

*Application for Site Certificate*

# KLONDIKE III WIND PROJECT

KWPAPPDoc18

Submitted to the  
Oregon Energy Facility Siting Council

*Prepared by  
David Evans and Associates, Inc.  
and Stoel Rives, LLP*

April 2005

APPLICATION FOR SITE CERTIFICATE

KLONDIKE III WIND PROJECT

Prepared by David Evans and Associates, Inc. and Stoel Rives, LLP

Submitted to the Oregon Energy Facility Siting Council  
April 2005

# TABLE OF CONTENTS

## **I. AFFIDAVIT OF AUTHENTICITY**

## **II. EXHIBITS**

<b>Exhibit A:</b>	Applicant Information .....	Tab A
<b>Exhibit B:</b>	Project Description .....	Tab B
<b>Exhibit C:</b>	Project Location.....	Tab C
<b>Exhibit D:</b>	Applicant's Organizational, Managerial and Technical Expertise.....	Tab D
<b>Exhibit E:</b>	Permits for Construction and Operation.....	Tab E
<b>Exhibit F:</b>	Names and Mailing Addresses of All Owners of Record .....	Tab F
<b>Exhibit G:</b>	Materials Analysis .....	Tab G
<b>Exhibit H:</b>	Geology and Soil Suitability .....	Tab H
<b>Exhibit I:</b>	Soil Conditions .....	Tab I
<b>Exhibit J:</b>	Wetlands.....	Tab J
<b>Exhibit K:</b>	Compliance with Statewide Planning Goals .....	Tab K
<b>Exhibit L:</b>	Protected Areas.....	Tab L
<b>Exhibit M:</b>	Financial Capability.....	Tab M
<b>Exhibit N:</b>	Not Applicable.....	Tab N
<b>Exhibit O:</b>	Water Requirements .....	Tab O
<b>Exhibit P:</b>	Fish and Wildlife Habitats and Species.....	Tab P
<b>Exhibit Q:</b>	Threatened and Endangered Plant and Animal Species .....	Tab Q
<b>Exhibit R:</b>	Scenic and Aesthetic Values.....	Tab R
<b>Exhibit S:</b>	Historic, Cultural and Archaeological Resources.....	Tab S
<b>Exhibit T:</b>	Recreational Opportunities.....	Tab T
<b>Exhibit U:</b>	Ability of Public and Private Providers to Provide Services.....	Tab U
<b>Exhibit V:</b>	Generation of Solid Waste and Wastewater.....	Tab V
<b>Exhibit W:</b>	Facility Retirement and Site Restoration.....	Tab W
<b>Exhibit X:</b>	Noise Generation .....	Tab X
<b>Exhibit Y:</b>	Not Applicable.....	Tab Y
<b>Exhibit Z:</b>	Not Applicable.....	Tab Z
<b>Exhibit AA:</b>	Electric Transmission Line.....	Tab AA
<b>Exhibit BB:</b>	Other Information.....	Tab BB
<b>Exhibit CC:</b>	Applicable Statutes, Administrative Rules and Local Government Ordinances.....	Tab CC

**EXHIBIT A**

**APPLICANT INFORMATION**

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

**TABLE OF CONTENTS**

	Page
A.1 NAME AND ADDRESS OF APPLICANT AND CONTACT PERSON .....	1
A.2 PARTICIPANT INFORMATION .....	1
A.3 CORPORATE INFORMATION .....	2
A.4 PARENT COMPANY INFORMATION.....	3
A.5 MISCELLANEOUS INFORMATION.....	3

**APPENDICES**

- A-1 ARTICLES OF ORGANIZATION
- A-2 AUTHORIZATION FOR SUBMITTING THE APPLICATION

**A.1 NAME AND ADDRESS OF APPLICANT AND CONTACT PERSON**

**OAR 345-021-0010(1)(a)(A)** *The name and address of the applicant including all co-owners of the proposed facility, the name, mailing address and telephone number of the contact person for the application, and if there is a contact person other than the applicant, the name, title, mailing address and telephone number of that person;*

Response:

Applicant's name and address are:

Klondike Wind Power III LLC (Klondike III)  
c/o PPM Energy, Inc.  
1125 NW Couch Street, Suite 700  
Portland, OR 97209

Contact person, address and phone number:

Jesse Gronner  
PPM Energy, Inc.  
1125 NW Couch Street, Suite 700  
Portland, OR 97209  
(503) 796-7045

**A.2 PARTICIPANT INFORMATION**

**OAR 345-021-0010(1)(a)(B)** *The contact name, address and telephone number of all participating persons, other than individuals, including but not limited to any parent corporation of the applicant, persons upon whom the applicant will rely for third-party permits or approvals related to the facility, and, if known, other persons upon whom the applicant will rely in meeting any facility standard adopted by the Council.*

Response:

**Parent Companies:**

PPM Energy, Inc.  
1125 NW Couch Street, Suite 700  
Portland, OR 97209

PacifiCorp Holdings, Inc.  
825 NE Multnomah Street  
Portland, OR 97232

Contact person, address and phone number:

Jesse Gronner  
PPM Energy, Inc.

1125 NW Couch Street, Suite 700  
Portland, OR 97209  
(503) 796-7045

**Permitting Assistance:**

At this time, no third party permits are expected to be required to complete the project. However, if it becomes necessary to open an additional (new or expanded) area for a batch plant, the contractor would be responsible for obtaining any federal, state or local approvals.

**A.3 CORPORATE INFORMATION**

**OAR 345-021-0010(1)(a)(C)** *If the applicant is a corporation, it shall give: (i) The full name, official designation, mailing address, and telephone number of the officer responsible for submitting the application; (ii) The date and place of its incorporation; (iii) A copy of its articles of incorporation and its authorization for submitting the application; and (iv) In the case of a corporation not incorporated in Oregon, the name and address of the resident attorney-in-fact in this state and proof of registration to do business in Oregon.*

- (i) *The full name, official designation, mailing address and telephone number of the officer responsible for submitting the application;*

Response: Information for the officer responsible for submitting the application follows:

Peter C. van Alderwerelt  
Vice President  
Klondike Wind Power III LLC  
1125 NW Couch Street, Suite 700  
Portland, OR 97209  
(503) 796-7091

- (ii) *The date and place of its incorporation;*

Response: Klondike III was organized and acknowledged by the Oregon Secretary of State on January 27, 2005, in Oregon.

- (iii) *A copy of its articles of incorporation and its authorization for submitting the application; and*

Response: A copy of the articles of organization is attached as Appendix A-1. Klondike III's authorization for submitting the application is set forth in the Operating Agreement of Klondike Wind Power III LLC and is attached as Appendix A-2.

- (iv) *In the case of a corporation not incorporated in Oregon, the name and address of the resident attorney-in-fact in this state and proof of registration to do business in Oregon.*

Response: Not applicable. Klondike III is organized in Oregon.

#### A.4 PARENT COMPANY INFORMATION

**OAR 345-021-0010(1)(a)(D)** *If the applicant is a wholly owned subsidiary of a company, corporation, or other business entity, in addition to the information required by paragraph (C), it shall give the full name and business address of each of the applicant's full or partial owners.*

Response:

PPM Energy, Inc.  
1125 NW Couch Street, Suite 700  
Portland, OR 97209

#### A.5 MISCELLANEOUS INFORMATION

**OAR 345-021-0010(1)(a)(E)** *If the applicant is an association of citizens, a joint venture or a partnership, it shall give: (i) the full name, official designation, mailing address and telephone number of the person responsible for submitting the application; (ii) the name, business address and telephone number of each person participating in the association, joint venture or partnership and the percentage interest held by each; (iii) proof of registration to do business in Oregon; (iv) a copy of its articles of association, joint venture agreement or partnership agreement and a list of its members and their cities of residence; and (v) if there are no articles of association, joint venture agreement or partnership agreement, the applicant shall state that fact over the signature of each member.*

Response: The Applicant is not an association of citizens, a joint venture, or a partnership.

**OAR 345-021-0010(1)(a)(F)** *If the applicant is a public or governmental entity, it shall give: (i) the full name, official designation, mailing address and telephone number of the person responsible for submitting the application; and (ii) written authorization from the entity's governing body to submit an application.*

Response: The Applicant is not a public or governmental entity.

**OAR 345-021-0010(1)(a)(G)** *If the applicant is an individual, the individual shall give his or her mailing address and telephone number.*

Response: The Applicant is not an individual.

**APPENDIX A-1**  
**Articles of Organization**







Secretary of State  
Corporation Division  
255 Capitol Street NE, Suite 151  
Salem, OR 97310-1327

Phone:(503)986-2200  
Fax:(503)378-4381  
www.filinginoregon.com

Registry Number: 265807-95  
Type: DOMESTIC LIMITED LIABILITY COMPANY

KLONDIKE WIND POWER III LLC  
C/O OFFICE OF GENERAL COUNSEL-LEGAL DEPT  
825 NE MULTNOMAH STE 1800  
PORTLAND OR 97232

### Acknowledgment Letter

The document you submitted was recorded as shown below. Please review and verify the information listed for accuracy.

If you have any questions regarding this acknowledgement, contact the Secretary of State, Corporation Division at (503)986-2200. Please refer to the registration number listed above. A copy of the filed documentation may be ordered for a fee of \$5.00. Submit your request to the address listed above or call (503)986-2317 with your Visa or MasterCard number.

**Document**  
ARTICLES OF ORGANIZATION

**Filed On**  
01/27/2005

**Jurisdiction**  
OREGON

**Name**  
KLONDIKE WIND POWER III LLC

**Registered Agent**  
C T CORPORATION SYSTEM  
388 STATE ST STE 420  
SALEM OR 97301

**Mailing Address**  
C/O OFFICE OF GENERAL COUNSEL-LEGAL DEPT  
825 NE MULTNOMAH STE 1800  
PORTLAND OR 97232

265807-95

ARTICLES OF ORGANIZATION  
OF  
KLONDIKE WIND POWER III LLC  
An Oregon Limited Liability Company

FILED  
JAN 27 2005  
OREGON  
SECRETARY OF STATE

ARTICLE I

The name of the limited liability company (the "Company") is Klondike Wind Power III LLC.

ARTICLE II

The Company shall have perpetual existence.

ARTICLE III

The name of the initial registered agent is CT Corporation System and the address of the initial registered office is 388 State Street, Suite 420, Salem, Oregon 97301.

ARTICLE IV

The address where the Division may mail notices is c/o Office of General Counsel, 825 NE Multnomah, Legal Department - Suite 1800, Portland, Oregon 97232.

ARTICLE V

The Company shall be managed by one or more managers.

ARTICLE VI

The name and address of the organizer is Douglas A. Kusyk, 825 NE Multnomah, Suite 1800, Portland, Oregon 97232.

ARTICLE VII

ORS 63.185(4) shall not apply in the event an additional or substitute member is admitted to the Company.

265807-95

ARTICLE VIII

These Articles of Organization may be amended, restated or modified from time to time by members holding more than fifty percent (50%) of the votes held by members then entitled to vote, consent to or otherwise decide any matter submitted to the members, as determined pursuant to the operating agreement of the Company; provided that any amendment to these Articles of Organization that would or could have the effect of changing the number of managers or any person specified as a manager under the operating agreement of the Company, changing a required voting percentage for approval of any matter or a member's voting rights or altering the interest of one or more members in profits, losses, similar items or any Company distribution shall require the affirmative vote of all members then entitled to vote.

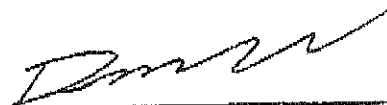
ARTICLE IX

To the fullest extent the Oregon Limited Liability Company Act, as it exists on the date hereof or may hereafter be amended, permits the limitation or elimination of liability of managers or members, a manager or member shall not be liable to the Company or the other members for monetary damages for conduct as a manager or member. Any amendment to or repeal of this Article IX shall not adversely affect any right or protection of a manager or member for or with respect to any acts or omissions of such manager or member occurring prior to such amendment or repeal.

ARTICLE X

The effective date of the Company's existence is the date of filing of these Articles of Organization by the Secretary of State.

DATED this 26<sup>th</sup> day of January, 2005.

  
Douglas A. Kusy, Organizer



## **APPENDIX A-2**

### **Authorization for Submitting the Application**



**OPERATING AGREEMENT**  
**OF**  
**KLONDIKE WIND POWER III LLC**



TABLE OF CONTENTS

Page

<b>ARTICLE 1 ORGANIZATION AND PURPOSES OF COMPANY</b> .....	<b>1</b>
1.1 Organization.....	1
1.2 Purposes and Powers.....	1
1.3 No Personal Liability.....	1
<b>ARTICLE 2 MANAGEMENT</b> .....	<b>1</b>
2.1 Management by Manager.....	1
2.2 Authority.....	2
2.3 Limitation of Liability.....	3
2.4 Discharge of Management Duties.....	3
2.5 Compensation and Reimbursement.....	3
2.6 Indemnification.....	3
2.7 Signature Authority.....	4
<b>ARTICLE 3 RIGHTS OF MEMBERS</b> .....	<b>4</b>
3.1 Voting Rights.....	4
3.2 Economic Rights.....	4
3.3 Approval of Members.....	4
3.4 Meetings; Other Action by Members.....	5
3.5 Withdrawal.....	5
<b>ARTICLE 4 CONFLICTS OF INTEREST</b> .....	<b>5</b>
4.1 Duty of Loyalty.....	5
4.2 Loans and Other Transactions with Company.....	6
<b>ARTICLE 5 ADDITIONAL MEMBERS</b> .....	<b>6</b>
<b>ARTICLE 6 TRANSFERS OF INTERESTS</b> .....	<b>7</b>
6.1 Restriction on Transfers.....	7
6.2 Permitted Transfers.....	7
6.3 Conditions to Permitted Transfers.....	7
6.4 Rights and Obligations of Assignees and Assignors.....	8
6.5 Admission of Assignee as Substitute Member.....	9
6.6 Effect of Admission of Substitute Member.....	9
<b>ARTICLE 7 DISSOLUTION AND WINDING UP</b> .....	<b>9</b>
7.1 Dissolution Events.....	9
7.2 Winding Up.....	10
7.3 Establishment of Trust or Reserves.....	11
7.4 Notices of Dissolution Event, Etc.....	11
<b>ARTICLE 8 BOOKS, RECORDS AND ACCOUNTINGS</b> .....	<b>11</b>
8.1 Books and Records.....	11
8.2 Reports.....	12
8.3 Rights of Members; Inspection.....	12
<b>ARTICLE 9 AMENDMENT</b> .....	<b>13</b>

<b>ARTICLE 10 MISCELLANEOUS</b> .....	<b>13</b>
10.1 Application of Oregon Law.....	13
10.2 Construction.....	13
10.3 Counterparts; Facsimiles.....	13
10.4 Waiver of Partition.....	14
10.5 Execution of Additional Instruments.....	14
10.6 Headings.....	14
10.7 Heirs, Successors and Assigns.....	14
10.8 Notices and Consents, Etc.....	14
10.9 Severability.....	14
10.10 Waivers.....	15
10.11 Entire Agreement.....	15

**OPERATING AGREEMENT  
OF  
KLONDIKE WIND POWER III LLC**

This OPERATING AGREEMENT of KLONDIKE WIND POWER III LLC, an Oregon limited liability company (the “**Company**”), entered into by PPM Energy, Inc., an Oregon corporation and the initial Member of the Company (the “**Initial Member**”), and any other Members or successors to interests in the Company, is effective January 27, 2005 (this “**Agreement**”). Capitalized terms used in this Agreement shall have the meanings ascribed thereto in Schedule A.

