisfy the ambient noise standard where a landowner has not waived the standard, noise levels at the appropriate measurement point are predicted assuming that all of the proposed wind facility's turbines are operating between cut-in speed and the wind speed corresponding to the maximum sound power level established by IEC 61400-11 (version 2002-12). These predictions must be compared to the highest of either the assumed ambient noise level of 26 dBA or to the actual ambient background L_{10} and L_{50} noise level, if measured. The facility complies with the noise ambient background standard if this comparison shows that the increase in noise is not more than 10 dBA over this entire range of wind speeds.”

Table 1 summarizes the industrial and commercial noise source standards. The standards apply at noise sensitive properties, which are defined in OAR 340-035-0015(38) as properties normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries. Residences are the only noise sensitive properties identified in the Project area.

Table 1
Oregon DEQ Industrial and Commercial Noise Source Standards

Statistical Descriptor	Existing and New Noise Sources	
	7 am-10 pm	10 pm-7 am
L ₅₀	55	50
L ₁₀	60	55
L ₀₁	75	60

Source: ODEQ 340-035-0035

Because wind turbines do not generate impulse noise, the impulse noise regulations specified in OAR 340-035-0035(1)(d) do not apply. Also, construction noise is exempt from the industrial noise limits in accordance with OAR 340-035-0035(5)(g).

In addition to the limits discussed above, OAR 340-035-0035(1)(f) establishes standards to regulate octave band sound pressure levels and audible discrete tones. Under DEQ's rules, when the Director of DEQ has reasonable cause to believe that the noise standards summarized in Table 1 do not adequately protect the health, safety, or welfare of the public as provided for in ORS Chapter 467, the Department may require the noise source to meet the additional standards contained in OAR 340-035-0035(1)(f).

3.2 MEASUREMENT AND ASSESSMENT PROCEDURES

Noise measurements were not conducted for this analysis. Instead, a background L₅₀ ambient noise level of 26 dBA was assumed in accordance with OAR 340-035-0035. As discussed previously, wind energy facilities must meet the DEQ noise impact criterion for noise levels generated from a wind energy facility at noise sensitive properties as summarized in Table 1, and with an increase of the L₁₀ or L₅₀ by no more than 10 dBA. This effectively allows for an L₁₀ or L₅₀ of no more than 36 dBA (26 dBA background + 10 dBA increase) at noise sensitive properties without a noise easement.

The facility proposes to use Vestas 3.0 megawatt (MW) wind turbines. The maximum sound power level for the turbines determined in accordance with IEC 61400-11 (2002) are shown in Table 2. The turbine hub heights will be 100 meters.

Table 2
Vestas 3.0 MW Turbine Sound Power Levels

Frequency	Sound Power Level (dBA)
63	94
125	98
250	103
500	105
1000	104
2000	101
4000	95
8000	85
Overall	110

IEC 61400-11 is an international standard that specifies acoustic noise measurement techniques for wind turbine generator systems. The standard establishes the “apparent sound power level” at integer wind speeds of 6, 7, 8, 9, and 10 meters per second (wind speed at 10 m height) using a regression analysis with 30 or more pairs of data. Measurements are integrated over a period of not less than one minute. A correction method is used for background noise. The apparent sound power level is then calculated from the background corrected data at the integer wind speeds. The maximum sound power level established by IEC 61400-11 will be the highest sound power level at any integer wind speed over the range of wind speeds. An uncertainty factor is also reported with IEC 61400-11 results and is a function of a number of factors including the quality and number of measurements.

A common sense interpretation of uncertainty indicates that potential variations due to measurement methods or sample size have an equal probability above or below the apparent level. The most likely sound power level for a turbine is the apparent sound power level. As the number of turbines contributing to sound levels at any location increases, the probability of variation above and below the apparent level is equal for each turbine and the cumulative sound power level would be expected to be well represented by the apparent level. For comparison to Oregon noise standards, turbine sound power measurements taken under IEC 61400-11 are generally short-term L_{eq} measurements. These measurements are used to calculate sound levels that are compared to an L_{50} standard. Although wind turbine noise is generally steady, the use of a short-term measurement more generally comparable in energy content to an L_2 for calculating an L_{50} is conservative.

