U.S. Generating Company

December 29, 1992

Ms. Christine Ervin, Director
Oregon Department of Energy
625 Marion Street N.E.
Salem, Oregon 97310

Dear Ms. Ervin:

We are pleased to submit to the Oregon Energy Facility Siting Council (EFSC) the Site Certificate Application (SCA) for the Hermiston Generating Project (the Project). The Project is a natural gas-fueled 468 MW cogeneration facility that will be located about 3 miles southwest of Hermiston, Oregon. Steam from the power plant will be supplied to the Lamb-Weston potato processing facility adjacent to the project site.

Enclosed are an original and sixty (60) copies of the SCA along with a check in the amount of $150,000.

We have worked closely with the Department of Energy staff in the development of the energy facility siting regulations, and we feel privileged to be one of the first to sponsor a project in this process.

We look forward to working with you and your staff. If you have any questions please contact me at (415) 291-6417.

Yours very truly,

Peter B. Evans

Peter B. Evans
Project Developer

Enclosures

444 Market Street, Suite 1900 • San Francisco, California 94111 • 415-291-6481 • Fax 415-291-6498

Application
for a
Site Certificate
for
Hermiston Generating Project

Volume 1

CONTENTS

Volume 1

INTRODUCTION

Hermiston Generating Company, L.P. ("Applicant") hereby submits this Site Certification Application ("SCA") to construct a natural gas-fueled combustion turbine energy facility, and its related and supporting facilities, near Hermiston, Oregon (the "Hermiston Project" or the "Project").

The Project is a high-efficiency combined cycle cogeneration power plant with a nominal generating capacity of 468 MW. It will be fueled by natural gas. The Project will sell electricity at the wholesale level to regional electric utilities that will, in turn, sell this electricity at the retail level to end users. The Project will also supply steam to the Lamb-Weston, Inc., potato processing facility, which is located on Westland Road in Hermiston. Lamb-Weston will use the steam for processing equipment, heating and cooking.

Related and supporting facilities for the Project will include a natural gas pipeline, that will be constructed for the primary purpose of bringing gas from an interstate pipeline to the energy facility site, and an electric transmission line, that will be upgraded. The transmission line will deliver electricity from the Project to the McNary Substation, which is a part of the electric distribution system owned and operated by the Bonneville Power Administration.

Applicant has already submitted a Notice of Intent, which the Oregon Department of Energy ("ODOE") deemed filed on May 4, 1992. On August 26, 1992, ODOE issued an order setting forth the applicable state statutes and administrative rules that are to be used for the preparation and review of this SCA. ODOE issued an addendum to that order on November 25, 1992. The

order specifies that Applicant may submit an application for a site certificate on or after November 2, 1992.

OAR 345-21-015(1) requires that the SCA address each provision of OAR 345-21-015(1) identified in the Project Order, with an appropriate exhibit label reflecting those provisions. Accordingly, the SCA includes a separate exhibit for each of the subsections applicable to the Project that are set forth in OAR 345-21-015(1). Applicant has also identified in the introduction to each of the appropriate exhibits the general standard set forth in OAR Division 22 that must be satisfied in order for the site certificate to be granted.

The affidavit required by OAR 345-21-015(2) follows the exhibits specified in OAR 345-21-015(1).

Applicant is filing sixty copies of this Application, along with one original, in accordance with OAR 345-21-15(3).

EXHIBIT A

APPLICANT INFORMATION

INTRODUCTION

This SCA is for a nominal 468 MW natural gas-fueled energy facility and certain related and supporting facilities to be built near Hermiston, Umatilla County, Oregon.

NAME AND ADDRESS OF APPLICANT-PARTNERSHIP - OAR 345-21-015(1)(a)(A)

Hermiston Generating Company, L.P., a Delaware limited partnership, is filing the SCA.

Applicant's address and telephone number are:

444 Market Street, 19th Floor
San Francisco, California 94111
(415) 291-6481
(415) 291-6450 fax

Partnership Information - OAR 345-21-015(1)(a)(B))

The partnership agreement is attached as Exhibit A-1.

A list of the members of the partnership and their cities of residence are:

Buckeye Power Corporation
c/o Bechtel Generating Company, Inc.
50 Beale Street
San Francisco, CA 94105
Attn: President

Larkspur Power Corporation
c/o PG&E Generating Company
444 Market Street, 19th Floor
San Francisco, CA 94111
Attn: Vice President

PG&EE Generating Company
444 Market Street, 19th Floor
San Francisco, CA 94111
Attn: Vice President

Applicant's officers are:

Joseph P. Kearney	President and Chief Executive Officer
P. Chrisman Iribe	Senior Vice President and Secretary
John R. Cooper	Vice President and Assistant Treasurer
Francis X. DeRosa	Vice President
David N. Bassett	Treasurer
Stephen A. Herman	General Counsel
Gerald S. Endler	Assistant Secretary and Assistant General Counsel

The full name, official designation, mailing address and telephone number of the person responsible for submitting the application is:

Mr. Francis X. DeRosa
Vice President , Hermiston Generating Company
444 Market Street, 19th Floor
San Francisco, California 94111
(415) 291-6485
(415) 291-6450 fax

Applicant's registration to do business in Oregon is attached as Exhibit A-2.