**ARTICLE 1  
ORGANIZATION AND PURPOSES OF COMPANY**

**1.1 Organization.**

The Company was created by the execution and filing of the Articles under the Act. The Initial Member agrees to conduct the Company’s business and affairs consistent with this Agreement, the Act and the Articles. The Initial Member shall from time to time contribute such Property to the Company as is agreed upon by the Company and the Initial Member.

**1.2 Purposes and Powers.**

The Company shall have all powers provided for in the Act and may engage in any lawful business permitted by the Act or the laws of any jurisdiction in which the Company may do business.

**1.3 No Personal Liability.**

The Company is an Oregon limited liability company and not a general or limited partnership. No Member shall have personal liability for any Company operations, debts, obligations or liability merely as a result of being a Member.

**ARTICLE 2  
MANAGEMENT**

**2.1 Management by Manager.**

Pursuant to the Articles, the Company is manager-managed. The Company shall have one Manager, who may but need not be a Member, may be a natural person or an Entity and need not be a resident of Oregon. The Manager shall initially be PPM Energy, Inc.

## 2.2 Authority.

The Manager shall have full and complete authority, power and discretion to manage and control the business, affairs and properties of the Company, to make all decisions regarding those matters listed below in this Section 2.2 or that this Agreement or the Act does not make expressly subject to approval by the Members, and to perform any and all other acts or activities necessary, customary, desirable or incident to the management of the Company's business. Notwithstanding any provision of the Act to the contrary, the Manager shall have authority to take the following actions on behalf of the Company without any consent of the Members:

(a) To cause the Company to borrow money for any purpose of the Company from financial institutions, the Manager, a Member, or any affiliate of the Manager or a Member on such terms and conditions as are commercially reasonable in the judgment of the Manager;

(b) In connection with any borrowing by the Company, to hypothecate, encumber and grant security interests in any or all of the Company Property to secure repayment of the borrowed sums;

(c) To acquire, improve, manage, charter, operate, lease, sell, transfer, exchange, encumber, pledge or dispose of any or all Company Property (whether in any such case in a single transaction of all or substantially all of the Company Property or in individual transactions), including without limitation in a transaction on terms and conditions that are commercially reasonable in the judgment of the Manager between the Company and either the Manager or a Member;

(d) To cause the Company to merge or otherwise combine with any other entity on terms and conditions that are commercially reasonable in the judgment of the Manager; and

(e) To execute instruments and documents, including without limitation checks, drafts, notes and other negotiable instruments, leases, mortgages or deeds of trust, security agreements, financing statements, deeds, assignments, bills of sale and other documents providing for the acquisition, mortgage or disposition of Company Property, partnership agreements, operating agreements of other limited liability companies, power purchase or sale agreements and any other instruments or documents necessary, in the opinion of the Manager, to the business of the Company.

Unless authorized to do so by this Agreement or by the Manager, no Member, employee or other agent of the Company shall have any power or authority to bind the Company in any way, to pledge its credit or to render it liable for any purpose.

### **2.3 Limitation of Liability.**

The Manager shall not be personally liable for any debt, obligation or liability of the Company merely by reason of being the Manager.

### **2.4 Discharge of Management Duties.**

The Manager shall discharge the duties of manager in good faith, with the care an ordinarily prudent person in a like position would exercise under similar circumstances and in a manner the Manager reasonably believes to be in the best interests of the Company. The Manager shall devote to the Company and apply to the accomplishment of Company purposes so much of time and attention as in the judgment of the Manager is reasonably necessary to manage and operate properly and prudently the affairs of the Company. The Manager may delegate the oversight and management of the day-to-day operations of the Company to such designees as the Manager may determine from time to time and may cause any such designee to be an officer of the Company with such powers and authority as the Manager may from time to time prescribe in writing.

### **2.5 Compensation and Reimbursement.**

During the term of this Agreement, the Manager may receive a management fee in such amount as is determined from time to time by the Manager. The Manager shall also be reimbursed on a monthly basis, or such other basis as the Manager may determine, for all out-of-pocket expenses the Manager incurs on behalf of the Company and for other expenses incurred by the Manager (such as rent and other office expenses, travel expenses, compensation expenses of employees and agents, accounting and legal fees, and general overhead) to the extent that such expenses are, in the reasonable judgment of the Manager, allocable to the Company.

### **2.6 Indemnification.**

To the fullest extent provided or allowed by the laws of Oregon, the Company shall indemnify the organizer, the Manager, each officer of the Company performing the duties of the Manager pursuant to Section 2.4 and each Member from and against all costs, losses, liabilities, damages, claims and expenses (including without limitation attorneys' fees and costs as incurred on trial and on appeal) incurred in the capacity of organizer, manager, officer or member or in any other capacity on behalf of the Company, including without limitation claims arising from any such Person's actions or inactions taken or omitted as organizer or a manager, officer or member or in any other capacity in furtherance of the business or affairs of the Company, whether taken prior to or subsequent to the formation of the Company; provided that the foregoing shall not eliminate or limit any such Person's liability for:

(a) Any breach of the duty of loyalty to the Company or the Members as described in this Agreement;

(b) Acts or omissions not in good faith which involve intentional misconduct or a knowing violation of law;

(c) Any unlawful distribution under the Act; or

(d) Any transaction not expressly approved or ratified by a Majority of the Members or permitted under this Agreement from which the Manager derives an improper personal benefit.

### **2.7 Signature Authority.**

The signature of the Manager or of any officer of the Company then serving pursuant to Section 2.4 and authorized by the Manager shall be necessary and sufficient to bind the Company, and a copy of this Agreement may be shown to the appropriate parties in order to confirm the same.

## **ARTICLE 3 RIGHTS OF MEMBERS**

### **3.1 Voting Rights.**

All Members (other than a Member that, pursuant to Section 6.4(b), has ceased to be entitled to vote) shall be entitled to vote on or consent to any matter submitted to a vote of, or requiring consent from, the Members. A Member entitled to vote may exercise by vote or consent that number of votes determined by multiplying the decimal equivalent of the Percentage Interest of the Member by 100.

### **3.2 Economic Rights.**

The Members shall share in profits, losses or any other items allocable to any period and in distributions of Company Property in accordance with Percentage Interests. Notwithstanding the foregoing, however, distributions following any dissolution of the Company shall be made in accordance with Section 7.2.

### **3.3 Approval of Members.**

Any action or transaction that requires the approval of the Members under this Agreement shall be authorized upon the affirmative vote, implementing action or written consent of a Majority of the Members unless either this Agreement or the Articles expressly imposes a higher standard for approval by the Members, in which case the specified approval of the Members shall be required for such action or transaction. Any Member (including the Manager) that has an interest in the outcome of a matter submitted to the Members for a vote may vote and have such vote as a Member counted upon such matter.

### **3.4 Meetings; Other Action by Members.**

Any Member or Manager may call a meeting of the Members, and the meeting shall be held in the principal executive office of the Company or at such other place and at such time as is specified in the notice of such meeting given by such Member or Manager. Members may participate in or conduct meetings through telephonic or other means of communication by which all authorized representatives (or proxy holders) of the Members participating may simultaneously communicate with each other. Members may take any action without a meeting, either by written consent describing the action taken or by implementing action (including but not limited to execution of documents), effective as of the date of signature by the necessary Members or such other date as is set forth therein. Any such consent or evidence of implementing action shall be maintained in the Company records. The attendance of a Member at a meeting shall constitute a waiver of objection to lack of notice or defective notice of the meeting, unless the Member objects at the beginning of the meeting to holding the meeting or transacting business at the meeting. A waiver of notice by a Member, given either before or after a meeting, shall be equivalent to the giving of notice of the meeting to such Member. There shall be no quorum requirement for any meeting of Members but any action that requires a vote of Members shall be approved at a meeting only upon receiving the vote of a Majority of the Members or such other vote as is required under this Agreement. Action not within the purposes described in a meeting notice may be taken at the meeting provided that such action is approved at the meeting by a Majority of the Members or such other vote as is required under this Agreement.

### **3.5 Withdrawal.**

Notwithstanding any provision of the Act to the contrary, no Member has the power to withdraw voluntarily from the Company. A Member that purports to withdraw voluntarily from the Company prior to any dissolution of the Company shall be in breach of this Agreement, shall be liable to the Company for any damages arising directly or indirectly from such purported withdrawal, shall cease to be a Member but shall continue to hold Economic Rights in the Company as an Assignee and shall not be entitled to any distribution from the Company by reason of such withdrawal.

## **ARTICLE 4 CONFLICTS OF INTEREST**

### **4.1 Duty of Loyalty.**

The Manager and each Member may engage in other business activities and may pursue business opportunities competitive with the business and operations of the Company without presenting any such opportunity to the Company or the Members, and the Company, the Manager and each Member hereby waives any right or claim to participate therein. Notwithstanding the foregoing, however, unless otherwise expressly approved or ratified by

a Majority of the Members or otherwise permitted under this Agreement, the Manager and each Member shall account to the Company and hold as trustee for the Company any benefit or any profits derived by such Member or Manager from any transaction connected with the formation, conduct or winding up of the Company or from any use of Company Property by such Member or Manager, including without limitation any information developed for the Company or any opportunity expressly offered to the Company.

#### **4.2 Loans and Other Transactions with Company.**

The Company may borrow money or transact other business with the Manager or a Member on terms that are commercially reasonable determined by the Manager in its reasonable discretion. The rights and obligations of a Member or Manager that lends money to or transacts business with the Company shall be the same as those of a Person that is not a Member or Manager, subject to other applicable law. No transaction with the Company shall be voidable solely because a Member or a Manager has a direct or indirect interest in the transaction if the transaction is expressly permitted by this Agreement or is approved or ratified as provided in this Agreement or in the Act.

### **ARTICLE 5 ADDITIONAL MEMBERS**

One or more Additional Members may be admitted only if the Manager and all of the Members consent to any such admission, which consent may be given or arbitrarily withheld in the sole and absolute discretion of the Manager and each Member. Any Additional Member shall make such contribution to the Company in cash or other Property as is agreed upon in writing by the Manager, the Members and the Additional Member, which writing shall specify the value of the Additional Member's contribution, the time for making such contribution, the respective Percentage Interest of each Member following such contribution and, if the admission of the Additional Member will cause there to be more than two "Members" for tax purposes, the partnership tax provisions governing the Company effective upon the admission of the Additional Member (unless such provisions have been adopted in connection with any earlier admission of an Additional Member or Substitute Member). Notwithstanding the foregoing, a Person shall not become an Additional Member unless and until such Person becomes a party to this Agreement as a Member by signing a counterpart signature page to this Agreement and executing such documents and instruments as the Manager reasonably may request to confirm such Person as a Member in the Company and such Person's agreement to be bound by the terms and conditions of this Agreement.



**ARTICLE 6  
TRANSFERS OF INTERESTS**

**6.1 Restriction on Transfers.**

Except as otherwise permitted by Section 6.2, no Member or Assignee shall Transfer all or any portion of such Person's interest in the Company. Any purported Transfer not permitted under Section 6.2 shall be null and void and of no force or effect whatsoever.

**6.2 Permitted Transfers.**

Subject to the conditions and restrictions set forth in Sections 6.3 and 6.4, a Member or Assignee may at any time Transfer all or any portion of such Person's interest in the Company:

(a) To any other Member;

(b) In the case of the Initial Member, or any successor to any or all of the interest of the Initial Member in the Company, to any transferee acceptable to the Initial Member or such successor in the sole and arbitrary discretion of such Member or successor, whichever is the Assignor;

(c) In any involuntary Transfer by operation of law; or

(d) To any transferee upon the consent of the Manager and a Majority of the Members, taking into account, in the case of the latter, only the non-Transferring Members.

Notwithstanding any provision of this Section 6.2 apparently to the contrary, any permitted Assignee under this Section 6.2 shall be admitted as a Substitute Member only in accordance with Section 6.5 except that (i) an Assignee described in Section 6.2(a), 6.2(b) or 6.2(c) shall be automatically admitted as a Substitute Member with respect to the interest acquired without any action pursuant to Section 6.5, unless otherwise expressly provided in connection with such Transfer, and (ii) an Assignee in a Transfer described in Section 6.2(d) that is approved by a vote sufficient under both of Sections 6.2(d) and 6.5(a) shall, unless otherwise expressly provided in connection with such vote, be automatically admitted as a Substitute Member without a separate vote pursuant to Section 6.5(a).