Ten potentially affected sound sensitive properties were identified in the area. All of the sensitive properties identified are residences. The locations of these properties (designated as R1, R2, R3, R6, R7, R8, R9, R10, R11, and R12) are shown on Figure 1. To predict the noise levels from the wind turbines at the sensitive properties, the CadnaA Computer Aided Noise Abatement model,

version 3.6.119 by DataKustik was used. The modeling followed International Standards Organization (ISO) Standards 9613 Parts 1 and 2, which specifically address outdoor propagation and attenuation of sound and engineering methods for calculating environmental noise and abatement. Key assumptions used in the analysis are shown in Table 3 with references.

Table 3
Key Assumptions Used in the Klondike IIIa Noise Analysis

Parameter	Value	Reference
Atmospheric absorption	Temperature - 11°C Relative humidity - 70 %	Previously required by EFSC in modeling for the Klondike III facility
Ground effects	Ground effects calculated in octave bands	ISO 9613-2, Section 7.3.1 – see discussion below
Ground absorption coefficient	G=1 for porous ground	ISO 9613-2, Section 7.3 Ground effects – “Porous ground, which includes ground covered by grass, trees, or other vegetation, and all other ground surfaces suitable for the growth of vegetation, such as farming land.”
Tower locations	Proposed turbines were modeled at their microsituated locations closest to each receptor within the potential 900-foot corridor (except for turbines near R2). This represents a worst-case location relative to noise for each receiver.	
Wind turbine sound power levels	As shown in Table 2	Maximum sound power levels per IEC 61400-11 (2002)

There are two methods for the calculation of ground effects in ISO 9613-2. Both methods have potential weaknesses for evaluating wind turbine noise. The general method of calculation in Section 7.3.1 can account for differences in attenuation by octave band, but is appropriate for ground that is flat or with a constant horizontal slope. The alternative A-weighted method of calculation in Section 7.3.2 cannot account for pure tones and is inaccurate over short distances, but it can generally be used for varying ground slopes.

The overall ground slope between turbines and receivers covers a large distance and is not flat or of constant slope. Wind turbines can potentially have pure tone characteristics. Functionally, because the turbines are very tall and the primary ground effects are expected to occur only near the receivers (within 30 times the height of the receiver or approximately 45 meters), the distance over which ground effects occur is short. The general method of calculation in Section 7.3.1 was chosen for the following reasons:

- For a wind turbine calculation, in most cases the source region (30 times the turbine hub height or approximately 3,000 meters) will be more than 10 meters above ground level and substantial ground effects would not occur.
- Given the large source region distance, the source and receiver regions will overlap for turbines that contribute to sound levels at receivers and no middle region will be included in the calculation.
- Ground effects would be calculated for the region near the receivers (within approximately 45 meters) and within this region, the assumption of approximately flat or constantly sloping ground is fairly reasonable.
- Turbines can have pure tone characteristics that may be important in the analysis.

The previous analyses for the Klondike III Wind Power project (the first site certificate and the first amended site certificate) were performed using the SPM9613, version 2.0 model (Power Acoustics, Inc.). The CadnaA model is a substantially more sophisticated model than the SPM9613 model. In particular, the CadnaA model can incorporate a digital terrain model and effectively address complex topography. The CadnaA model also incorporates both ISO 9613-2 Section 7.3 methods for calculating ground effects, where the SPM9613 model only has the capability to use the Section 7.3.1 method. As a result of the differences in the model capabilities, additional discussion relative to ground effects has been presented and the assumptions used in the analysis are different for this phase of the project than for previous phases.