The name and address of the resident attorney in fact in the State of Oregon is:

Robert S. Ball
Ball, Janik & Novack
101 SW Main Street, Suite 1100
Portland, OR 97204
(503) 228-2525
(503) 295-1058 fax

Mr. Peter Evans is the Project Developer for the Project and is the primary contact person for the Project. His address is:

444 Market Street, 19th Floor
San Francisco, CA 94111
(415) 291-6417
(514) 291-6450 fax.

Exhibit A-1

[EXECUTION COPY]

LIMITED PARTNERSHIP AGREEMENT

OF

CENTRAL FLORIDA GENERATING COMPANY LIMITED PARTNERSHIP

Dated as of September 17, 1991

among

Buckeye Power Corporation,

Larkspur Power Corporation,

and

PG&E Generating Company

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LIMITED PARTNERSHIP AGREEMENT

OF

CENTRAL FLORIDA GENERATING COMPANY LIMITED PARTNERSHIP

THIS LIMITED PARTNERSHIP AGREEMENT ("Agreement") is entered into as of September 17, 1991 by and among Buckeye Power Corporation, a Delaware corporation ("Buckeye"), in its role as a general partner, Larkspur Power Corporation, a California corporation ("Larkspur"), in its role as a general partner (Buckeye and Larkspur in their roles as general partners are sometimes referred to herein as the "General Partners") and PG&E Generating Company, a California corporation ("PG&E"), in its role as a limited partner (PG&E in its role as a limited partner is sometimes referred to herein as the "Limited Partner" and the General Partners and the Limited Partner are sometimes referred to herein collectively as the "Partners"), with reference to the following:

RECITALS:

WHEREAS, the parties hereto desire to form a limited partnership under the Delaware Revised Uniform Limited Partnership Act (the "Act") in order to engage in certain activities in connection with the ownership, development, financing, construction, operation and maintenance of an electrical generation or cogeneration station and related facilities, including, without limitation, transmission facilities (the "Facility"), at a site to be determined and all estates, rights and interests in property (real, personal and mixed) as may be appropriate for ownership, development, construction, operation and maintenance of the Facility (the Facility together with such estates, rights and interests being herein referred to as the "Project");

WHEREAS, the Partners anticipate entering into an Amended and Restated Limited Partnership Agreement prior to obtaining the financing for the Project in order to more fully carry out the activities described in the Recitals to this Agreement;

NOW, THEREFORE, in consideration of the premises and the mutual agreements hereinafter contained, the Partners hereby agree as follows:

SECTION 1

GENERAL TERMS

1.1 Formation. The Partners hereby form a limited partnership (the "Partnership") under the Act, effective upon the filing of the Certificate of Limited Partnership for the Partnership as provided in Section 1.2.

1.2 Filing of Certificate of Limited Partnership. The General Partners shall promptly file a Certificate of Limited Partnership with the Delaware Secretary of State.

1.3 Name of Partnership. The name of the Partnership shall be CENTRAL FLORIDA GENERATING COMPANY LIMITED PARTNERSHIP.

1.4 Principal Place of Business. The Partnership's principal office and place of business shall be 7475 Wisconsin Avenue, Bethesda, Maryland.

1.5 Purposes of Partnership. The sole purposes of the Partnership are to (i) submit proposals to one or more electric utility companies for the sale of electricity to such utility companies, (ii) negotiate and enter into one or more power purchase agreements with one or more electric utility companies for the sale of electricity from the Facility, (iii) seek and obtain debt and equity financing for the Project, (iv) seek and obtain control of a site for the Project, (v) negotiate and enter into agreements for the supply of fuel and water to the Facility, (vi) if the Facility is a cogeneration facility, negotiate and enter into an agreement for the sale of thermal energy from the Facility, and (vii) undertake other development activities with respect to the Project. The Partnership shall engage in no other business without the consent of the Partners. However, the Partners recognize that, in connection with the Project, new Partners may be added to the Partnership, general partners may convert all or part of their general partner interests to limited partner interests and the Partners intend to enter into an Amended and Restated Limited Partnership Agreement to more fully carry out the activities described in the Recitals to this Agreement and to set forth definitive agreements on all Partnership matters, including management rights, capital contribution commitments and allocations of profits, losses and cash.

1.6 Term of Partnership. The term of the Partnership shall commence on the date the Certificate of Limited Partnership described in Section 1.2 is filed with the Delaware Secretary of State (the "Effective Date"), and shall continue until terminated in accordance with Section 8.

1.7 Filing of Other Certificates. The Board of Control (as defined in Section 5.1) shall cause to be executed, filed and published all such certificates, notices,

statements or other instruments, and amendments thereto for the formation of a limited partnership under the laws of the State of Delaware and the operation of a limited partnership under all applicable laws as the Board of Control may deem necessary or advisable for the operation of the Partnership.

SECTION 2

CAPITALIZATION

2.1 Capital Accounts. An individual capital account shall be maintained for each Partner. Each Partner's capital account shall be:

(i) increased by (A) the amount of all cash capital contributions to the Partnership made by such Partner, (B) the fair market value, as determined by the mutual consent of the Partners, of any assets, net of liabilities secured thereby, contributed to the Partnership by such Partner, and (C) all items of income or gain allocated to such Partner; and

(ii) decreased by (D) all cash distributed to such Partner, (E) the fair market value of any assets, net of liabilities secured thereby, distributed to such Partner, and (F) all items of deduction or loss allocated to such Partner; provided, however, that the capital accounts shall in all events be determined and maintained in accordance with the rules set forth in Section 1.704-1(b)(2)(iv) of the Treasury Regulations issued by the Internal Revenue Service (collectively, the "Allocation Rules").

2.2 Capital Contributions.

(a) Initial Capital Contributions.

(i) General Partners. On the Effective Date, Buckeye and Larkspur shall each contribute $49 in cash to the Partnership.

(ii) Limited Partner. On the Effective Date, the Limited Partner shall contribute $2 in cash to the Partnership.

(b) Additional Capital Contributions. Partners may make additional capital contributions to the Partnership, but only with the consent of the other Partners. Other than as described in Section 2.2(a), no Partner shall have any obligation to make any capital contributions to the Partnership.

2.3 No Interest on Capital Account Balances. No Partner shall be entitled to receive any interest on the balance in its capital account.

2.4 Loans to Partnership.

(a) Required Loans. No Partner shall be required to lend any money to the Partnership.