**6.3 Conditions to Permitted Transfers.**

A Transfer shall not be permitted under Section 6.2 unless and until each of the following conditions are satisfied:

(a) The Assignor and Assignee have executed and delivered to the Company such documents and instruments of conveyance as may be necessary or appropriate in the

opinion of counsel to the Company to effect such Transfer and to confirm the agreement of the Assignee to be bound by the provisions of this Agreement and, if the Transfer will cause there to be more than two "Members" for tax purposes, all of the Members have agreed in writing on the partnership tax provisions governing the Company effective upon the admission of the Substitute Member (unless such provisions have been adopted in connection with any earlier admission of an Additional Member or Substitute Member).

(b) The Assignor and/or Assignee have reimbursed the Company for all costs and expenses that the Company reasonably incurs in connection with the Transfer.

(c) The Assignor and Assignee have provided to the Company the Assignee's taxpayer identification number, sufficient information to determine the Assignee's initial tax basis in the interest Transferred and any other information reasonably necessary to permit the Company to file all required federal and state tax returns and other legally required information statements or returns. Without limiting the generality of the foregoing, the Company shall not be required to make any distribution otherwise provided for in this Agreement with respect to any interest Transferred until it has received such information.

#### **6.4 Rights and Obligations of Assignees and Assignors.**

(a) A Transfer by any Member or other Person shall not itself dissolve the Company or, except as otherwise provided in this Agreement, entitle the Assignee to become a Member or exercise any rights of a Member, including without limitation any Management Rights.

(b) A Transfer by any Member, including without limitation any involuntary Transfer, shall eliminate the Transferring Member's power and right to vote (in proportion to the extent of the interest Transferred) on any matter submitted to the Members, and, for voting purposes, such interest shall not be counted as outstanding in proportion to the extent of the interest Transferred. The Transfer shall also eliminate the Member's entitlement to any Management Rights associated with the Transferred interest, including without limitation rights to information, but shall not cause the Member to be released from any liability to the Company solely as a result of the Transfer.

(c) An Assignee not admitted as a Substitute Member shall be entitled only to the Economic Rights with respect to the interest Transferred and shall have no Management Rights (including without limitation rights to any information or accounting of the affairs of the Company or to inspect the books or records of the Company) with respect to the interest Transferred. If an Assignee becomes a Substitute Member, the voting rights associated with the interest Transferred shall be restored and be held by the Substitute Member along with all other Management Rights with respect to the interest Transferred. The Assignee shall have no liability as a Member solely as a result of the Transfer.

(d) If a court of competent jurisdiction charges an interest in the Company with the payment of an unsatisfied amount of a judgment, to the extent so charged the judgment creditor shall be treated as an Assignee.

#### **6.5 Admission of Assignee as Substitute Member.**

Subject to any other applicable provisions of this Article 6, an Assignee may be admitted to the Company as a Substitute Member, with all of the Management Rights of a Member, but only upon satisfaction of all of the following conditions:

(a) The Manager and a Majority of the non-Transferring Members consent to such admission, which consent may be given or arbitrarily withheld in the sole and absolute discretion of the Manager and each such Member;

(b) The Assignee becomes a party to this Agreement as a Member by executing a counterpart signature page to this Agreement and executing such documents and instruments as the Manager may reasonably request as necessary or appropriate to confirm such Assignee as a Member in the Company and such Assignee's agreement to be bound by the terms and conditions of this Agreement;

(c) The Assignee pays or reimburses the Company for all reasonable legal, filing and publication costs that the Company incurs in connection with the admission of the Assignee as a Member with respect to the interest Transferred; and

(d) If the Assignee is not a natural person of legal majority, the Assignee provides the Company with evidence reasonably satisfactory to counsel for the Company of the authority of the Assignee to become a Member and to be bound by the terms and conditions of this Agreement.

#### **6.6 Effect of Admission of Substitute Member.**

A Substitute Member shall have, to the extent of the interest Transferred, the rights and powers, and be subject to the restrictions and liabilities, of a Member and shall be liable for any obligations of the Assignor to make contributions but shall not be obligated for liabilities unknown to the Substitute Member at the time of becoming a Member.

### **ARTICLE 7 DISSOLUTION AND WINDING UP**

#### **7.1 Dissolution Events.**

Pursuant to the Articles, the duration of the Company is perpetual. However, the Company shall nevertheless dissolve and commence winding up and liquidating upon the first to occur of any of the following (each, a "Dissolution Event"):

(a) The sale of all or substantially all of the Company Property other than in the ordinary course of business, as determined by the Manager in the Manager's sole discretion; or

(b) The vote of the Manager and a Majority of the Members to dissolve, wind up and liquidate the Company.

Notwithstanding anything in the Act to the contrary, to the maximum extent permitted by law, the Dissolution Events are the exclusive events that may cause the Company to dissolve, and the Company shall not dissolve prior to the occurrence of a Dissolution Event notwithstanding the occurrence of any event specified in the Act or any other event that might otherwise cause a dissolution.

## 7.2 Winding Up.

Upon the occurrence of a Dissolution Event, the Company shall continue solely for the purposes of winding up its affairs in an orderly manner, satisfying the claims of its creditors and Members and liquidating or distributing its assets to the extent necessary therefor. Neither the Manager nor any Member shall take any action that is inconsistent with, or not necessary to or appropriate for, the orderly winding up of the Company's business and affairs. The Manager (or, if there is none then serving, a Majority of the Members, acting as Manager) shall oversee the winding up and dissolution of the Company, provide a full accounting of the Company's liabilities and Property, cause the Company Property to be distributed in kind or to be liquidated as promptly as is consistent with obtaining the fair value thereof and shall cause any net proceeds therefrom and any remaining Property to be applied and distributed in the following order:

(a) First, to the payment and discharge of all of the Company's debts and liabilities to creditors, including to any Member to the extent permitted under the Act;

(b) Second, to the payment and discharge of any remaining debts or liabilities of the Company to any Member; and

(c) Third, to the sole Member, or, if there is more than one Member, to the Members in accordance with positive capital account balances after giving effect to all contributions, distributions and allocations for all periods.

The Manager or a Member that performs more than *de minimis* services in completing the winding up and termination of the Company pursuant to this Article 7 shall be entitled to receive reasonable compensation for the services performed.

### **7.3 Establishment of Trust or Reserves.**

In the reasonable discretion of the Manager a pro rata portion of the distributions that would otherwise be made to the Members pursuant to this Article 7 may be:

(a) Distributed to a trust established for the benefit of the Members for the purposes of liquidating Company assets, collecting amounts owed to the Company and paying any contingent or unforeseen liabilities or obligations of the Company. The assets of any such trust shall be distributed to the Members from time to time, in the reasonable discretion of the Manager in the same proportions as the amount distributed to such trust by the Company would otherwise have been distributed to the Members pursuant to Section 7.2; or

(b) Withheld to provide a reasonable reserve for Company liabilities (contingent or otherwise) and to reflect the unrealized portion of any installment obligations owed to the Company; provided that such withheld amounts shall be distributed to the Members as soon as practicable.

### **7.4 Notices of Dissolution Event, Etc.**

If any Dissolution Event occurs, the Manager shall, within thirty (30) days thereafter, provide notice thereof to each Member and take such other actions as the Manager determines to be necessary or appropriate.

## **ARTICLE 8 BOOKS, RECORDS AND ACCOUNTINGS**

### **8.1 Books and Records.**

At the expense of the Company, the Manager shall maintain records and accounts of all operations and expenditures of the Company. At a minimum the Company shall keep at its principal place of business the following records:

(a) A current list of the full name and last known business, residence or mailing address of each Member and Manager, both past and present;

(b) A copy of the Articles and all amendments thereto, together with executed copies of any powers of attorney pursuant to which any amendment has been executed;

(c) Copies of the Company's federal, state and local income tax returns and reports, if any, for the three (3) most recent years;

(d) Copies of the Company's currently effective written Operating Agreement and all amendments thereto, copies of any writings permitted or required under the Act and copies of any financial statements of the Company for the three (3) most recent years;

(e) Minutes of every meeting of the Members and any consents obtained from Members for actions taken without a meeting; and

(f) To the extent not contained in this Agreement, a statement prepared and certified as accurate by the Manager that describes (i) the amount of cash and a description and statement of the agreed value of other Property or consideration contributed by each Member or that each Member has agreed to contribute in the future, (ii) the times at which or events on the occurrence of which any additional contributions agreed to be made by each Member, if any, are to be made and (iii) if agreed upon, the time at which or the events upon which the Company is to be dissolved and its affairs wound up.

## **8.2 Reports.**

Within ninety (90) days after the end of each fiscal year of the Company, the Company shall furnish to each Member an annual report consisting of at least the following to the extent applicable:

(a) A copy of the Company's federal income tax return for that fiscal year, if any;

(b) Profit and loss statements;

(c) A balance sheet showing the Company's financial position as of the end of that fiscal year; and

(d) Any additional information that the Members may require for the preparation of their individual federal and state income tax returns.

In addition, if the Company indemnifies or advances expenses to a Manager or Member in connection with a proceeding by or in the right of the Company, the Company shall report the indemnification or advance in writing to the Members.

## **8.3 Rights of Members; Inspection.**

Each Member shall have the right to receive the reports and information required to be provided by the Act, the Articles or this Agreement. Upon reasonable request, each Member, and any authorized representative of any Member, shall have the right, during ordinary business hours, to inspect and copy, at the requesting Member's expense, the books and records that the Company is required to maintain and keep by the Act, the Articles or this Agreement.

## ARTICLE 9 AMENDMENT

This Agreement and the Articles may be amended, restated or modified from time to time by a Majority of the Members then entitled to vote, consent to or otherwise decide any matter submitted to the Members, as determined pursuant to this Agreement; provided that any amendment that would change the number of managers of the Company or any Person specified as the Manager under Section 2.1, change a required voting percentage for approval of any matter or a Member's voting rights or alter the interest of one or more Members in profits, losses, similar items or any Company distribution shall require the affirmative vote of all Members then entitled to vote. Subject to the foregoing, neither the Manager nor any Member shall have any vested rights under this Agreement that can not be modified from time to time through an amendment to this Agreement.

## ARTICLE 10 MISCELLANEOUS

### 10.1 Application of Oregon Law.

This Agreement, and the application or interpretation hereof, shall be governed exclusively by its terms and by the laws of Oregon, and specifically the Act, without regard to choice of law rules.

### 10.2 Construction.

Whenever required by the context in this Agreement, the singular number shall include the plural and vice versa, and any gender shall include the masculine, feminine and neuter genders. The term "Member" when used in any provision relating to capital accounts or any other tax or financial matter shall be deemed to include any Person having Economic Rights under this Agreement.

### 10.3 Counterparts; Facsimiles.

This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which shall constitute one and the same instrument. Facsimile signatures of the parties on this Agreement or any amendment of this Agreement shall be deemed original signatures, and each Member or other party shall forward the original signed version of such document promptly following facsimile transmission.

#### **10.4 Waiver of Partition.**

Each Member specifically waives any direct or indirect right of partition such Member may have or may hereafter acquire that would enable such Member to cause any Company Property to be the subject of a suit for partition.

#### **10.5 Execution of Additional Instruments.**

Each Member hereby agrees to execute such other and further statements of interest and holdings, designations, powers of attorney and other instruments necessary to effectuate the purposes of this Agreement or comply with any laws, rules or regulations applicable to the Company.

#### **10.6 Headings.**

The headings in this Agreement are inserted for convenience only and are in no way intended to describe, interpret, define or limit the scope, extent or intent of this Agreement or any provision hereof.

#### **10.7 Heirs, Successors and Assigns.**

Each and all of the covenants, terms, provisions and agreements contained in this Agreement shall be binding upon and inure to the benefit of the parties and, to the extent permitted by this Agreement, their respective heirs, legal representatives and permitted successors and assigns.

#### **10.8 Notices and Consents, Etc.**

Any notice, demand or communication required or permitted to be given by any provision of this Agreement shall be in writing and shall be deemed to have been sufficiently given or served for all purposes if delivered personally to the party or to an executive officer of the party to which the same is directed or, if sent by registered or certified mail, postage and charges prepaid, addressed to the Manager's, Member's or Company's address, as shown in the records of the Company. Except as otherwise provided herein, any such notice shall be deemed to be given five (5) Business Days after the date on which the same was deposited in the United States mails.

#### **10.9 Severability.**

If any provision of this Agreement or the application thereof to any person or circumstance shall be invalid, illegal or unenforceable to any extent, the remainder of this Agreement and the application thereof shall not be affected and shall be enforceable to the fullest extent permitted by law.



**10.10 Waivers.**

The failure of any party to seek redress for violation of or to insist upon the strict performance of any covenant or condition of this Agreement shall not prevent a subsequent act, which would have originally constituted a violation, from having the effect of an original violation.

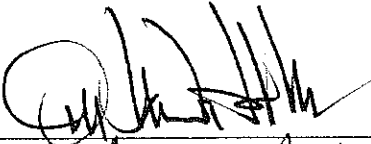
**10.11 Entire Agreement.**

The Articles, this Agreement and any other document to be furnished pursuant to the provisions hereof embody the entire agreement and understanding of the parties as to the subject matter contained herein. There are no restrictions, promises, representations, warranties, covenants or undertakings other than those expressly set forth or referred to in such documents. This Agreement and such documents supersede all prior agreements and understandings with respect to the subject matter hereof.