4.0 Results

The worst-case results for the noise levels at each of the noise sensitive properties in the Klondike IIIa project area are shown in Table 4. The results were generated by shifting each of the turbines in areas potentially affecting a receiver (sensitive property) to the closest location within the proposed turbine corridor, except for R2 where the turbine base position caused sound levels of 50 dBA and shifting turbines toward the receiver within the corridor would be expected to result in levels exceeding the noise standard. Results for turbines affecting R2 are for turbines located at the center of the proposed corridor. The turbine shifts were unique for each receiver and are shown in Figures A-1 through A-7 in Appendix A for receivers R1, R3, R7 (same positions used for R6), R8, R9, R10, and R12 (same positions used for R11).

Table 4
Worst-Case Estimated Operations Noise Levels

Receiver ID	Estimated Noise Level (dBA)
R1	39
R2	50
R3	46
R6	43
R7	43
R8	48
R9	43
R10	39
R11	28
R12	35

Table 4 shows that the estimated noise levels at all sensitive properties do not exceed the DEQ nighttime L₅₀ standard of 50 dBA. Estimated sound levels are above 36 dBA at all sensitive properties except for those represented by R11 and R12.

OAR 340-035-0035 (1)(b)(B)(iii)(III) states that the noise levels from a wind energy facility may increase the ambient statistical noise levels L₁₀ and L₅₀ by more than 10 dBA (but not above the limits in Table 1), if the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind energy facility is located.

Noise easements will be required for properties represented by R1, R2, R8, R9, and R10. Noise easements have already been obtained for properties represented by R3, R6, and R7. The project proponent will obtain the required noise easements or will submit additional analysis showing changes to the turbine locations or sound power levels to reduce sound levels at affected properties to 36 dBA or lower.

5.0 References

DataKustik, 2006. CadnaA Computer Aided Noise Abatement Manual, Version 3.6. DataKustik GmbH, Greifenberg, Germany.

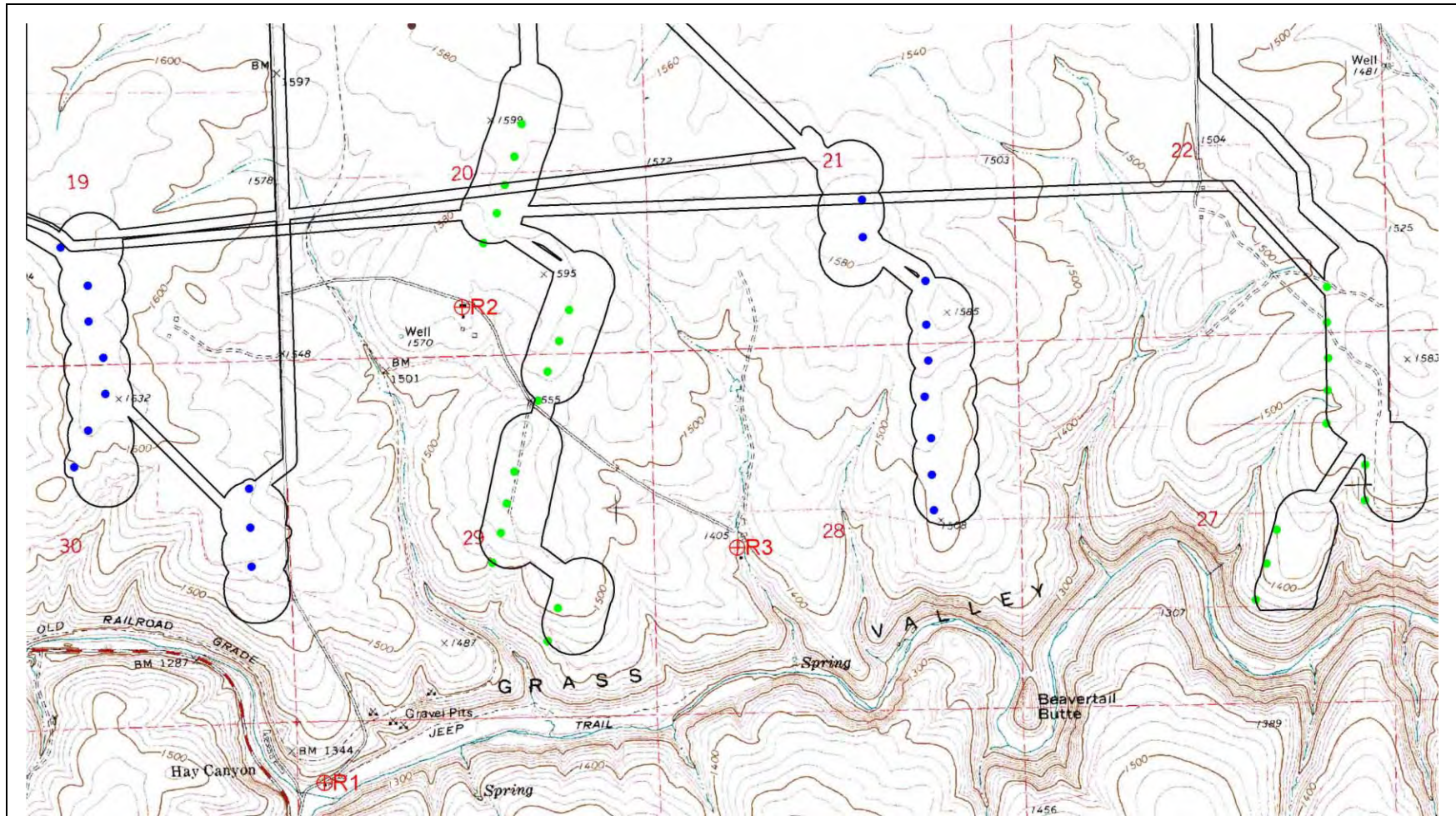
International Electrotechnical Commission (IEC) 61400-14 Ed. 1, *Wind Turbines – Part 14: Declaration of apparent sound power level and tonality values of wind turbines*.