(b) Permitted Loans. In the event that Partnership funds are insufficient to meet its costs, expenses, obligations or liabilities, or to make any expenditure authorized by this Agreement, any Partner may (but shall not be required to) lend all or a portion of the amount of needed funds to the Partnership. Any such loans shall bear interest at market rates and be repayable at the earliest possible time.

SECTION 3

PROFITS AND LOSSES

3.1 Allocation of Profits and Losses. For both accounting and tax purposes, each item of income, gain, loss, deduction and credit of the Partnership for each fiscal year (or portion thereof) shall be allocated to the Partners as follows:

General Partners:

Buckeye	49%
Larkspur	49%

Limited Partner:

PG&E	2%

3.2 Consistency with Allocation Rules. Notwithstanding the terms of Section 3.1, allocations of items described therein shall be made to the Partners in the manner required for such allocations to be given effect for federal income tax purposes under the Allocation Rules.

SECTION 4

DISTRIBUTIONS

4.1 Operating Cash Flow Distributions. All distributions, other than liquidating distributions, shall be made at such times and in such amounts as the Partners mutually agree.

4.2 Liquidating Distributions. Distributions in liquidation of the Partnership shall be made in the manner described in Section 8.2(d).

4.3 Other Distributions. Except as provided in Section 4.1, 4.2 or otherwise in this Agreement, no Partner shall be entitled to receive any distribution from the Partnership without the consent of the other Partners.

SECTION 5

MANAGEMENT

5.1 Generally. The overall management and control of the Partnership shall be exercised by a board (the "Board of Control") which, except as otherwise provided in this Agreement, shall have all rights and powers permitted a general partner under the Act. Except as permitted by the Board of Control or this Agreement, no Partner shall have any right or authority to take any action on behalf of the Partnership with respect to third parties.

5.2 Board of Control.

(a) Membership. The Board of Control shall consist of five individuals, two of whom shall be appointed by Larkspur and three of whom shall be appointed by Buckeye. The initial members of the Board of Control are:

Larkspur Representatives: Mason Willrich
Stuart Booth

Buckeye Representatives: Cordell W. Hull
John W. Weiser
Philip J. Luks

In the absence of one or more members of the Board of Control, the General Partner which appointed the absent member may designate an alternate to act for such absent member. The General Partners may also designate the CEO (as defined in Section 5.4(a)) as an ex officio, nonvoting member of the Board of Control. Each member of the Board of Control shall hold office until death, resignation or removal at the pleasure of the General Partner which appointed him. If a vacancy occurs on the Board of Control, the General Partner which appointed such vacating member shall appoint his successor. Designation, removal and appointment shall be by notice to the other General Partner, with a copy to the CEO (as defined in Section 5.4(a)).

(b) Designated Members. Each General Partner shall designate one of its members of the Board of Control to act as its representative with respect to certain matters regarding the operation of the Partnership (a "Designated Member"). From time to time the Board of Control may delegate to the Designated Members authority to take actions on behalf of the Board of Control.

(c) Meetings and Approval Requirements.

(1) Regular Meetings. The Board of Control shall meet no less than once each calendar quarter on a date and at a time and place established by the Board of Control.

(2) Special Meetings. A special meeting of the Board of Control shall be held at the request of any Board of Control member.

(3) Telephonic Meetings. Any meeting of the Board of Control may be held by conference telephone call or through similar communications equipment by means of which all persons participating in the meeting can hear each other. Participation in a telephonic meeting held pursuant to this Section shall constitute presence in person at such meeting.

(4) Notices. Notices of regular meetings of the Board of Control are not required. Notices of special meetings of the Board of Control shall state the date and hour of the meeting and the purpose or purposes for which the meeting is called. Special meetings shall be held at the address of the party requesting the special meeting as set forth in Section 9.1, or at such other place as shall be agreed to by the members of the Board of Control. The notice of a special meeting shall be given in writing not less than ten (10) nor more than twenty (20) days before the date of the meeting to each

Board of Control member. Board of Control members may waive in writing the requirements for notice before, at or after the special meeting involved.

(5) Quorum. At each meeting of the Board of Control, the presence in person or by telephone, as appropriate, of at least two members of the Board of Control, including at least one member appointed by each General Partner, or, in the case of the absence of a member, such member's alternate, shall be necessary to constitute a quorum for the transaction of business. An alternate may only act for one absent member at a time.

(6) Approval Requirements. An affirmative vote of each member of the Board of Control (other than the CEO) present in person or by telephone, as appropriate, and voting at a duly held meeting of the Board of Control shall be necessary for any action of the Board of Control.

(7) Written Consents. Any action required or permitted to be taken at a meeting of the Board of Control may be taken without a meeting if at least one member of the Board of Control appointed by each General Partner consents thereto in writing. Such consents shall be filed with the minutes of the proceedings of the Board of Control.

(d) Compensation and Reimbursement. Board of Control members shall not be entitled to receive compensation for, or reimbursement of expenses incurred in, attending meetings of the Board of Control.

5.3 Authority.

(a) All Partners. Notwithstanding any other provision in this Agreement to the contrary, the following acts require the prior written approval of all Partners:

(i) amendment of this Agreement in accordance with Section 9.3, as provided therein;

(ii) admission of a new Partner in accordance with Section 7.1;

(iii) dissolution and termination of the Partnership in accordance with Section 8.1(a);

(iv) the sale of all or substantially all of the assets of the Partnership, except in the liquidation and winding up of the business of the Partnership upon its dissolution and termination (for purposes of this Section 5.3(a)(iv), "substantially all" means greater than seventy-five percent (75%)); and

(v) taking any act which would constitute a bankruptcy of the Partnership.

(b) Board of Control. The Board of Control shall have full power and authority in the management and control of the Partnership with respect to matters other than those reserved to the Partners in Section 5.3(a) above.