**IN WITNESS WHEREOF**, the Initial Member has executed this Agreement effective as of the date first set forth above.

**Initial Member:**

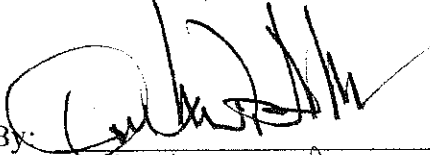
**PPM ENERGY, INC.**

By:   
Name: Andrew P. Haller  
Title: Sr. Vice President

Acknowledged and Appointment Accepted:

**Manager:**

**PPM ENERGY, INC.**

By:   
Name: Andrew P. Haller  
Title: Sr. Vice President

Schedule A

TABLE OF DEFINITIONS

	<u>Page</u>
“Act” .....	i
“Additional Member” .....	i
“Agreement” .....	i
“Articles” .....	i
“Assignee” .....	i
“Assign or” .....	i
“Business Day” .....	i
“Company” .....	i
“Company Property” .....	i
“Dissolution Event” .....	i
“Economic Rights” .....	i
“Entity” .....	i
“Initial Member” .....	i
“Majority of the Members” .....	ii
“Management Rights” .....	ii
“Manager” .....	ii
“Member” .....	ii
“Percentage Interest” .....	ii
“Person” .....	ii
“Property” .....	ii
“Substitute Member” .....	ii
“Transfer” .....	ii

## DEFINITIONS

The following terms used in the foregoing Operating Agreement shall have the following meanings (unless otherwise expressly provided therein):

“**Act**” shall mean the Oregon Limited Liability Company Act, as amended.

“**Additional Member**” shall mean a Member, other than a Substitute Member, that has acquired both Economic Rights and Management Rights from the Company after the date of this Agreement.

“**Agreement**” shall mean this Operating Agreement, as amended from time to time.

“**Articles**” shall mean the Articles of Organization of the Company previously filed with the Secretary of State of Oregon, as amended or restated from time to time.

“**Assignee**” shall mean an Owner of Economic Rights that has not been admitted as a Substitute Member, including an owner of Economic Rights pursuant to a Transfer permitted under Article 6.

“**Assignor**” shall mean a Person that either voluntarily or involuntarily Transfers an interest in the Company.

“**Business Day**” shall mean any day other than Saturday, Sunday or any legal holiday on which banks in Portland, Oregon are closed.

“**Company**” shall mean the Oregon limited liability company governed by this Agreement.

“**Company Property**” shall mean any Property owned by the Company.

“**Dissolution Event**” shall mean any of the events described in Section 7.1 as causing a dissolution of the Company.

“**Economic Rights**” shall mean a Member’s share of the profits, losses or any other items allocable to any period and distributions of Company Property pursuant to the Act, the Articles and this Agreement but shall not include any Management Rights.

“**Entity**” shall mean any general partnership, limited partnership, limited liability company, corporation, joint venture, trust, business trust, cooperative or other association or entity, including without limitation any foreign trust or foreign business organization.

“**Initial Member**” shall have the meaning set forth in the first paragraph of this Agreement.

**“Majority of the Members”** shall mean, at any time, the Member or Members (including any proxy holder acting on behalf of a Member) holding more than 50 percent of the votes held by Members then entitled to vote, consent to or otherwise decide any matter submitted to the Members.

**“Management Rights”** shall mean the right of a Member to participate in the management of the Company, including rights to information and to consent or approve actions of the Members.

**“Manager”** shall mean the Manager provided for in Section 2.1.

**“Member”** shall mean each Member named herein and any Person that may hereafter become an Additional or Substitute Member, but only for so long as such Member is a Member under the terms of this Agreement.

**“Percentage Interest”** shall mean the percentage interest for each Member set forth below unless and until adjusted by agreement of all of the Members then entitled to vote or, in respect of any Member, reduced or increased by reason of any Transfer permitted under this Agreement:

<u>Member</u>	<u>Percentage Interest</u>
PPM Energy, Inc.	100%

**“Person”** shall mean any natural person or Entity, and the heirs, executors, administrators, legal representatives, successors and assigns of each such Person where the context so permits.

**“Property”** shall mean any property, real or personal, tangible or intangible, including cash and any legal or equitable interest in such property.

**“Substitute Member”** shall mean an owner of Economic Rights admitted to all rights of membership in the Company and thereby the holder of Management Rights of a Member.

**“Transfer”** shall mean with respect to any interest in the Company, as a noun, any voluntary or involuntary assignment, sale or other transfer or disposition of such interest (but shall not include a pledge, or the granting of a security interest, lien or other encumbrance in or against, any interest in the Company) and, as a verb, voluntarily or involuntarily to assign, sell or otherwise transfer or dispose of such interest.



**EXHIBIT B**

**GENERAL INFORMATION ABOUT THE PROPOSED FACILITY**

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

**TABLE OF CONTENTS**

	Page
B.1 DESCRIPTION OF THE PROPOSED FACILITY.....	1
B.2 DESCRIPTION OF RELATED OR SUPPORTING FACILITIES .....	9
B.3 DIMENSIONS OF MAJOR STRUCTURES AND FEATURES .....	10
B.4 CORRIDOR EVALUATION AND SELECTION .....	10
B.5 PIPELINE AND TRANSMISSION LINE .....	11
B.6 CONSTRUCTION SCHEDULE .....	12
B.7 MAP OF DISTURBANCE AREAS .....	13

**TABLES**

Table B- 1. On-Site Electrical Loads and Losses.....	8
--	---

**APPENDICES**

- B-1 MAP OF DISTURBANCE AREAS
- B-2 FREQUENCY, SPEED AND DISTRIBUTION OF WINDS

## **B.1 DESCRIPTION OF THE PROPOSED FACILITY**

**OAR 345-021-0010(1)(b)** *Information about the proposed facility, construction schedule and temporary disturbances of the site, including:*

**OAR 345-021-0010(1)(b)(A)** *A description of the proposed energy facility, including as applicable:*

- (i) Major components, structures and systems, including a description of the size, type and configuration of equipment used to generate electricity and useful thermal energy;*

Response: The Applicant proposes to construct an approximately 273 megawatt (MW) wind generation project in Sherman County, Oregon. The proposed project is adjacent to the Klondike I (24 MW) and Klondike II (75 MW) wind generating projects. The project is expected to provide up to 273 MW of capacity and approximately 91 average megawatts (aMW) of energy. The project will be constructed on privately-owned land and will be connected to the regional transmission grid at Bonneville Power Administration's ("BPA") proposed BPA Klondike Schoolhouse Substation. The NEW BPA transmission line from this substation to the BPA John Day Substation is not considered a related or supporting facility (see Appendix B-3).

All project facilities will be located on private agricultural land upon which the Applicant has negotiated long-term wind energy leases with the landowners. The wind energy leases allow for the Applicant to permit, construct, and operate wind energy facilities for a defined period. In exchange, the landowners receive compensation from the Applicant. The terms of the wind energy leases allow landowners to continue their farming operations in and around the wind turbine generators and other facilities where the farming activities do not impact the operation and maintenance of the wind generation equipment.

It is anticipated that project construction will begin in the second quarter of 2006 with a completion of construction by the fourth quarter 2006. It is expected that commissioning and commercial operation of the facility will be complete by the end of December 2006.

Because the manufacturer, model, and size of the wind turbine generators have not yet been selected for the project, this application is being submitted for two alternative turbine technologies. The fact that the application is being submitted with the two alternative technologies will not significantly affect the number of turbines installed, nor will it significantly affect the project construction schedule and layout.

Although either of two turbine types could be selected, the studies and analyses provided in this application are based on the "worst case" situation. For instance, for scenic and aesthetic evaluation, the taller of the two turbines was analyzed, and for the noise evaluation, the louder of the two turbines was analyzed. In this way, the application ensures that the project will meet all applicable Council standards.

For the purposes of this application, the “site boundary” is:

- 150 feet from the turbine string centerlines. Turbine strings consist of access road, collector system, and turbines, with the turbine defining the center.
- 30 feet from the centerline of existing county roads that will be graveled and/or will contain a portion of the underground collector system,
- 60 feet from the centerline of proposed overhead line and proposed underground collector system not in the road prism,
- Proposed laydown areas,
- Proposed O&M facility,
- Proposed substation facilities, and
- Mitigation area.

The analysis areas for evaluating impacts to the various resources will be measured as a distance from the Site Boundary.

For purposes of this application “site” is defined as:

- 150 feet from the turbine string center lines (with the turbine defining the center),
- 30 feet from the centerline of existing county roads that will contain underground collector system,
- 30 feet from the centerline of portion of the underground collector system that do not lie within a turbine string corridor or county road,
- Proposed O&M facility,
- Proposed substation facilities, and
- Mitigation area.

## **Major Wind Plant Components**

### Turbines

Wind turbines consist of two primary components: a tubular tower, and the nacelle, which rests on the tower (*See Appendix C-4*). The nacelle houses equipment such as the gearbox and supports the turbine blades and hub. The turbines are interconnected with an underground power collection system and linked to the project substation.

The wind turbines are grouped in linear strings, and some of these will include aviation warning lights required by the Federal Aviation Administration (FAA). The number of turbines with lights and the lighting pattern of the turbines will be determined in consultation with the FAA.

Wind Turbines – Alternative 1 – General Electric (GE) 1.5 MW Turbine



The GE 1.5 MW wind turbine is a 3-blade active yaw- and pitch-regulated machine with power and torque control capabilities. The blade diameter is 77 to 82 meters (m) and the height at the hub is expected to be up to 80 m. The swept area of the rotor is 4,657 to 5,281 square meters (m<sup>2</sup>) and the rotor speed is variable, operating between 10 and 18 revolutions per minute (rpm).

#### Wind Turbines – Alternative 2 – Vestas V82 1.65 MW Turbine

The Vestas V-82 wind turbine is a 3-blade active yaw- and pitch-regulated machine with power and torque control capabilities. The blade diameter is 82 m and the height at the hub is expected to be up to 80 m. The swept area of the rotor is 5,281m<sup>2</sup> and the rotor speed is 14.4 rpm.

#### Wind Turbine Towers

The tower that supports the wind turbine is expected to be a tapered monopole, roughly 80 m tall for either turbine. It is supported by a reinforced concrete foundation. The towers will be uniformly painted a neutral gray or white color. The towers feature a locked entry door at ground level and an internal access ladder with safety platforms for access to the nacelle. A controller cabinet will be located inside each tower at its base. Towers are typically fabricated in three sections that are assembled on-site. The tower is designed to withstand the maximum wind speeds expected at the project – typically 60 meters per second (m/s) (134 miles per hour [mph]) at hub height.

#### Generator Step-Up Transformer (GSU) and Transformer Foundations

For both turbine types, a GSU transformer will be installed at the base of each wind turbine to increase the output voltage of the wind turbine to the voltage of the power collection system (typically 34.5 kilovolts [kV]). Small concrete slab foundations will be constructed to support the GSU transformers.

The tower for the wind turbine will be set on a spread footer concrete foundation. The actual foundation design for each turbine will be determined based on site-specific geotechnical information and structural loading requirements of the selected turbine model.

#### Power Collection System

A network of underground power lines will be installed within the prism of new and existing roads at the project to collect power generated by the individual wind turbines and route the power to a collector substation for delivery into the utility grid. The power collection system will operate at 34.5 kV. Where geotechnical conditions or other engineering considerations require, the collector system may be aboveground.

Power from the eastern section of the project will be routed to a collector substation near Webfoot. From this substation, aboveground power lines, hung on single wood or steel poles of a type similar to other power lines in the area, will carry the power

approximately 3.5 miles to the BPA Klondike Schoolhouse Substation. All poles will conform to raptor protection guidelines. No specific equipment manufacturers have been chosen to supply power collection system components.

#### SCADA System

A supervisory, control and data acquisition (SCADA) system to be installed at the project will collect operating and performance data from each wind turbine and the project as a whole, and provide remote operation of the wind turbines. The wind turbines will be linked to a central computer via a fiber optic network. The host computer is expected to be located in the Operations and Maintenance (“O&M”) facility at the site for the project. The SCADA software consists of applications developed by the turbine manufacturer or a third party SCADA vendor.

#### Interconnection

Additional substation equipment near the existing BPA Klondike Schoolhouse Substation will be constructed to accommodate and step up the additional power entering the grid. The additional substation equipment will include foundations, circuit breakers, power transformer(s), bus and insulators, disconnect switches, relaying, battery and charger, surge arrestors, AC and DC supplies, control house, metering equipment, SCADA provision, grounding, fence, and associated control wiring. The facilities will conform to all applicable Oregon and BPA regulations and standards, as required.

(ii) *A site plan and general arrangement of buildings, equipment and structures;*

Response: A site plan is included in Exhibit C.

(iii) *Fuel and chemical storage facilities, including structures and systems for spill containment;*

Response: All production, use, storage, transport, and disposal of hazardous materials associated with the proposed project will be in strict accordance with federal, state, and local government regulations and guidelines. No extremely hazardous materials (as defined by 40 Code of Federal Regulations 335) are anticipated to be produced, used, stored, transported, or disposed of as a result of this project. All lubricants, oils, greases, antifreeze, cleaners, degreasers, and hydraulic fluids used in the operation and maintenance of the facility will be stored in the O&M building, in approved containers above ground. Similarly, all lubricants, oils, greases, antifreeze, cleaners, degreasers, or hydraulic fluids being held for delivery to a certified recycling transporter will be temporarily stored in the O&M building in approved containers that will be located above ground.

The project site will be accessed by a variety of construction and O&M vehicles and equipment. Construction equipment and O&M trucks will be properly maintained at all times to minimize leaks of motor oils, hydraulic fluids, and fuels. Refueling and maintenance of vehicles that are authorized for highway travel will be performed offsite

at an appropriate facility during construction, operation, and maintenance. Construction vehicles that are not highway-authorized will be serviced on the project site.

The wind turbines and transformers are anticipated to use the following lubricants, oils, greases, antifreeze, cleaners, degreasers, and hydraulic fluids (or comparable products from other manufacturers):

- Simple Green (cleaner and degreaser);
- Oil-Flo (cleaner and degreaser);
- Mobil SHC 632 (gear oil);
- Mobilux EP 1 (grease);
- Mobil SHC 524 (hydraulic fluid);
- Shell DIALA (R) A oil (mineral oil used as transformer coolant); and
- ethylene glycol (standard commercial antifreeze used in radiators).