Oregon Administrative Rules (OAR), Department of Environmental Quality (DEQ), Chapter 340, Division 35. *Noise Control Regulations*.

Orr, E.L., W.N. Orr, and E.M. Baldwin. 1992. *Geology of Oregon*, Fourth Edition. Kendall/Hunt Publishing. Dubuque, Iowa.

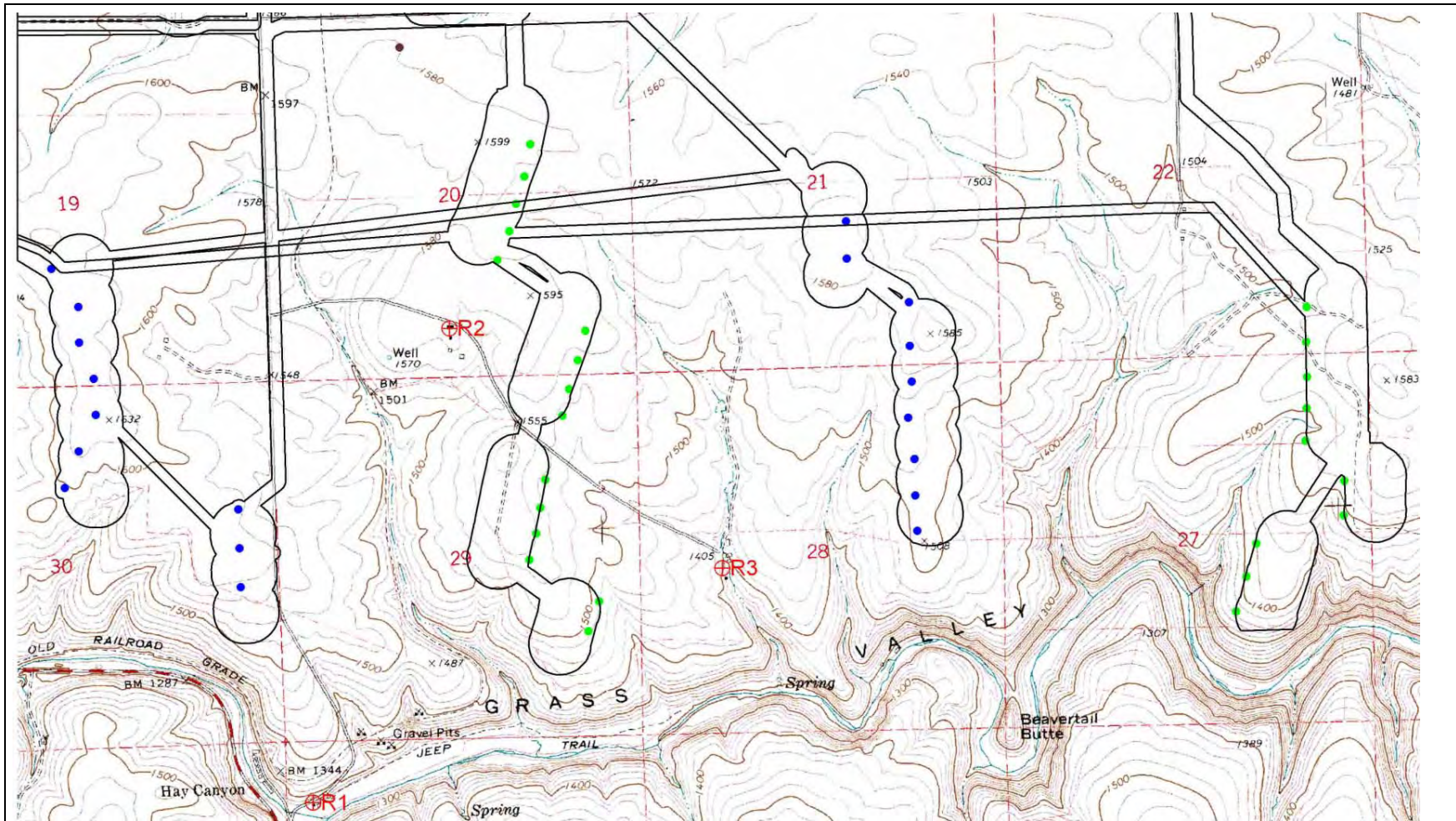
Appendix A

Klondike IIIa Wind Project Worst Case Turbine Locations



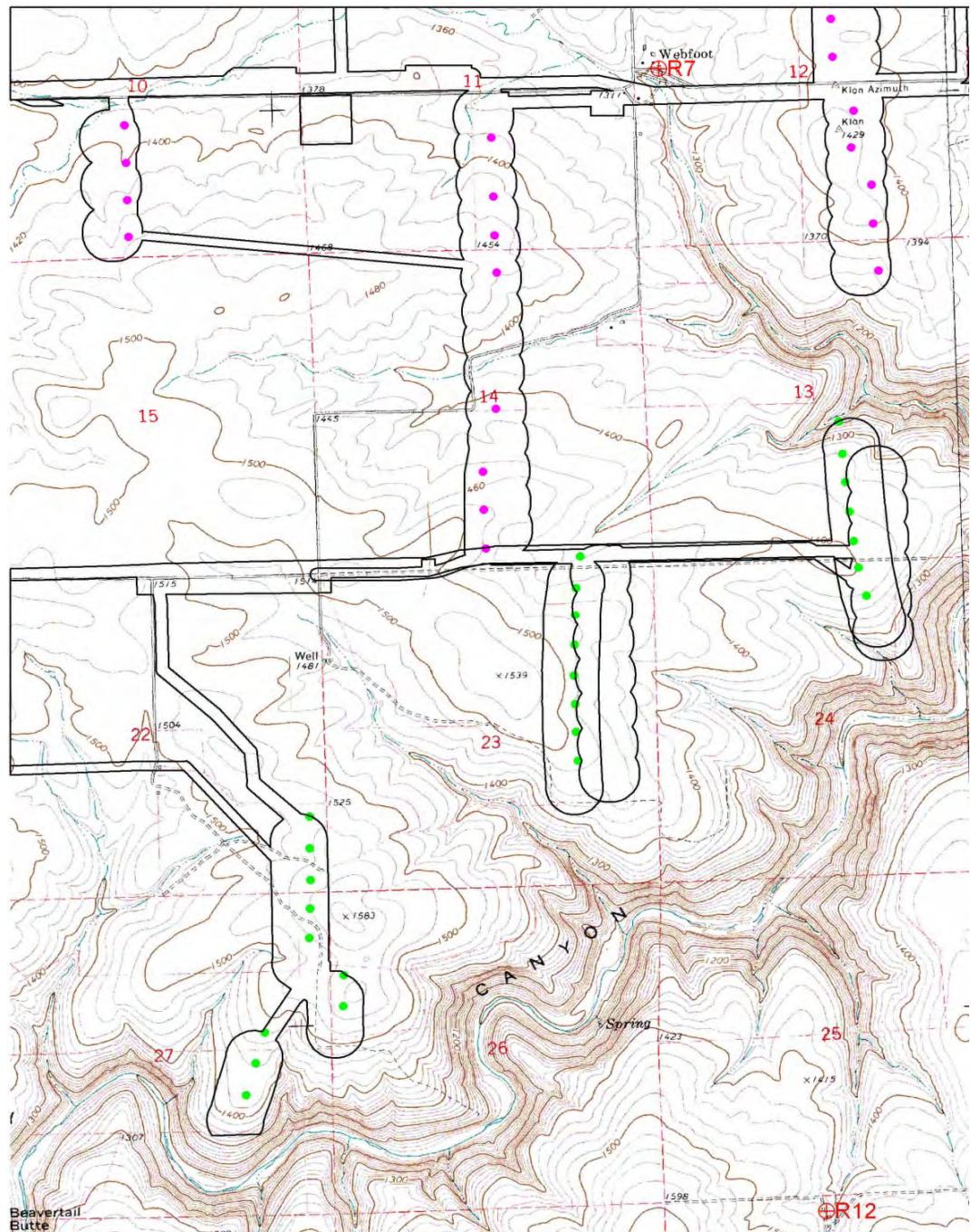
- Klondike IIIa Turbines (proposed and shown in proposed corridors)
- Klondike III Turbines GE 1.5 MW (permitted and shown in permitted corridors)
- Klondike III Turbines Siemens 2.3 MW (permitted and shown in permitted corridors)
- Klondike III, Amendment 2 Turbine Mitsubishi 2.4 MW (requested)

Figure A-1
Klondike IIIa Noise Analysis
Worst Case Turbine Locations for R-1



- Klondike IIIa Turbines (proposed and shown in proposed corridors)
- Klondike III Turbines GE 1.5 MW (permitted and shown in permitted corridors)
- Klondike III Turbines Siemens 2.3 MW (permitted and shown in permitted corridors)
- Klondike III, Amendment 2 Turbine Mitsubishi 2.4 MW (requested)