5.4 Officers of the Partnership.

(a) Chief Executive Officer. The Board of Control shall appoint a President and Chief Executive Officer for the Partnership (the "CEO") who may be an employee of a Partner or an affiliate of a Partner, and who shall have primary responsibility for the day-to-day affairs of the Partnership, subject to (i) the provisions of this Agreement, (ii) an obligation to keep the Board of Control informed of all material decisions within his authority, and (iii) any requirements or conditions established from time to time by the Board of Control.

(b) Other Officers. The Board of Control shall appoint such other officers for the Partnership, with such authority, as it deems necessary or advisable.

5.5 Power of Attorney.

(a) Attorney-in-Fact. The Limited Partner hereby grants to the General Partners a special power of attorney irrevocably making, constituting and appointing each General Partner and its authorized officers as the Limited Partner's attorney-in-fact, with power and authority to act in its name and on its behalf to execute, acknowledge and swear to in the execution, acknowledgment and filing of: (i) all certificates and other instruments deemed necessary or advisable by the General Partners to permit the Partnership to become or to continue as a limited partnership or partnership wherein the Limited Partner has limited liability in the jurisdictions where the Partnership may be doing business; (ii) all instruments that effect an amendment to this Agreement entered into pursuant to Section 9.3; and (iii) all fictitious or assumed name certificates required or permitted to be filed on behalf of the Partnership.

(b) Terms of Power. The foregoing power of attorney: (i) is coupled with an interest and shall be irrevocable and survive the corporate dissolution of the Limited Partner; and (ii) shall survive an assignment by the Limited Partner of all or any portion of its interest in the Partnership but only until the assignee of the interest is admitted as a substituted Limited Partner.

5.6 Bank Accounts. The Board of Control shall cause to be established and maintained one or more accounts for the Partnership at such bank or banks as it may from time to time designate.

5.7 No Compensation. No Partner shall be entitled to compensation from the Partnership for services rendered to the Partnership except as otherwise provided herein.

SECTION 6

ACCOUNTING, RECORDS AND REPORTS

6.1 Fiscal Year. The fiscal year of the Partnership for both accounting and tax purposes shall be the calendar year.

6.2 Method of Accounting. The Partnership's books of account shall be maintained in accordance with generally accepted accounting principles; provided, however, that for purposes of making allocations and distributions hereunder (including, without limitation, distributions in liquidation of the Partnership in accordance with capital account balances as required by Section 8.2), capital accounts and items of income, loss and other items described in Section 3.1 shall be determined in accordance with federal income tax accounting principles utilizing the accrual method of accounting.

6.3 Books and Records.

(a) Books of Account. The Partnership shall maintain, at its principal office, full and proper ledgers and other books of account, of all receipts and disbursements and other financial activities of the Partnership.

(b) Tax Information. Within 90 days (or as soon thereafter as practical) after the end of each taxable year of the Partnership, the Board of Control shall cause the Partnership to send to the Limited Partner all information with respect to the Partnership necessary to complete the latter's federal, state, and local income or franchise tax or information returns for the year.

6.4 Tax Matters Partner. Larkspur shall be the "tax matters partner" of the Partnership, as that term is defined in Section 6231(a)(7) of the Internal Revenue Code.

SECTION 7

CHANGES IN MEMBERSHIP

7.1 New Partners. New Partners may be admitted to the Partnership only with the prior written consent of each Partner.

7.2 Transfer of Partnership Interests. A Partner shall not sell, assign or transfer its interest in the Partnership without the prior written consent of the other Partners. Any such purported sale, assignment, or transfer of a partnership interest by a Partner which has not been so consented to in writing shall be null and void.

7.3 Conversion. Any General Partner may, upon thirty (30) days prior written notice to the other Partners, convert all or a portion of its general partner interest to a limited partner interest. Upon the conversion, such Partner shall become a Limited Partner, with all of the rights and subject to all of the limitations of a Limited Partner hereunder, but retaining its capital account and financial rights with respect to allocations and distributions in the same manner as then provided in this Agreement. The converting Partner shall reasonably cooperate with the other Partners, at their request, to structure the conversion in a manner that will not cause a termination of the Partnership.

7.4 Effect. Neither the admission of a new Partner nor the transfer of a Partner's interest shall cause a dissolution or termination of the Partnership. The withdrawal of a Partner from the Partnership or the conversion of a general partner interest to a limited partner interest shall cause a dissolution of the Partnership only if required by Section 8.1(c).

SECTION 8

DISSOLUTION AND TERMINATION

8.1 Events Causing Dissolution. The Partnership shall be dissolved upon the first to occur of the following events:

(a) the written consent of the Partners to dissolve the Partnership;

(b) December 31, 2031;

(c) a General Partner ceases to be a general partner of the Partnership, if:

(i) such Partner is not the sole General Partner and all remaining General Partners elect within ninety (90) days after receiving knowledge of such cessation not to continue the business of the Partnership; or

(ii) such Partner is the sole General Partner, unless all remaining Partners agree in writing to continue the business of the Partnership and to admit one or more new general partners;

(d) Entry of a decree of judicial dissolution under Act Section 17-802; or

(e) any other event which causes a dissolution of the Partnership under the Act notwithstanding a provision of this Agreement to the contrary.

8.2 Procedures Upon Dissolution.

(a) General. In the event the Partnership dissolves, it shall commence winding up pursuant to the appropriate provisions of the Act and the procedures set forth in this Section 8.2. Notwithstanding the dissolution of the Partnership, prior to the termination of the Partnership, the business of the Partnership and the affairs of the Partners, as such, shall continue to be governed by this Agreement.