None of these products contains any compounds listed as extremely hazardous by the Environmental Protection Agency (EPA). These products will be used in moderate quantities (e.g., less than 50 gallons per turbine) and will be contained entirely within the spill trap and nacelle, so that the possibility for accidental leakage is minimal. Lubricants, hydraulic fluids, antifreeze, and oils will be checked quarterly, filled as needed, and changed every 1 to 2 years, as recommended by the manufacturer. Fluid changes will be performed up-tower, where any accidental spill would be contained by the nacelle. Spent lubricants, hydraulic fluids, antifreeze, cleaners, degreasers, and oils will be recycled by a certified waste contractor.

Transformers will contain cooling oil that does not contain polychlorinated biphenyls (PCBs). Transformers will be regularly inspected.

Towers and other project equipment will arrive on-site already painted and will rarely need repainting during the life of the equipment. Should any repainting be necessary, it will be performed by licensed contractors in compliance with applicable laws and regulations.

Herbicides may be used at landowner request to minimize the potential for introduction of weeds into adjacent cultivated areas. Herbicides will be applied either by the landowner or by a licensed contract professional charged with observance of all regulations governing use and selection of herbicides. Herbicides will not be stored onsite or disposed of on the project site.

*(iv) Equipment and systems for fire prevention and control;*

Response: Each wind turbine generator and pad-mounted transformer will be constructed with a concrete pad around each base, with a minimum of 10 feet of non-flammable ground cover on all sides. The county fire department will be given a copy of the approved site plan indicating the identification number assigned to each turbine, and the

location of the substation and accessory structures. The fire department will also receive any gate keys to the facility.

The proposed turbines have built-in equipment protection features that shut down the turbine automatically to minimize the chance of a mechanical problem causing major damage or a fire. The underground electrical collection system substantially reduces the risk of fire from short circuits caused by wildlife or weather.

All on-site employees will receive annual fire prevention and response training by qualified instructors or members of the local fire department. Employees will also be required to keep all vehicles on roads and off dry grassland during the dry months of the year, unless such activities are required for emergency purposes, in which case fire precautions will be observed.

Service vehicles assigned to regular maintenance or construction at the project site and the O&M building shall be equipped with a shovel and portable fire extinguisher of a 4A50BC or equivalent rating.

- (v) *Structures, systems, and equipment for waste management and disposal, including, to the extent known, the amount of wastewater the applicant anticipates and the applicant's plans for disposal of wastewater and storm water. If the applicant has submitted any permit applications to the Office, as described in OAR 345-021-0000(4), that contain this information, the applicant may copy relevant sections of those documents into this exhibit or include in this exhibit cross-references to the relevant sections of those documents;*

Response: The waste management activities for the construction and operation phases are described in the subsections below:

#### Construction

Several different non-hazardous construction wastes will be generated during the construction of the facility. Concrete waste from turbine pad construction, wood waste from wood forms used for concrete pad construction, and scrap steel from turbine tower shipping and construction will be the major solid wastes produced during construction. Some additional construction wastes may include erosion control materials such as straw bales and silt fencing, packaging materials for turbine components, and electrical materials.

During construction wastewater will be generated. The major source of wastewater will be from washing down concrete trucks once they are emptied. Portable toilets will also be placed onsite during construction to provide sewage handling. These toilets will be pumped and cleaned weekly by the construction contractor providing them. No other sources of wastewater should be created during the construction activities.

Stormwater during construction will be managed in compliance with both the facility's Erosion Control Plan and its Stormwater General Permit 1200-C, which will be issued by

the Oregon Department of Environmental Quality (DEQ) (see Appendix I-2). The erosion control methods used during construction will consist of techniques such as hay bales, silt fences, and revegetation.

Wastes generated during construction will be recycled when feasible. Steel scrap will be collected and transported to a recycling facility. Wood will be reused when possible and then recycled. Concrete waste will be used as fill on site or at another site (as described in Exhibit G) or, if no reuse option is available, removed and taken to a local landfill. Packaging wastes (such as paper and cardboard) will be segregated and recycled as feasible. Any non-recyclable wastes will be collected and transported to a local landfill.

### Operations

During normal operation there should be very little solid waste produced. Office waste, the main solid waste generated, will be generated at the O&M building. Other minor and potentially hazardous wastes that may be generated during operations will consist of oily rags or similar wastes related to turbine lubrication and other maintenance, as described in Exhibit G. The only other source of waste will be incidental waste from the repair and/or replacement of electrical or turbine components. No industrial wastewater will be generated during operations.

(vi) *For thermal power plants and electric generating facilities producing energy from wind, solar or geothermal energy:*

(I) *A discussion of the source, quantity, availability, and energy content of all fuels (Btu, higher heating value) or the wind, solar or geothermal resource used to generate electricity or useful thermal energy. For the purpose of this subparagraph, “source” means the coal field, natural gas pipeline, petroleum distribution terminal or other direct source;*

Response: Appendix B-2 shows the frequency, speed and distribution of the winds in the general Klondike area.

(II) *Fuel cycle and usage including the maximum hourly fuel use at the net electrical power output at average annual conditions for a base load gas plant and the maximum hourly fuel use at nominal electric generating capacity for a non-base load power plant or a base load gas plant with power augmentation technologies, as applicable;*

Response: Because the facility will use renewable energy, it does not have a “fuel cycle.”

(III) *The gross capacity as estimated at the generator output terminals for each generating unit. For a base load gas plant, gross capacity is based on the average annual ambient conditions for temperature, barometric pressure and relative humidity. For a non-base load plant, gross capacity is based on the average temperature, barometric pressure and relative humidity at*

*the site during the times of year when the facility is intended to operate. For a baseload gas plant with power augmentation, gross capacity in that mode is based on the average temperature, barometric pressure and relative humidity at the site during the times of year when the facility is intended to operate with power augmentation.*

Response: Because the facility will use renewable energy that will not consume fossil fuels it is not considered a “base-load” or “non-base load” plant.

(IV) *A table showing a reasonable estimate of all on-site electrical loads and losses greater than 50 kilowatts, including losses from on-site transformers, plus a factor for incidental loads, that are required for the normal operation of the plant when the plant is at its designed full power operation.*

Response:

**Table B- 1. On-Site Electrical Loads and Losses**

Description	Load (kW)
Maintenance Facility	Less than 50 kW
Aircraft Warning Lights	Less than 50 kW
Collector Substation Facilities	Less than 50 kW
Utility Interconnect Transformer (60 – 100 MVA Base)	
No Load Losses	30 – 50 kW
Load Losses	80 –150 kW
Auxillary Losses	Less than 5kW

(V) *Process flow, including power cycle and steam cycle diagrams to describe the energy flows within the system;*

Response: As described earlier in this Exhibit, wind energy will be converted to electricity by either 1.5 or 1.65 MW turbines. The proposed turbines will employ an active yaw control (designed to steer the turbine toward the wind), active blade pitch control (designed to regulate wind rotor speed), and a generator/power electronic converter system (designed to produce nominal 60 Hertz, electric power). The rotor spins in a clockwise direction under normal operating conditions when viewed from an upwind location. At speeds exceeding approximately 50 mph the rotor stops turning. Electricity is generated by the turbines at 575 volts, and then is converted to 34.5 kV by pad-mounted transformers adjacent to each turbine. Power is collected at 34.5 kV, transmitted by underground cables to the project substations, and then is converted to 230 kV for transmission over the regional transmission network.

(VI) *Equipment and systems for disposal of waste heat;*

Response: The facility is a wind power project; no waste heat will be generated.

(VII) *The maximum number of hours per year and energy content (Btu per year, higher heating value) of alternate fuel use;*

Response: The facility will not use any alternate fuels.

(VIII) *The nominal electric generating capacity;*

Response: The nominal electric generating capacity is up to 273 MW.

(IX) *The fuel chargeable to power heat rate;*

Response: Not applicable.

(vii) *For transmission lines, the rated voltage, load carrying capacity, and type of current;*

Response: The 3.5 mile aboveground collector line will be 230 kV with a load carrying capacity of up to 400 MW of alternating current.

(viii) *For pipelines, the operating pressure and delivery capacity in thousand cubic feet per day;*

Response: There are no pipelines associated with the project.

(ix) *For surface facilities related to underground gas storage, estimated daily injection and withdrawal rates, horsepower compression required to operate at design injection or withdrawal rates, operating pressure range and fuel type of compressors; and*

Response: Not applicable.

(x) *For facilities to store liquefied natural gas, the volume, maximum pressure, liquefaction and gasification capacity in thousand cubic feet per hour.*

Response: Not applicable.

## **B.2 DESCRIPTION OF RELATED OR SUPPORTING FACILITIES**

**OAR 345-021-0010(1)(b)(B)** *A description of major components, structures and systems of each related or supporting facility;*

Response: Transportation to and from the site will follow a route that includes access via Interstate, State, and County Roads. A final transportation plan will be approved as required prior to the commencement of construction.

Within the project, approximately 19 miles of new roads will be constructed (See Appendix C-3). The roads will be 20 feet wide and constructed with crushed gravel. During construction, 19 laydown areas will be used to stage construction and store supplies and equipment. There will be a 2-acre laydown area adjacent to each proposed turbine string, and four 4-acre laydown areas throughout the project. The laydown areas will also consist of a crushed gravel surface; the laydown areas will be removed and the disturbed areas restored to their pre-construction conditions following construction.

A new O&M facility will be constructed for the Klondike III Wind Project. The water supply (on-site well of <5000 gallons/day) and sanitary facilities will be constructed at the new O&M site to serve the Klondike III project. Power to the new O&M building will be supplied by Wasco Electric Cooperative, and be carried from the existing O&M building one mile east on the poles of the aboveground collection system.

### **B.3 DIMENSIONS OF MAJOR STRUCTURES AND FEATURES**

**OAR 345-021-0010(1)(b)(C)** *The approximate dimensions of major facility structures and visible features.*

Response: The turbine towers will be approximately 80 m above ground level. The underground footprint of the turbine foundations will be approximately 2,000 square feet. The 3.5 mile 230 kV aboveground collector line will be on wood or steel poles approximately 110 feet tall, sunk 30 feet deep. The O&M building will be approximately 5,000 square feet. The new collector substation near Schoolhouse will occupy approximately 4 acres of land. The new collector substation near Webfoot will occupy a portion of the 4-acre parcel on which the O&M building will be located.

### **B.4 CORRIDOR EVALUATION AND SELECTION**

**OAR 345-021-0010(1)(b)(D)** *If the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a transmission line or pipeline, that, by itself, is an energy facility under the definition in ORS 469.300, a corridor selection assessment explaining how the applicant selected the corridor(s) for analysis in the application. In the assessment, the applicant shall evaluate the corridor adjustments the Office has described in the project order, if any. The applicant may select any corridor for analysis in the application and may select more than one corridor. However, if the applicant selects a new corridor, then the applicant must explain why the applicant did not present the new corridor for comment at an informational meeting under OAR 345-015-0130. In the assessment, the applicant shall discuss the reasons for selecting the corridor(s), based upon evaluation of the following factors:*

The proposed facility is not a pipeline or a transmission line, and has no related or supporting transmission line or pipeline that, by itself, would be considered an energy facility under the definition in ORS 469.300. The 3.5-mile aboveground 230 kV collector line is not by itself an energy facility.

(i) *Least disturbance to streams, rivers and wetlands during construction;*



Response: Not applicable.

- (ii) *Least percentage of the total length of the pipeline or transmission line that would be located within areas of Habitat Category 1, as described by the Oregon Department of Fish and Wildlife;*

Response: Not applicable.

- (iii) *Greatest percentage of the total length of the pipeline or transmission line that would be located within or adjacent to public roads, as defined in ORS 368.001, and existing pipeline or transmission line rights-of-way;*

Response: Not applicable.

- (iv) *Least percentage of the total length of the pipeline or transmission line that would be located within lands that require zone changes, variances or exceptions;*

Response: Not applicable.

- (v) *Least percentage of the total length of the pipeline or transmission line that would be located in a protected area as described in OAR 345-022-0040;*

Response: Not applicable.

- (vi) *Least disturbance to areas where historical, cultural or archaeological resources are likely to exist; and*

Response: Not applicable.

- (vii) *Greatest percentage of the total length of the pipeline or transmission line that would be located to avoid seismic, geological and soils hazards;*

Response: Not applicable.

- (viii) *Least percentage of the total length of the pipeline or transmission line that would be located within lands zoned for exclusive farm use;*

Response: Not applicable.

## **B.5 PIPELINE AND TRANSMISSION LINE**

**OAR 345-021-0010(1)(b)(E)** *For the corridor(s) the applicant selects under paragraph (D) and for any related or supporting facility that is a pipeline or transmission line, regardless of size:*

- (i) *The length of the pipeline or transmission line;*

Response: The aboveground collector line will be approximately 3.5 miles long.

- (ii) *The proposed right-of-way width of the pipeline or transmission line, including to what extent new right-of-way will be required or existing right-of-way will be widened;*

Response: The Applicant has executed long-term wind energy leases for all of the property along the proposed path for the aboveground collector line. The leases grant a right-of-way for as much width necessary to allow the Applicant to build a transmission line associated with wind power facilities.

- (iii) *If the proposed corridor follows or includes public right-of-way, a description of where the facility would be located within the public right-of-way, to the extent known. If the applicant might choose to locate all or part of the facility adjacent to but not within the public right-of-way, describe the reasons the applicant would use to justify locating the facility outside the public right-of-way. The application must include a set of clear and objective criteria and a description of the type of evidence that would support locating the facility outside the public right-of-way, based on those criteria;*

Response: The proposed corridor for the aboveground collector line would not include public right-of-way. The Applicant has chosen to utilize the right-of-way granted in its leases rather than utilize public right-of-way to avoid the possibility that the County may, at a later date, wish to expand public roads within existing public right-of-way.

- (iv) *The diameter and location, above or below ground, of each pipeline; and*

Response: Not applicable.

- (v) *A description of the transmission line structures and their dimensions;*

Response: The proposed aboveground collector line will be on wood or steel poles approximately 110 feet tall, sunk 30 feet deep into the ground. The base of each pole will have an approximate diameter of 2.5 feet. The spacing of poles will be approximately 500 to 700 feet apart.