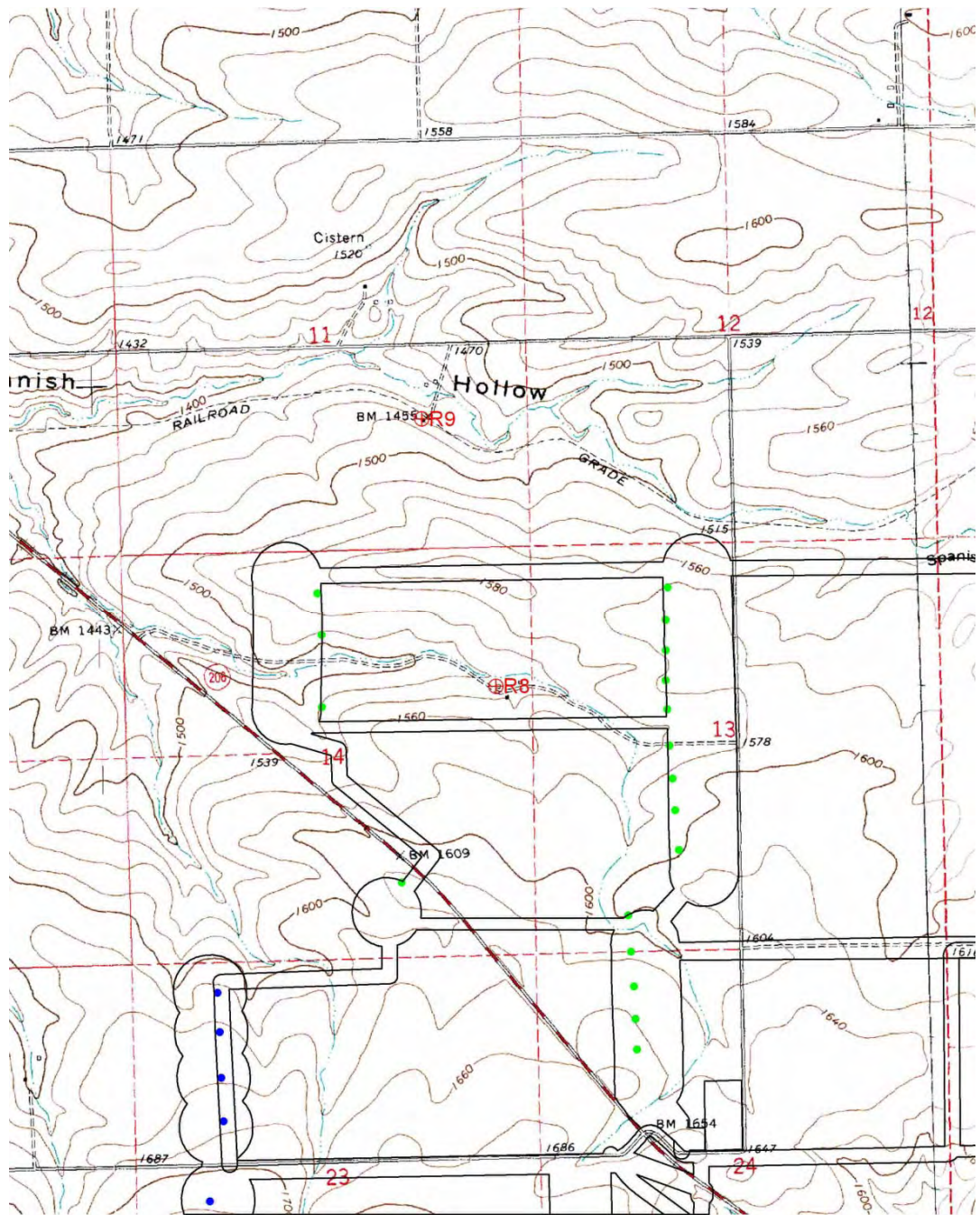
Figure A-2
Klondike IIIa Noise Analysis
Worst Case Turbine Locations for R-3



- Klondike IIIa Turbines (proposed and shown in proposed corridors)
- Klondike III Turbines GE 1.5 MW (permitted and shown in permitted corridors)
- Klondike III Turbines Siemens 2.3 MW (permitted and shown in permitted corridors)
- Klondike III, Amendment 2 Turbine Mitsubishi 2.4 MW (requested)

Figure A-3
Klondike IIIa Noise Analysis
Worst Case Turbine Locations
for R-6 and R-7