(b) Control of Winding Up. The Board of Control shall have all the duties and responsibilities associated with the dissolution and winding up of the Partnership; provided, however, that (i) if a General Partner at the time of such dissolution was the Partner with respect to whom an event occurred causing such dissolution, then such winding up shall be conducted by the other General Partner, or if there is no General Partner other than the one with respect to whom such an event has occurred, by a person selected by the Limited Partner (acting without the participation of the Partner with respect to whom the event occurred causing such dissolution) to wind up the Partnership for reasonable compensation (the Board of Control, such General Partner or such person selected by the Limited Partner, as the case may be, hereinafter referred to as the "Liquidator"), and (ii) if the dissolution was caused by entry of a decree of judicial dissolution pursuant to Section 8.1(e), the winding up shall be carried out in accordance with such decree.

(c) Manner of Winding Up. Upon dissolution of the Partnership, the Liquidator shall (i) cause the Certificate of Limited Partnership to be canceled as prescribed by the Act Section 17-203, and (ii) determine the time, manner and terms of any sale or sales of Partnership property pursuant to such winding up, consistent with its

fiduciary responsibility and having due regard to the activity and condition of the relevant market and general financial and economic conditions.

(d) Application of Assets. Upon dissolution of the Partnership, the remaining assets shall be applied as follows:

(1) Creditors. First, to payment of the liabilities of the Partnership owing to third parties and to Partners. After payment of any such known liabilities, the Liquidator shall set up such reserves as it deems reasonably necessary for any contingent or unforeseen liabilities or obligations of the Partnership. Such reserves may be paid over by the Liquidator to an escrow holder, to be held in escrow for the purpose of paying any such contingent or unforeseen liabilities or obligations, and, at the expiration of such period as the Liquidator may deem advisable, such reserves shall be distributed to the Partners or their assigns in the manner set forth in Section 8.2(d)(2) below.

(2) Partners. Second, to the Partners in accordance with their capital account balances, after all allocations of profits or losses and after adjustment of the Partners' capital account balances pursuant to the last sentence of this Section 8.2(d)(2). If such distributions are insufficient to return to any Partner the full amount of his capital account, he shall have no recourse against the other Partners. If the Liquidator determines that the Partnership should distribute any of its assets in kind, such assets shall be distributed on the basis of their fair market values, as determined by an appropriate appraisal procedure mutually agreed to by the Partners, and the capital accounts of the Partners shall be adjusted prior to liquidating distributions being made to reflect how any resulting gain or loss would have been allocated under Section 3.1 if such assets had been sold.

8.3 Termination of Partnership. Upon the completion of the liquidation of the Partnership and the distribution of all Partnership assets, the Partnership's affairs shall terminate and the General Partners, or if there is no General Partner, a majority of the Limited Partners, shall cause to be executed and filed a Certificate of Cancellation of the Partnership's Certificate of Limited Partnership, as well as any and all other documents required to effectuate the termination of the Partnership.

SECTION 9

MISCELLANEOUS

9.1 Notices. Any written notice to any of the Partners or to the Partnership required or permitted hereunder shall be deemed to have been duly given on the date of

service, if served personally on the party to whom such notice is to be given, or on the fifth day after mailing if mailed to such party by registered or certified mail, postage prepaid, and addressed to such party at the address stated opposite its name below, or at such other address as may be specified by written notice given to the Partnership by such party under this Section 9.1.

Entity	Address
Larkspur:	c/o PG&E Generating Company 444 Market Street, 19th Floor San Francisco, California 94106 Attn: Vice President
Buckeye:	c/o Bechtel Generating Company, Inc. 50 Beale Street San Francisco, California 94105 Attn: President
PG&E:	c/o PG&E Generating Company 444 Market Street, 19th Floor San Francisco, California 94106 Attn: Vice President

9.2 Binding Effect. This Agreement shall be binding upon the respective successors, assigns and legal representatives, and shall inure to the benefit of the permitted assigns, of the parties hereto, except to the extent otherwise provided herein.

9.3 Amendment. This Agreement may be amended, except as otherwise provided herein, only upon the written consent of each Partner.

9.4 Entire Agreement. This Agreement constitutes the entire understanding of the parties hereto with respect to the subject matter hereof.

9.5 Severability. If any provision of this Agreement or the application thereof to any party or circumstances is held invalid or unenforceable, the remainder of this Agreement and the application of such provision to other parties or circumstances shall not be affected thereby, and to this end, the provisions hereof are declared severable.

9.6 Counterparts. This Agreement may be executed in one or more counterparts, but all such counterparts shall constitute one and the same agreement.

9.7 Applicable Law. This Agreement shall be deemed a contract made under the laws of the State of Delaware, and the rights and obligations of the parties hereto shall be governed by and construed in accordance with the laws of such state.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date set forth in the preamble to this Agreement.

Larkspur:

LARKSPUR POWER CORPORATION,
a California corporation

By: P. Chrisman Tibbe
Title: Authorized Agent

Buckeye:

BUCKEYE POWER CORPORATION,
a Delaware corporation

By: P. Chrisman Tibbe
Title: Authorized Agent

PG&E:

PG&E GENERATING COMPANY,
a California corporation

By: P. Chrisman Tibbe
Title: Authorized Agent

FIRST AMENDMENT

TO

LIMITED PARTNERSHIP AGREEMENT

OF

CENTRAL FLORIDA GENERATING COMPANY LIMITED PARTNERSHIP

THIS FIRST AMENDMENT TO LIMITED PARTNERSHIP AGREEMENT OF CENTRAL FLORIDA GENERATING COMPANY LIMITED PARTNERSHIP (the "Amendment") is entered into as of the 20th day of January 1992, by and between Buckeye Power Corporation, a Delaware corporation ("Buckeye"), and Larkspur Power Corporation, a California corporation ("Larkspur"), with reference to the following:

RECITALS:

WHEREAS, Buckeye and Larkspur entered into the Limited Partnership Agreement of Central Florida Generating Company Limited Partnership dated as of September 17, 1991 (the "Partnership Agreement"); and

WHEREAS, the parties desire to amend the Partnership Agreement in certain respects as hereinafter set forth;

NOW, THEREFORE, the parties hereby amend the Partnership Agreement as follows:

1. All capitalized terms used in this Amendment but not defined herein shall have the meanings set forth in the Partnership Agreement.