## **B.6 CONSTRUCTION SCHEDULE**

**OAR 345-021-0010(1)(b)(F)** *A construction schedule including the date by which the applicant proposes to begin construction and the date by which the applicant proposes to complete construction. Construction is identified in OAR 345-001-0010. The applicant shall describe in this exhibit all work on the site that the applicant intends to begin before the Council issues a site certificate. The applicant shall include an estimate of the cost of that work. For the purposes 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, that the applicant anticipates or has performed as of the time of submitting the application;*

Response: The Applicant proposes to begin construction by April 1, 2006, and complete construction by December 31, 2006. Additional engineering and geotechnical investigations may occur prior to issuance of the site certificate. No other work is anticipated to begin prior to issuance of a site certificate. The estimated cost of the pre-construction work is less than \$100,000.

**B.7 MAP OF DISTURBANCE AREAS**

**OAR 345-021-0010(1)(b)(G)** *A map showing all areas that may be temporarily disturbed by any activity related to the design, construction and operation of the proposed facility.*

Response: See Appendix B-1. The project will permanently impact 70 acres. Temporary disturbance, such as for laydown areas and collector system trenches, will impact 55 acres. Two acres of temporary disturbance, such as plowing, may occur in the habitat mitigation area.

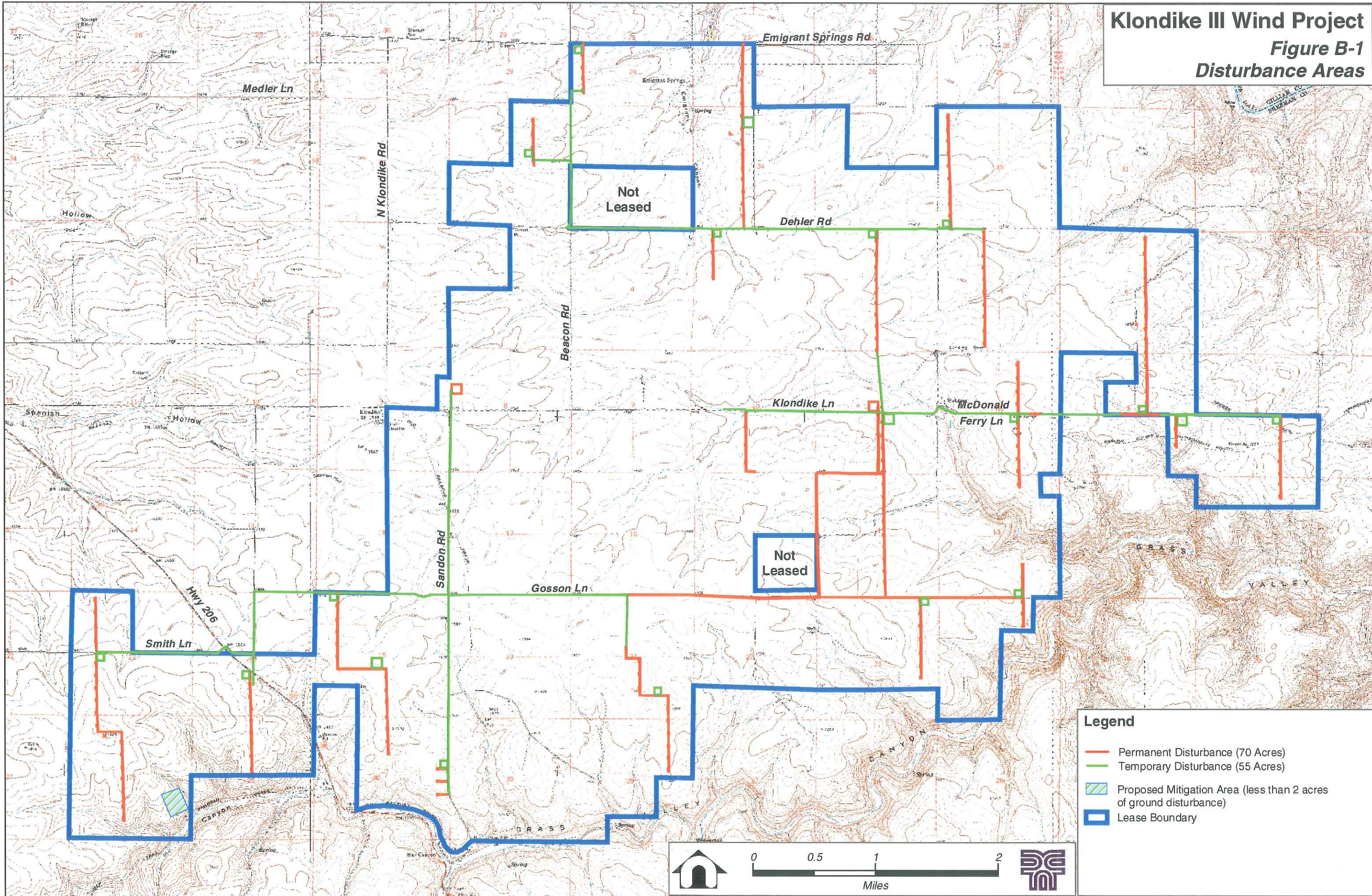
## **APPENDIX B-1**

### **Map of Disturbance Areas**





**Klondike III Wind Project**  
**Figure B-1**  
**Disturbance Areas**



**Legend**

- Permanent Disturbance (70 Acres)
- Temporary Disturbance (55 Acres)
- Proposed Mitigation Area (less than 2 acres of ground disturbance)
- Lease Boundary

0
0.5
1
2

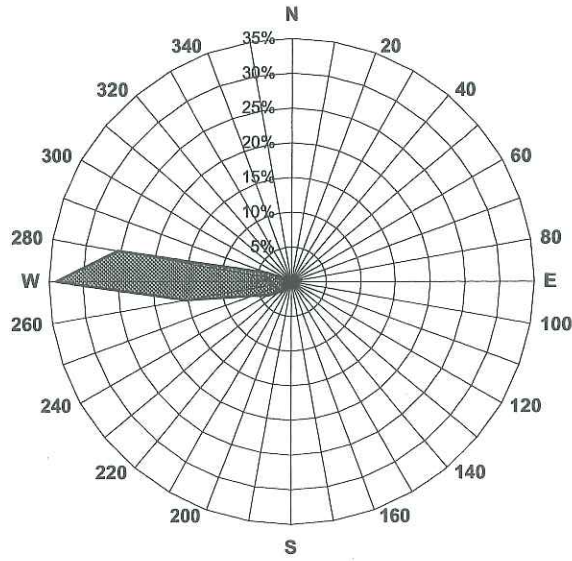
Miles



## **APPENDIX B-2**

### **Frequency, Speed and Distribution of the Winds**

**APPENDIX B-2**  
**Wind Energy Rose**  
 (Frequency, Speed, Distribution) for the  
 Klondike III Wind Project



**Klondike Wind Energy Rose**

Direction	Percent of Annual Turbine Energy
0	0.06%
10	0.01%
20	0.05%
30	0.17%
40	0.13%
50	0.28%
60	0.34%
70	0.56%
80	1.53%
90	1.29%
100	0.96%
110	0.52%
120	0.18%
130	0.05%
140	0.02%
150	0.01%
160	0.02%
170	0.03%
180	0.02%
190	0.05%
200	0.31%
210	0.57%
220	1.57%
230	2.35%
240	3.97%
250	5.97%
260	15.28%
270	33.91%
280	25.35%
290	3.65%
300	0.50%
310	0.11%
320	0.07%
330	0.04%
340	0.02%
350	0.02%
360	0.00%
Grand Total	100.00%



## EXHIBIT C

### PROJECT LOCATION OAR 345-021-0010(1)(c)

#### TABLE OF CONTENTS

	Page
C.1 INTRODUCTION.....	1
C.2 MAPS.....	1
C.3 LOCATION OF PROJECT COMPONENTS.....	1
C.3.1 Proposed Energy Facility Site .....	1
C.3.2 Turbines.....	1
C.3.3 Transmission Line Corridor .....	2
C.3.4 Power Supply Corridor.....	2
C.3.5 Gas Pipeline Corridor .....	2
C.3.6 Water Pipeline Corridor .....	2

#### APPENDICES

C-1 LOCATION MAP OF ENERGY FACILITY SITE
C-2 PROJECT COMPONENT MAP
C-3 TURBINE LOCATION MAP
C-4 TURBINE SCHEMATIC
C-5 ROADWAY CROSS-SECTION

## **C.1 INTRODUCTION**

**OAR 345-021-0010(1)(c)** *Information about the location of the proposed facility, including:*

## **C.2 MAPS**

**OAR 345-021-0010(1)(c)(A)** *A map or maps, including a 7.5-minute quadrangle map, showing the proposed locations of the energy facility site, and all related or supporting facility sites, in relation to major roads, water bodies, cities and towns, important landmarks and topographic features.*

Response: A map showing the location of the proposed energy facility site boundary plotted on a 7.5 minute quadrangle map is included as Appendix C-1.

## **C.3 LOCATION OF PROJECT COMPONENTS**

**OAR 345-021-0010(1)(c)(B)** *A description of the location of the proposed energy facility site and the proposed site of each related or supporting facility, including the approximate land area of each. If a proposed pipeline or transmission line is to follow an existing road, pipeline, or transmission line, the applicant shall state to which side of the existing road, pipeline, or transmission line the proposed facility will run, to the extent it is known.*

Response: Appendix C-2 shows the location of the proposed Klondike III site boundary and the location of each related and supporting facility. See sections C.3.1 through C.3.5, below for further information.

### **C.3.1 Proposed Energy Facility Site**

The proposed energy facility site is located approximately 4 miles east of Wasco, in Sherman County, Oregon. The proposed energy facility site is located on parcels consisting of approximately 14,500 acres owned by several landowners, which have been leased in whole or in part to the Applicant for the development of the proposed energy facility. The property is located in the Townships 1 and 2 North and Ranges 17, 18 and 19 East Sections. It is accessed by traveling approximately 4 miles south on U.S. Highway 97 from its intersection with Interstate 84. The proposed Klondike III project will be located on approximately 70 acres of the 14,500-acre leased area.

### **C.3.2 Turbines**

The proposed energy facility would have 165 wind generating turbines. Appendix C-3 shows the approximate location of the turbines for the Klondike III project. Appendix C-4 provides a schematic of an individual turbine.

### **C.3.3 Transmission Line Corridor**

The proposed Klondike III Wind Power project would deliver electric power to the BPA Klondike Schoolhouse Substation via a new above ground and underground collector system as shown on the Project Component Map, Appendix C-2. The underground collector system will follow the roadways and be contained mainly in the road prism, Appendix C-5. The BPA Klondike Schoolhouse Substation is the first point of interconnection with the primary power grid.

From the BPA Klondike Schoolhouse Substation, power generated by the project will be transmitted to the new BPA John Day Substation via a new, approximately 11-mile long BPA 230-kV transmission line. This is considered by BPA to be a system upgrade that may be used by several projects in the area. The conductor size and structure type of the new transmission line will be determined by BPA in order to maximize interconnection capacity while minimizing impacts to crop land. As a BPA system upgrade, the transmission line is not considered a related or supporting facility for the Klondike III project.

### **C.3.4 Power Supply Corridor**

Power to Klondike III's O&M building will be supplied by Wasco Electric Cooperative via a new approximately 1-mile feeder line from the existing Klondike O&M building. This line will be located on property already leased by Klondike III.

### **C.3.5 Gas Pipeline Corridor**

There is no gas pipeline associated with this project.

### **C.3.6 Water Pipeline Corridor**

There is no water supply pipeline associated with project.



## **APPENDIX C-1**

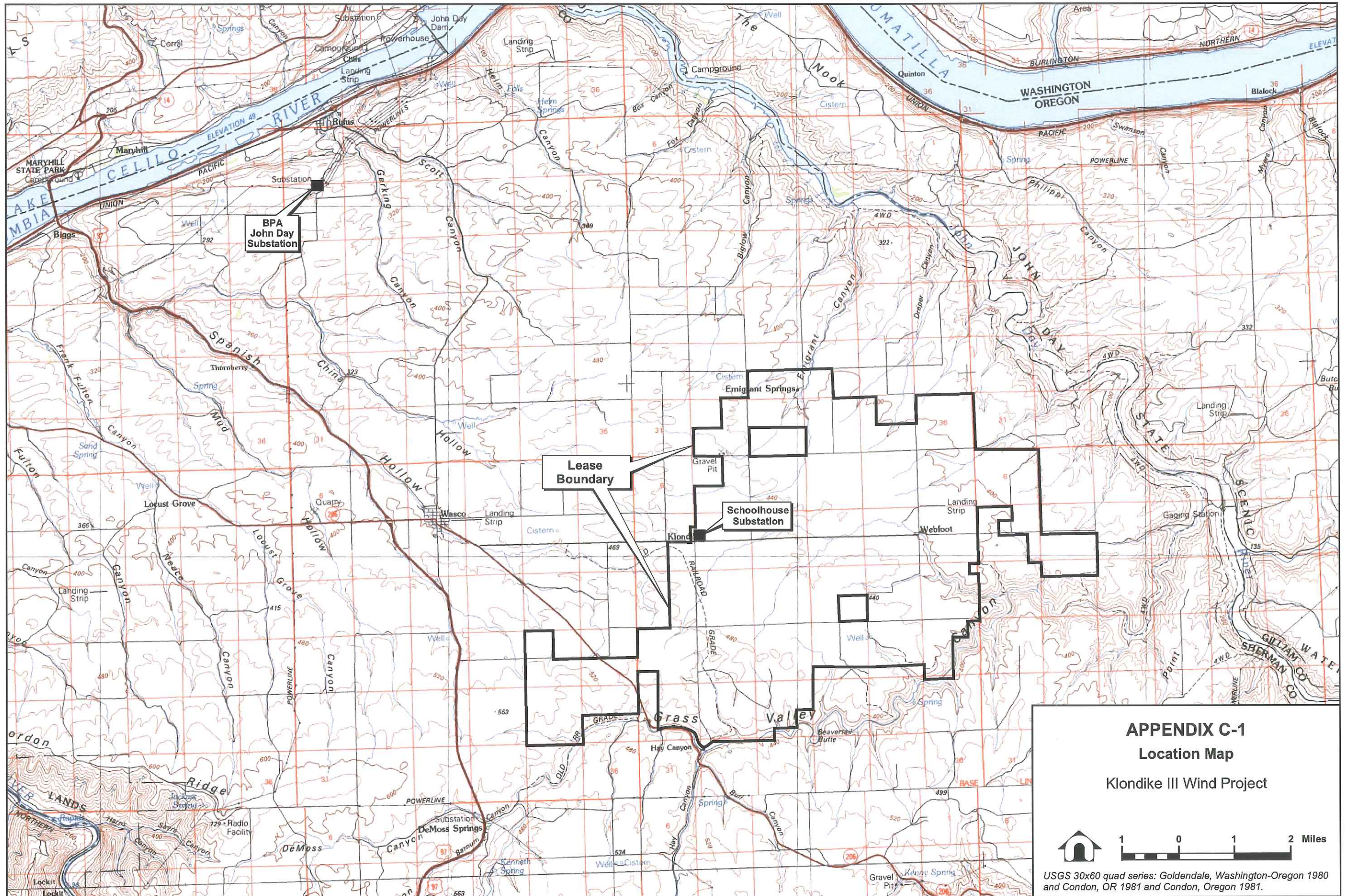
### **Location Map of Energy Facility Site**