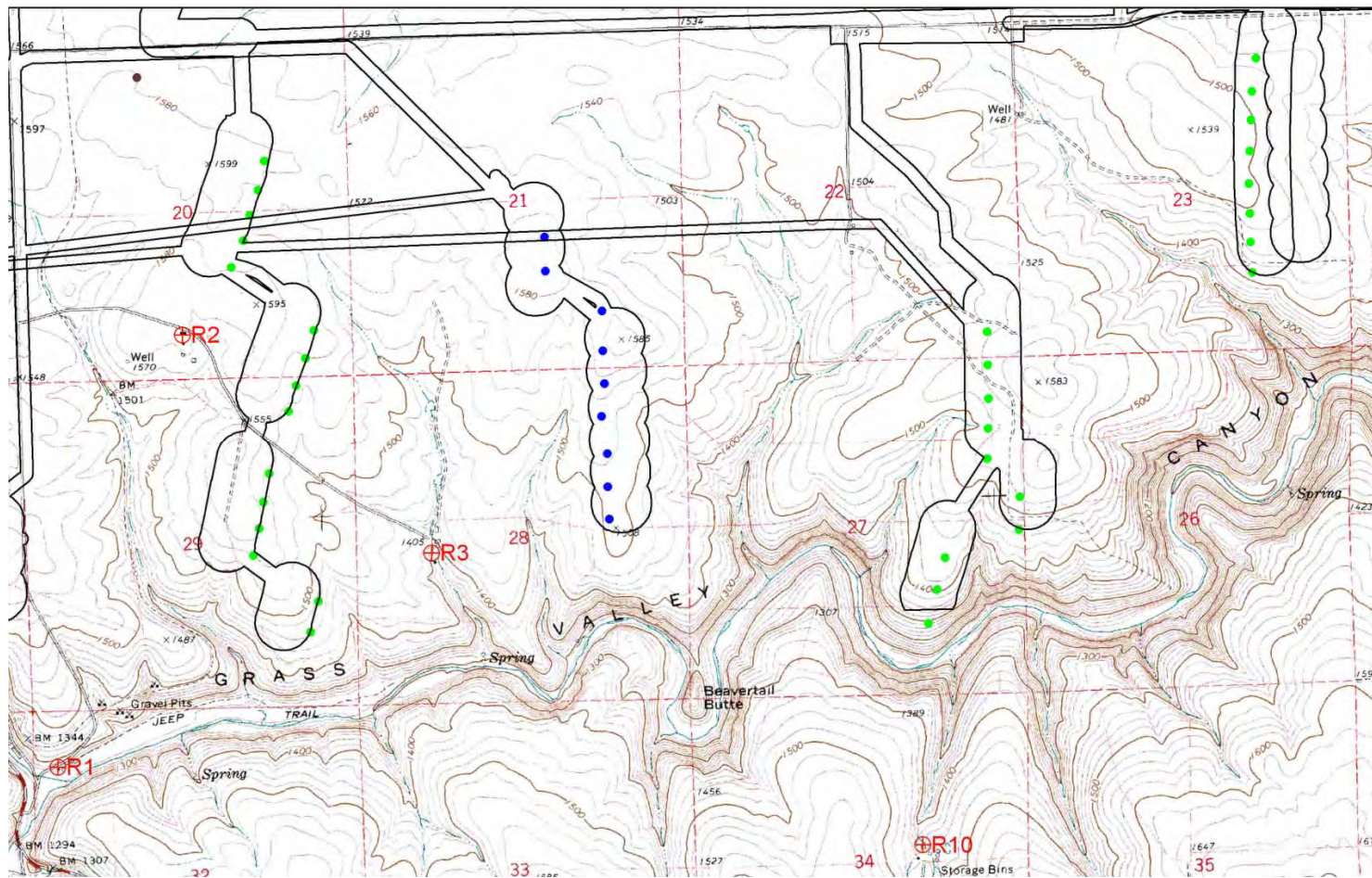
TW Environmental, Inc.



- Klondike IIIa Turbines (proposed and shown in proposed corridors)
- Klondike III Turbines GE 1.5 MW (permitted and shown in permitted corridors)
- Klondike III Turbines Siemens 2.3 MW (permitted and shown in permitted corridors)
- Klondike III, Amendment 2 Turbine Mitsubishi 2.4 MW (requested)

Figure A-4
Klondike IIIa Noise Analysis
Worst Case Turbine Locations
for R-8

TW Environmental, Inc.



- Klondike IIIa Turbines (proposed and shown in proposed corridors)
- Klondike III Turbines GE 1.5 MW (permitted and shown in permitted corridors)
- Klondike III Turbines Siemens 2.3 MW (permitted and shown in permitted corridors)
- Klondike III, Amendment 2 Turbine Mitsubishi 2.4 MW (requested)

Figure A-6
Klondike IIIa Noise Analysis
Worst Case Turbine Locations for R-10