2. The title of the Partnership Agreement is hereby deleted in its entirety and replaced by the following provision:

> "LIMITED PARTNERSHIP AGREEMENT OF HERMISTON GENERATING COMPANY, L.P."

3. Section 1.3 of the Partnership Agreement is hereby deleted in its entirety and replaced by the following provision:

> "1.3 Name of Partnership. The name of the Partnership shall be HERMISTON GENERATING COMPANY, L.P."

4. All of the remaining terms and provisions of the Partnership Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the Partners have executed this First Amendment To Limited Partnership Agreement through their duly authorized officers as of the date first set forth above.

BUCKEYE POWER CORPORATION

By: _____
Name: _____
Title: _____

LARKSPUR POWER CORPORATION

By: _____
Name: _____
Title: _____

4. All of the remaining terms and provisions of the Partnership Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the Partners have executed this First Amendment To Limited Partnership Agreement through their duly authorized officers as of the date first set forth above.

BUCKEYE POWER CORPORATION

By: _____
Name: _____
Title: _____

LARKSPUR POWER CORPORATION

By: Stuart W Booth
Name: _____
Title: _____

EXHIBIT A-2

To be filed under separate cover.

EXHIBIT B

PROJECT DESCRIPTION

INTRODUCTION

The Hermiston Project is a high-efficiency combustion turbine/combined cycle electric power plant that will be fueled by natural gas. It will generate electricity for sale at the wholesale level to regional electric utilities, that will, in turn, sell this electricity at the retail level to the end users. The Project is expected to have a nominal electric generating capacity of 468 MW.

In addition to generating electric power, the Hermiston Project will supply process steam to the Lamb-Weston, Inc. potato processing facility located on Westland Road in Hermiston, Oregon, adjacent to the energy facility. Lamb-Weston, a subsidiary of ConAgra, Inc., is a nationwide leader in the production and sale of frozen potato products and a technological leader in the formulation of value-added potato products. The company supplies virtually every major fast-food company in the U.S., and is a leading supplier to the traditional restaurant and food service trade. The Lamb-Weston facility produces primarily frozen french fries and other value-added potato products. It is one of the largest employees in the area, with a workforce of over five hundred people, and is a major driver of the local economy. Due to the efficiencies of cogeneration, the Project will be able to supply steam at a lower cost to Lamb-Weston than if Lamb-Weston itself produced the steam. This will help to keep the Lamb-Weston facility viable in the very competitive food processing business.

Lamb-Weston uses steam for processing equipment, heating, and cooking. A pipeline with a diameter of about 8 to 10 inches will be constructed from the energy facility to the Lamb-Weston facility to supply steam from the energy facility. The Lamb-Weston steam load that is to be supplied by the Project is expected to remain at a constant annual average level through the life of the Project. Variations in the Project's electrical output due to variations in the actual steam loads will be minimal, approximately ± 2 percent.

This Exhibit describes the energy facility, its related and supporting facilities and its nominal electric generating capacity. Exhibit B also includes general design drawings of the Project. The discussion in this Exhibit is relevant to the structural standards set forth in OAR 345-22-020.

FACILITY DESCRIPTION, INCLUDING RELATED AND SUPPORTING FACILITIES - OAR 345-21-05(1)(b)

Overview

The energy facility will consist of two essentially identical side-by-side combustion turbine generators, two heat recovery steam generators (HRSG), and two steam turbines. A process flow diagram for one of the twin units is provided as Figure B-1. A site plan and general arrangement for the Project is provided as Figure B-2 and Figure B-2A. Natural gas fuel will be compressed and burned in the gas turbines in a manner similar to that of a jet aircraft engine. In each gas turbine, expanding combustion gases will turn a rotor which, attached to a generator, will produce electricity. The hot combustion gases exhausted from the combustion turbine will then be used to boil water in the HRSGs. Steam from the HRSGs will be expanded through steam turbines and condensed in condensers for return to the HRSGs, where the water will again be turned to steam. The steam turbines are also attached to generators to make electricity. Cooling water for the condensers will be provided from a cooling tower system utilizing evaporative cooling.

Significant Facility Structures and Buildings

The Project will include the following structures and buildings :

- Two combustion turbine buildings, each composed of a steel frame supported on a concrete foundation. Each building will be approximately 8,700 square feet in area and will house a combustion turbine generator and associated mechanical and electrical equipment.

- Two steam turbine buildings, each approximately 8,500 square feet, will separately house the two steam turbines and their associated surface condensers.

- Separate warehouse buildings for each unit will house workshops, a maintenance area, and offices. These buildings will be approximately 4,500 square feet each and may share common walls with the other buildings.

- An open structure of approximately 7,000 square feet housing each HRSG. Each HRSG will be located adjacent to the combustion turbine building and connect to an approximately 190 foot high emission stack. There will be one stack for each unit or a total of two stacks for the facility.

- Two four-cell mechanical induced draft evaporative cooling towers, one for each unit.

- A single auxiliary boiler.

- An air compressor system for each unit.

- Two fuel oil storage cylindrical tanks (48 feet high and 70 feet in diameter), each having a capacity of 1.4 million gallons of fuel oil for each unit and a bermed truck loading/unloading area.

- Supply water storage in two cylindrical tanks (42 feet high and 45 feet in diameter) with a capacity of 500,000 gallons each.

- Demineralized water storage in two cylindrical tanks, each with a capacity of 400,000 gallons each.