## **APPENDIX C-2**

### **Project Component Map**

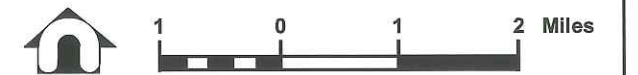




**APPENDIX C-1**

**Location Map**

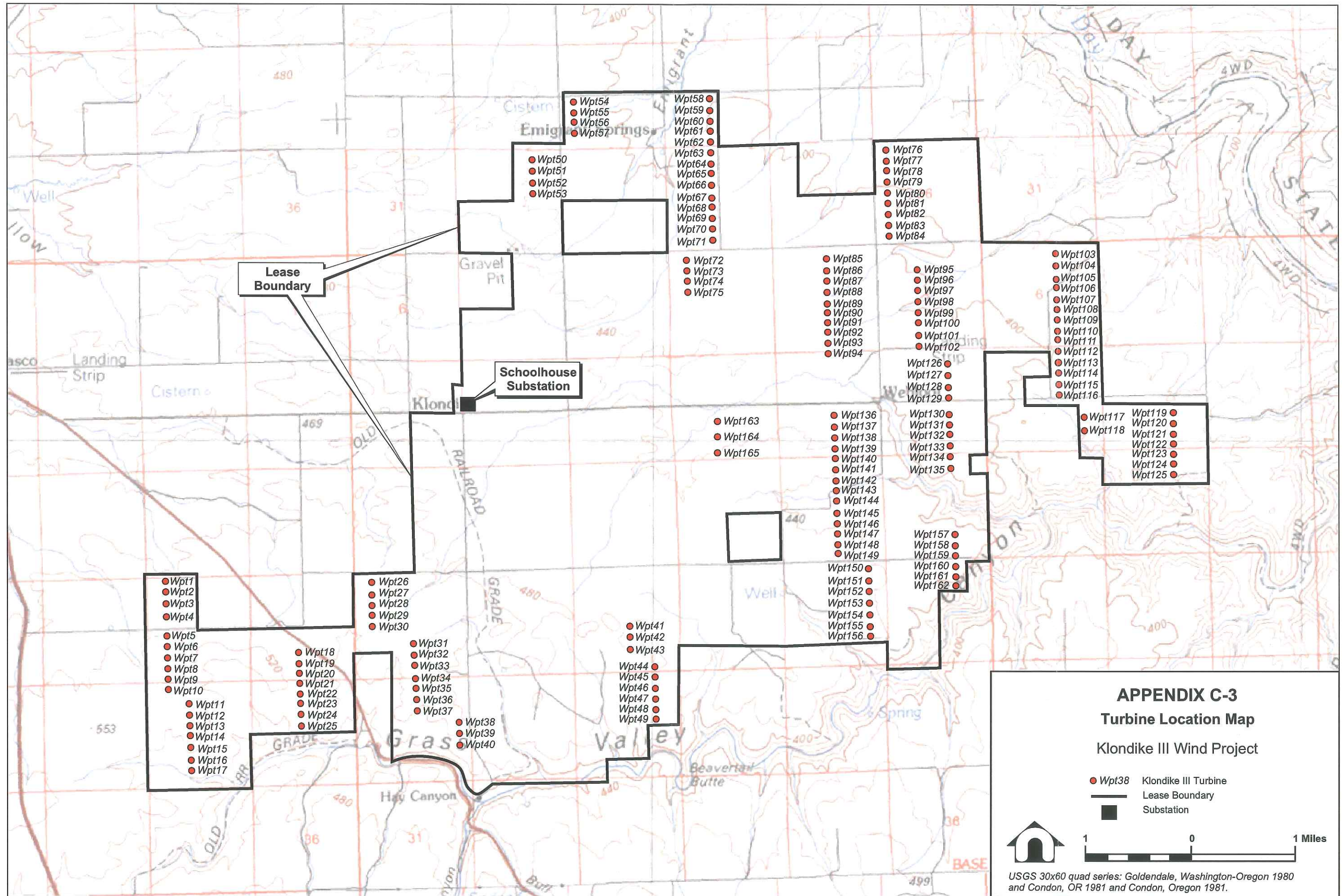
**Klondike III Wind Project**



USGS 30x60 quad series: Goldendale, Washington-Oregon 1980 and Condon, OR 1981 and Condon, Oregon 1981.



**APPENDIX C-3**  
**Turbine Location Map**



- Wpt1
- Wpt2
- Wpt3
- Wpt4
- Wpt5
- Wpt6
- Wpt7
- Wpt8
- Wpt9
- Wpt10
- Wpt11
- Wpt12
- Wpt13
- Wpt14
- Wpt15
- Wpt16
- Wpt17

- Wpt18
- Wpt19
- Wpt20
- Wpt21
- Wpt22
- Wpt23
- Wpt24
- Wpt25
- Wpt26
- Wpt27
- Wpt28
- Wpt29
- Wpt30
- Wpt31
- Wpt32
- Wpt33
- Wpt34
- Wpt35
- Wpt36
- Wpt37

- Wpt38
- Wpt39
- Wpt40

- Wpt41
- Wpt42
- Wpt43
- Wpt44
- Wpt45
- Wpt46
- Wpt47
- Wpt48
- Wpt49

- Wpt163
- Wpt164
- Wpt165

- Wpt136
- Wpt137
- Wpt138
- Wpt139
- Wpt140
- Wpt141
- Wpt142
- Wpt143
- Wpt144
- Wpt145
- Wpt146
- Wpt147
- Wpt148
- Wpt149
- Wpt150
- Wpt151
- Wpt152
- Wpt153
- Wpt154
- Wpt155
- Wpt156

- Wpt157
- Wpt158
- Wpt159
- Wpt160
- Wpt161
- Wpt162

- Wpt130
- Wpt131
- Wpt132
- Wpt133
- Wpt134
- Wpt135

- Wpt126
- Wpt127
- Wpt128
- Wpt129

- Wpt95
- Wpt96
- Wpt97
- Wpt98
- Wpt99
- Wpt100
- Wpt101
- Wpt102

- Wpt85
- Wpt86
- Wpt87
- Wpt88
- Wpt89
- Wpt90
- Wpt91
- Wpt92
- Wpt93
- Wpt94

- Wpt72
- Wpt73
- Wpt74
- Wpt75

- Wpt58
- Wpt59
- Wpt60
- Wpt61
- Wpt62
- Wpt63
- Wpt64
- Wpt65
- Wpt66
- Wpt67
- Wpt68
- Wpt69
- Wpt70
- Wpt71

- Wpt50
- Wpt51
- Wpt52
- Wpt53

- Wpt54
- Wpt55
- Wpt56
- Wpt57

- Wpt76
- Wpt77
- Wpt78
- Wpt79
- Wpt80
- Wpt81
- Wpt82
- Wpt83
- Wpt84

- Wpt103
- Wpt104
- Wpt105
- Wpt106
- Wpt107
- Wpt108
- Wpt109
- Wpt110
- Wpt111
- Wpt112
- Wpt113
- Wpt114
- Wpt115
- Wpt116

- Wpt117
- Wpt118

- Wpt119
- Wpt120
- Wpt121
- Wpt122
- Wpt123
- Wpt124
- Wpt125

Lease Boundary

Schoolhouse Substation

Gravel Pit

RAILROAD GRADE

Hay Canyon

Gras Valley

Beavertail Butte

Spring

Well

Well

Klondike

Landing Strip

Cistern

Cistern

Emigrant Springs

Emigrant

Well

Well

Well

Well

Well

Well

Well

Well

Well

Well

Well

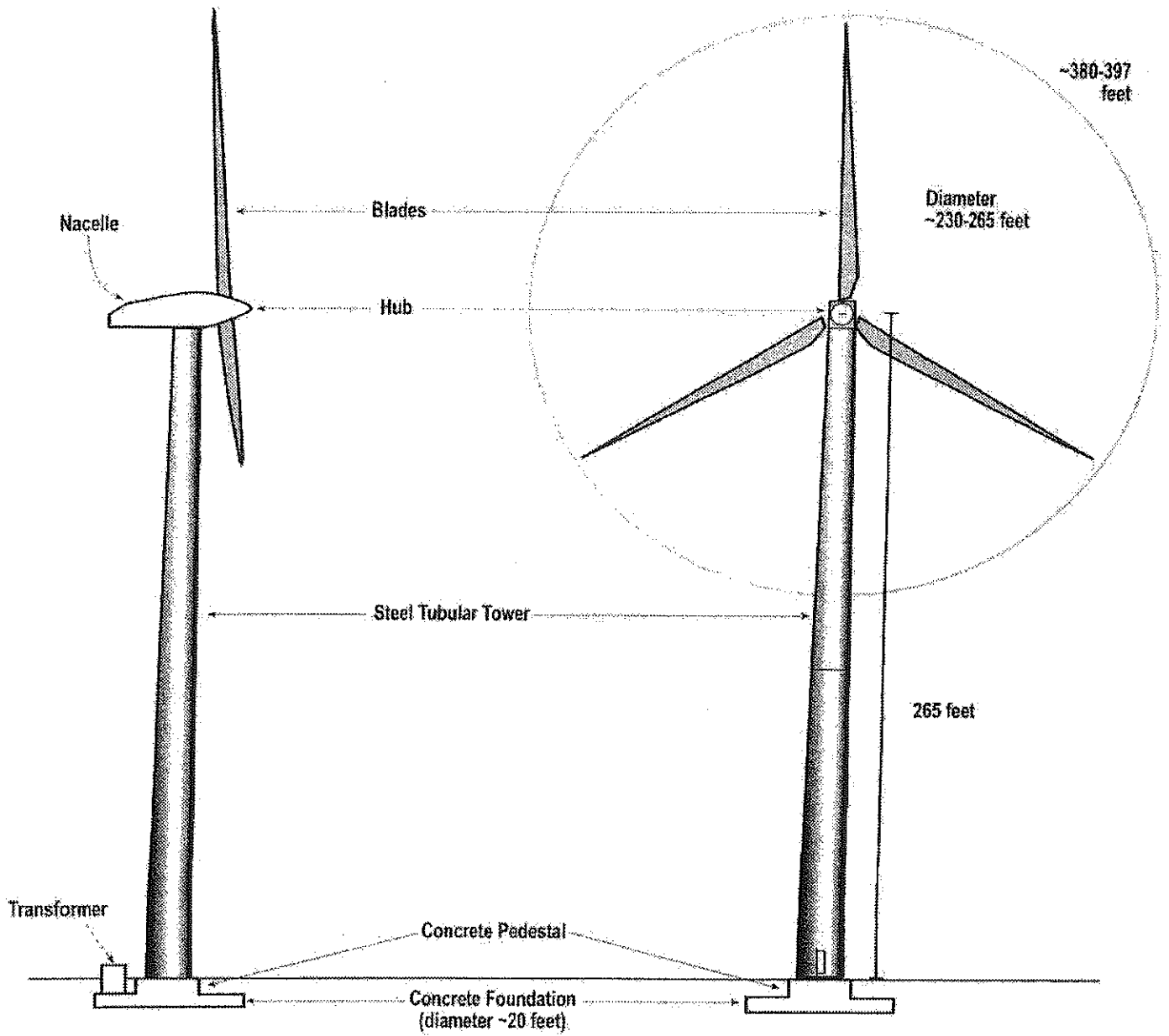
Well

Well

## **APPENDIX C-4**

### **Turbine Schematic**





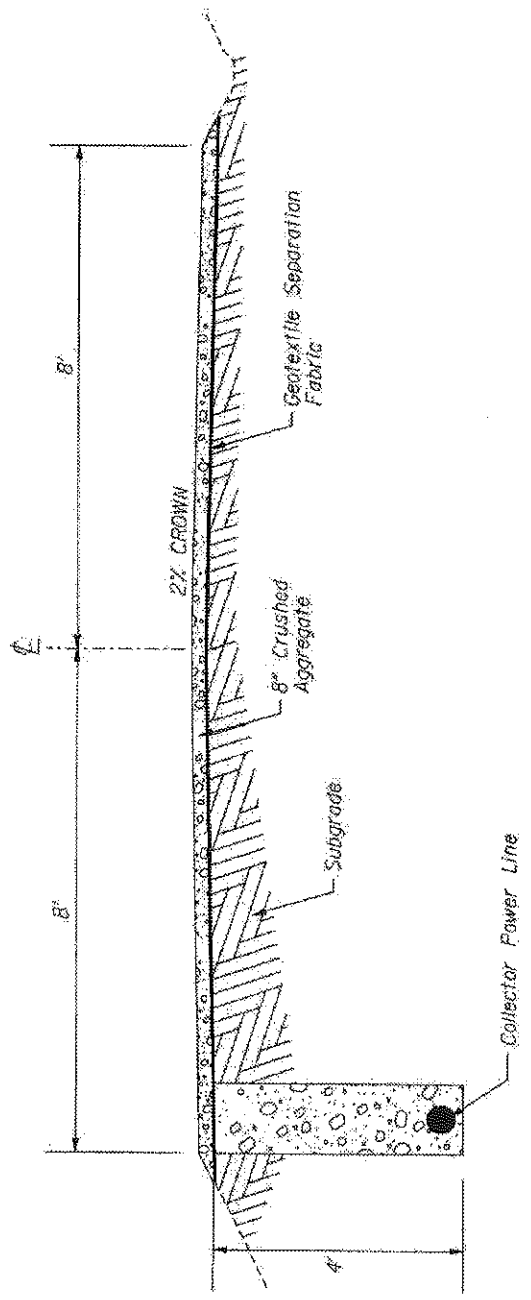
**APPENDIX C-4**  
**Turbine Schematic**  
Klondike III Wind Project