- A 55,000 square foot outdoor electrical switchyard.

- Paved roads and parking areas.

- Various utility interconnections (natural gas pipeline, electrical transmission line, steam pipeline, water pipeline, and effluent disposal pipeline).

The Project structures will be architecturally designed to visually integrate with the surrounding area. Neutral colors will be used for the stack and for site buildings. Aesthetically pleasing landscape designs and architectural treatment will be incorporated into the site plan. The design objective of the proposed landscape plan will be to allow easy access to equipment, while partially screening and providing visual buffering to the facility.

Permanent on-site parking will be provided to accommodate all employees in addition maintenance crews, visitor, and deliveries. Handicapped parking will be provided.

An elevation diagram showing the proposed structures is provided as Figure B-3.

Related and Supporting Facilities

Related and supporting facilities for the Project will include a natural gas pipeline that will be constructed primarily to bring gas from an interstate pipeline to the energy facility site and an electric transmission line that will be constructed primarily to deliver the Project's electrical output to a major regional electric substation. The natural gas pipeline will be less than sixteen inches in diameter and less than five miles in length. The transmission line will lie entirely within Umatilla County and partially within the City of Umatilla, and will consist primarily of an upgrade of an existing line to 230 kV within an existing right-of-way. Thus, neither of these facilities is an "energy facility" within the meaning of ORS 469.300(10).

Power Generation Components

There are five major systems associated with power generation at the energy facility: the power generation system, the cooling cycle system, the auxiliary boiler, the control system and the electric power system. Each of these systems is discussed below.

Power System

Four components comprise the power system: the combustion turbine, the heat recovery steam generator, the steam turbine and the stack.

Combustion Turbine Generator ("CT")

The Hermiston Project will employ two advanced gas fired, General Electric Company, Frame 7FA, combustion turbines. The basic elements of these units include a compressor, a dry low-NO_X combustor, a turbine, and an electric generator. Within the combustor, injected fuel will be mixed with compressed air from the compressor and fired. The resulting hot exhaust gases will drive the turbine blades to rotate a shaft driving both the inlet air compressor and the electric generator. Some of the rotational energy of the shaft will be used to compress the incoming combustion air. However, the greater portion of the shaft's rotational energy will drive the generator to produce the facility's electrical output. At full load, each combustion turbine will burn approximately 1,700 MMBTU/hr of fuel. This will be converted in the electric generator to a total (nominal) electrical output of 158 MW for each unit. To improve the efficiency of the CT during the summer, an air inlet cooling system will reduce the temperature of the outside air drawn into the air compressor during the combustion process.

The primary fuel for the turbines will be natural gas, with low-sulfur fuel oil as backup fuel. The CT will be housed in an enclosure which provides thermal insulation, acoustical attenuation, and fire extinguishing media containment. The enclosure will allow access for routine inspections and maintenance.

Heat Recovery Steam Generators ("HRSGs")

One of the significant features of a combined cycle plant is the utilization of the hot exhaust gas from the combustion turbine to produce steam which is, in turn, expanded in a steam turbine to drive an electric generator and produce electricity. The Heat Recovery Steam Generator is the key piece of equipment necessary to the production of this steam.

The power generation system planned for the Hermiston Project will exhaust combustion turbine gas through the HRSG where it will give up thermal energy in a convective heat transfer process to reduce the turbine exhaust temperature from 1100°F to about 205°F at the stack. This heat is transferred through the HRSG tube-walls to heat the feedwater from about 100°F to as high as approximately 1,000°F.

To achieve a high level of efficiency of electrical generation in the steam turbine, the HRSG accomplishes its heat transfer process in three stages or pressure levels and is commonly referred to as a triple pressure system.

This three stage process begins with the pumping of about 1055 gallons per minute ("gpm") of water at approximately 100°F from the condenser to the low pressure ("LP") section of the HRSG. In this section the temperature is increased to about 585°F. A small percentage of the flow, about 123 gpm, is flashed to low pressure steam at 60 pounds per square inch absolute ("psia") and goes directly to the LP section of the steam turbine. The remainder continues through the HRSG, increasing in temperature and pressure to about 1000°F and 1400 psia, and then flows as high quality steam to the high pressure ("HP") section of the steam turbine.

To increase the output of the steam turbine and improve its efficiency, the HP steam that leaves the high pressure section of the steam turbine is sent back to the HRSG where it picks up additional thermal energy in an intermediate stage of the HRSG called the intermediate pressure ("IP") section. Here, the steam is reheated from about 654°F back up to 1000°F and then is sent back to the steam turbine's IP section. The IP steam mixes with the LP steam about two thirds of the way through the steam turbine and then exhausts to the condenser where the steam is condensed to water (at 100°F). This condensed water is then pumped back through the cycle again.

Steam Turbine ("ST")

Each ST is designed to produce approximately 80 MW of electricity without the consumption of additional fuel. The ST is a triple admission, reheat, condensing turbine and is designed for sliding pressure operation. This means that the steam turbine inlet pressure follows the pressure set by the output of the HRSG which is, in turn, a function of combustion turbine output. The HP

portion of the ST receives high pressure superheated steam from the HRSG and then exhausts steam into the reheat section of the HRSG. Reheated steam from the HRSG is supplied to the IP turbine, and the IP turbine exhausts into the low pressure LP turbine. The LP turbine receives low pressure superheated steam from the HRSG and exhausts steam into the condenser. One of the steam turbines will be equipped with extraction nozzles for providing process steam to Lamb-Weston.

Stack

After going through the HRSG, the exhaust flow will vent to an approximately 190 foot stack. In accordance with EPA and Oregon Department of Environmental Quality ("DEQ") guidelines, the stack height will be 2 1/2 times the height of the tallest surrounding structure, thereby meeting the standard of Good Engineering Practice ("GEP"). The GEP height eliminates the potential for aerodynamic down wash of stack emissions, while minimizing visual impacts of the stack.