*Not to Scale*

**APPENDIX C-5**  
**Roadway Cross-Section**

STATE	PROJECT
AK	SPR-200-2007

KLONDIKE III TYPICAL SECTION



APPENDIX C-5  
 Roadway Cross Section  
 Klondike III Wind Project

Not to Scale

**EXHIBIT D**

**APPLICANT'S ORGANIZATIONAL, MANAGERIAL, AND TECHNICAL EXPERTISE**

OAD 345-021-0010(1)(d)

**TABLE OF CONTENTS**

	Page
D.1 INTRODUCTION .....	1
D.2 APPLICANT'S PREVIOUS EXPERIENCE .....	1
D.3 QUALIFICATION OF APPLICANT'S PERSONNEL.....	2
D.4 QUALIFICATIONS OF KNOWN CONTRACTORS .....	5
D.5 APPLICANT'S PAST PERFORMANCE .....	5
D.6 APPLICANT WITH NO PREVIOUS EXPERIENCE.....	5
D.7 ISO CERTIFIED PROGRAM .....	5
D.8 MITIGATION .....	5
D.9 CONCLUSION .....	6

**TABLES**

Table D-1. Wind Power Generation Facilities .....	1
---	---

**D.1 INTRODUCTION**

**OAR 345-021-0010(1)(d)** *Information about the organizational expertise of the applicant to construct and operate the proposed facility, providing evidence to support a finding by the Council as required by OAR 345-022-0010, including:*

Response: PPM Energy, Inc. (PPM) as parent of the Applicant, Klondike Wind Power III LLC (Klondike III), will provide the organizational, managerial, and technical expertise to construct and operate the proposed facility. PPM is an integrated, non-utility energy company that owns, controls, manages, or operates 1,614 MW of independent power generation facilities in the United States, 831 MW of which are generated by wind energy. PPM will directly provide its expertise to the Applicant.

**D.2 APPLICANT'S PREVIOUS EXPERIENCE**

**OAR 345-021-0010(1)(d)(A)** *The applicant's previous experience, if any, in constructing and operating similar facilities;*

Response: The following summarizes the wind power generation facilities in which PPM or one of its direct subsidiaries is involved and the nature of that involvement:

**Table D-1. Wind Power Generation Facilities**

Facility	Location (County, State)	Capacity	Commercial Operation	PPM Role
Klondike Wind Project	Sherman, OR	24 MW	2001	Owner / Operator
Stateline Wind Energy Center	Walla Walla, WA and Umatilla, OR	300 MW	2001	Power Purchaser / Marketer
Colorado Green Wind Project	Prowers, CO	50% of 162 MW	2003	Owner / Operator
High Winds Energy Center	Solano, CA	162 MW	2003	Power Purchaser / Marketer
Moraine Wind Project	Pipestone and Murray, MN	51 MW	2003	Owner / Operator
Flying Cloud Wind Project	Dickinson, IA	44 MW	2003	Owner / Operator
Wyoming Wind Energy Center	Uinta, WY	144 MW	2003	Power Purchaser / Marketer
Mountain View III and Phoenix Wind Projects	Riverside, CA	25 MW	2003	Owner / Operator
<b>TOTAL</b>		<b>831 MW</b>		



PPM, through its direct subsidiaries, also developed and owns or manages the output of three natural gas-fired generation facilities, including the Klamath Cogeneration and Klamath Expansion projects in Oregon and the West Valley project in Utah. PPM's total gas-fired generation portfolio is 784 MW of capacity.

### D.3 QUALIFICATION OF APPLICANT'S PERSONNEL

**OAR 345-021-0010(l)(d)(B)** *The qualifications of the applicant's personnel who will be responsible for constructing and operating the facility, to the extent that the identities of such personnel are known when the application is submitted;*

Response: The following are brief resumes of each of the key personnel assigned to the Klondike III team:

**Peter C. van Alderwerelt**, Senior Vice President, has overall management responsibility for business development and origination activities at PPM including new power project development and wholesale power marketing. He has overseen the expansion of PPM's generation portfolio to over 1,500 MW over the last three years. Recent accomplishments include the combined-cycle 500-MW Klamath Cogeneration Plant in Klamath Falls, Oregon and the 300-MW Stateline Wind Plant near Walla Walla, Washington. Mr. van Alderwerelt has over 20 years experience in the energy industry and is a licensed Mechanical Engineer with a degree from the University of California, Davis. Prior to joining PPM, Mr. van Alderwerelt was responsible for developing regional and international cogeneration and power project opportunities on behalf of several private developers.

**Jean Wilson** is Vice President of Business Development, responsible for PPM's wind energy development activities. Jean has been involved in all aspects of PacifiCorp and PPM new wind developments, spanning over 800 MW of wind transactions, including the following transactions:

- 50% investment in the 162 MW Colorado Green Project;
- 100% investment in the 22 MW Mountain View 3 Project;
- 100% acquisition of the 24 MW Klondike Project;
- Securing the 162 MW High Winds Project PPA;
- Securing the 144 MW Pleasant Valley Project PPA; and
- 100% investment in the 50 MW Rock River, Wyoming wind plant.

The establishment of PacifiCorp's Green Power Marketing business (in conjunction with Barrett Stambler); and Development of the 2.1 MW PacWest wind plant in San Geronio, California.

Jean has over 8 years experience in the wind energy business, and 10 years experience in real estate development, finance and banking. She holds a B.S. in Finance from the University of Southern California, and an MBA from Stanford University.

**Paul Koehler** is Director of Business Development. Over the last year at PPM, Paul has led the development of the 22 MW Mountain View Wind Project, the negotiation of the purchase power agreement for the 144 MW Wyoming Wind Project, and development of

several wind projects in PPM's development pipeline, including the Klondike II project in Sherman County, Oregon.

Prior to joining PPM, Paul directed his own consulting business focused on energy price risk management and renewable generation, with clients as utilities, power marketers, and resource developers across the US.

Paul has over 20 years of experience in the electric energy business, having worked primarily in West Coast wholesale energy markets and engaged in renewable generation, power marketing, and new business development. Paul has held leadership positions with Enron, Portland General Electric, and Bonneville Power Administration. Paul holds a Bachelor of Arts degree from the University of Oregon, Honors College.

**Robert W. Baker** is the Manager of Wind Energy Assessment and Evaluation. Bob is a senior meteorologist and has worked in the wind industry both in the university and private sector for nearly 30 years. He has been a pioneer in the development of wind resource assessment prospecting techniques and he has applied his expertise in aerial surveillance and ground evaluation to quickly locate good wind areas, many of which have been or are currently being developed into wind farms in the 50-300 MW scale. He has authored or co-authored over 50 publications in technical journals and project reports. Bob has a Masters Degree in Atmospheric Sciences from Oregon State University and is a Certified Consulting Meteorologist (CCM), the professional certification granted by the American Meteorological Society.

**Barrett Stambler** is the Managing Director of Renewable Origination, responsible for PPM's sales and marketing activities. Barrett has played a major role in developing and managing PPM's wind energy business including:

Execution of the 300 MW Stateline Wind Project power purchase agreement located in eastern Oregon and Washington;

Sale of 175 MW of wind generation to Seattle City Light;

Sale of 120 MW of green tags to the Sacramento Municipal Utility District;

Sale of 30 MW of wind generation to five Southern California municipals;

Sale of 90 MW of wind generation to Bonneville Power Administration;

Sale of 22.5 MW of wind generation to a Southern California IOU;

Sale of 25 MW of wind generation to Eugene Water Electric Board; and

Sale of merchant wind generation to Green Mountain.

Barrett has over 18 years of experience in the renewable energy business with US Windpower, Calpine, and the Department of Energy. He holds a B.A. from Pomona College and an MBA from Yale University.

**Rob Goodman** currently manages a team of 15 power traders who collectively possess over 150 years of experience in Western System Coordinating Council (WECC). Experience includes control area operations, generation and transmission dispatching/scheduling and forward, daily and hourly trading throughout WECC. He is currently managing over 200 MW of wind generation and 744 MW of gas fired

generation within PacifiCorp and Bonneville Power Administration control areas. The trading team will be adding additional talent to the group to enhance our presence in Midwest.

**Allan Query** is Vice President of Construction & Operations for PPM. He joined Pacific Generation Company (PGC), an earlier unregulated affiliate, in 1991 as Director of Project Engineering. He is currently managing the design and construction of PPM's wind projects that include approximately 100 MWs in the Midwest and 185 MWs in the Western United States. In addition, he has managed the design, construction and startup of the 240 MW Crockett Cogeneration Project and the 484 MW Klamath Cogeneration Project for the project owners, as well as managing engineering oversight for PGC's interest in 13 other generation projects powered by gas, coal, refuse derived fuel, hydro, and wind. In his current capacity, he is responsible for management of engineering, construction, and operation of PPM projects. He graduated Cum Laude from Seattle University in Mechanical Engineering, is a registered Professional Engineer, and has over 30 years experience in the power generation industry. While with GE from 1973 to 1991 as a field engineer, startup engineer, service manager, project manager, and manager of projects, he gained a recognized expertise in the design, construction, start-up, and project management of unique gas turbine, combined cycle, and biomass fired power and cogeneration plants throughout the western U.S. and Alaska. He has had direct experience with more than 30 such projects, including regenerative cycle marine propulsion systems and several of the earliest large combined cycle generation projects. His group is responsible for the following activities:

- Project Design, Engineering and Construction Specifications
- Interconnection and Substation Design
- Project Environmental Assessments
- Permits and Related Approvals
- Project Construction and Commissioning
- Project Operations
- Project Maintenance

**Jim Gilbert** is Director of Project Engineering, responsible for PPM's technical support for new development activities. Since joining PPM in November 2002, Jim has directed and managed the technical resources associated with PPM's development activities including technical oversight and contract administration provided for the Klondike acquisition, the Flying Cloud and Mountain View III development projects, and most recently, the Colorado Green acquisition. Mr. Gilbert holds a Construction Management degree from Washington State University with graduate level studies in business finance from UC Berkeley and Golden Gate University. He has over 21 years in the power industry and structured origination, including strategic acquisitions and investments, marketing, construction management, and power plant development. Mr. Gilbert has held various management level positions in the independent power industry and has directed commercial and technical teams associated with business investments including a diverse mix of resource and power plant technologies. Prior to joining PPM, Mr. Gilbert was Director, Business Development for Enron North America's West Power Origination division located in Portland, Oregon.

#### **D.4 QUALIFICATIONS OF KNOWN CONTRACTORS**

**OAR 345-021-0010(1)(d)(C)** *The qualifications of any architect, engineer, major component vendor, or prime contractor upon whom the applicant will rely in constructing and operating the facility, to the extent that the identities of such persons are known when the application is submitted;*

Response: The Applicant has not selected a prime contractor to construct the project. However, Klondike III will work with engineers, manufacturers, and contractors who are experienced in the wind industry to complete the project.

#### **D.5 APPLICANT'S PAST PERFORMANCE**

**OAR 345-021-0010(1)(d)(D)** *The past performance of the applicant, including but not limited to the number and severity of any regulatory citations in constructing or operating a facility, type of equipment, or process similar to the proposed facility;*

Response: Neither PPM nor the Applicant has received any regulatory citations in connection with the construction or operation of similar facilities.

#### **D.6 APPLICANT WITH NO PREVIOUS EXPERIENCE**

**OAR 345-021-0010(1)(d)(E)** *If the applicant has no previous experience in constructing or operating similar facilities and has not identified a prime contractor for construction or operation of the proposed facility, other evidence that the applicant can successfully construct and operate the proposed facility. The applicant may include, as evidence, a warranty that it will, through contracts, secure the necessary expertise; and*

Response: Not applicable.

#### **D.7 ISO CERTIFIED PROGRAM**

**OAR 345-021-0010(1)(d)(F)** *If the applicant has an ISO 9000 or ISO 14000 certified program and proposes to design, construct and operate the facility according to that program, a description of the program;*

Response: PPM does not have an ISO 9000 or 14000 certified program.

#### **D.8 MITIGATION**

**OAR 345-021-0010(1)(d)(G)** *If the applicant relies on mitigation to demonstrate compliance with any standards of Division 22 or 24 of this chapter, evidence that the applicant can successfully complete such proposed mitigation, including past experience with other projects and the qualifications and experience of personnel upon whom the applicant will rely, to the extent that the identities of such persons are known at the date of submittal.*

Response: Mitigation for the project may be required for impacts to soil, scenic values, and other resources. Klondike III, through its parent company PPM, has extensive experience from past successful projects in constructing wind power generating projects that avoid impacts to the extent practicable, and mitigate for impacts to resources.

#### **D.9 CONCLUSION**

Based on the above information, the Applicant has satisfied the required 345-021-0010(1)(d), and the Council may find that the Applicant has the organizational expertise to construct, operate, and retire the proposed facility in compliance with Council stand pursuant to OAR 345-002-0010.