Cooling Cycle

Steam Turbine/Condenser

After the steam passes through the steam turbine it is condensed in a shell and tube heat exchanger (surface condenser) with cooling water from the cooling tower. Each condenser will include its shell, tubes, a water box, and hot well. Condensed water in the hot well is pumped back to the low pressure section of the HRSG to begin the thermal cycle again.

Cooling Tower

Cooling for the condenser will be evaporative (wet) cooling using mechanical induced draft cooling towers. Fans at the top of the cooling tower maintain a draft within the cooling tower. Circulating water pumps will move the water from the cooling tower basin through the circulating water piping system to the tube side of the condenser and back to the top of the cooling tower. During this process, cooling water does not come into contract with water circulating in the HRSG that will be heated to make steam. The water will be cooled by evaporation as it falls through baffles from the top of the cooling tower to a basin at the bottom of the tower where it is

again pumped back through the condenser. Cooling tower components include the basin, fans, fan deck, drift eliminators, fill material (baffles), and other necessary components. The cooling towers will also include a fire protection system, consisting of sprinklers, and fire suppression equipment.

Each cooling tower is approximately 230 feet in length by 55 feet in width by 50 feet in height and includes a basin holding 500,000 to 600,000 gallons of water used for circulating through the condenser for cooling.

Auxiliary Boiler

An auxiliary boiler will be provided capable of supplying 100,000 pounds of steam per hour for startup purposes, for Lamb-Weston's use during power plant outages, and to provide peaking steam supply. The auxiliary boiler may also be used for freeze protection during power plant outages.

Control System

Each unit will have a state-of-the-art, integrated microprocessor based distributed digital control and monitoring system ("DCS") will be provided for plant control, data acquisition, and data analysis. The plant control system will provide for startup, shutdown, and control of plant operation.

Electric Power System and Interconnection

Electric power will be generated by the combustion turbine generator and the steam turbine generator. The output of each combustion turbine generator will be connected to its 18.0 kV-230 kV main step-up transformer. The output of each steam turbine generator will be connected to its 13.8 kV-230 kV main step-up transformer. The outputs of the combustion turbine and steam turbine generator main step-up transformers will then be bused (i.e., joined) together on the 230 kV side of the transformers. A tower for the utility interconnection to the 230 kV bus will also be provided. A 4.16 kV bus and other related equipment will be provided inside of the energy facility to handle internal loads. An electrical single-line diagram is shown in figure B-4.
The Project will deliver electric power to the regional power grid at BPA's McNary Substation at

Umatilla, Oregon, approximately 12 miles from the energy facility site. The transmission interconnection schematic arrangement is shown in Figure B-5.

The Project will require upgrading of an existing 115 kV transmission line, operated by Umatilla Electric Cooperative, to 230 kV. Approximately 12 miles of this transmission line, entirely within Umatilla County and partially within the City of Umatilla (see Exhibit C, Figure C-3), will be upgraded between the energy facility site and the interconnection with the McNary Substation. This upgrade will consist of replacing existing wooden poles with single-shaft steel poles and adding the new 230 kV circuits to the steel poles that will then carry both the existing 115 kV and the new 230 kV circuits. Where it now exists, the 69 kV underbuild will also be retained, possibly with continued use of some of the wooden poles. Depictions of typical steel pole designs under consideration are provided as Figure B-6. The new poles will incorporate raptor-proof design features described in Exhibits P and R. The upgrade will occur within the existing transmission right-of-way.

Because of the expected routing of the new 230 kV transmission line into the McNary Substation, it is likely that approximately 1/4 mile of new 230 kV transmission line will be constructed. This new section of transmission line will be of similar design to that of the upgraded portion of the line, except only the 230 kV line will be carried on the new poles.

Environmental Protection Components

Air Pollutant Emissions Control

While burning natural gas, the Project will emit NO_X (nitrogen oxides), CO (carbon monoxide), non-methane hydrocarbons, and small quantities of particulate. During fuel oil firing, additional emissions will include SO_2 (sulfur dioxide) and somewhat greater amounts of particulate. Emission controls incorporated in the Project design are described below.

NO_X Control Systems

The Project will be designed to control NO_X using an advanced Dry Low-NO_X combustor. This will be a state-of-the-art design, capable of achieving 9 ppmvd NOx levels.

Continuous Emissions Monitoring System

A separate monitoring system for airborne pollutants will be installed to provide monitoring and alarming of NOx and CO concentrations in both HRSG exhaust systems. The continuous emissions monitoring systems ("CEMs") will provide input signals to the DCS, previously described, and will meet all the requirements of the Oregon Department of Environmental Quality for monitoring and reporting.

Other Emissions

Emissions of SO_2 and particulate will be minimized through use of natural gas as the primary fuel and low sulfur (0.05 percent) No. 2 distillate oil as the backup fuel. Control of CO and non-methane hydrocarbons will be achieved through maintenance of proper combustion controls.

Process Water

As part of the cooling cycle, make-up water will be added at the cooling tower basin to replace water lost through evaporation or discharged from the cooling tower. The discharged water, known as cooling water blowdown, will account for most of the process effluent discharged from the Project. Cooling water blowdown will have the character of the feedwater supply with native constituents in somewhat higher concentrations due to evaporation. The Project anticipates providing cooling tower blowdown for beneficial reuse by Madison Farms, which will use the cooling tower blowdown for crop irrigation. Madison Farms is constructing a distribution system to convey water from the Columbia River, along with the cooling water from the Project, to its fields for irrigation. The distribution system will include a water pipeline and pump stations to convey water to the boundary of Madison Farms, as well as additional pumping, distribution, and storage facilities within Madison Farms. The purpose of this distribution system is to expand the area under irrigation to the full extent of Madison Farm's existing water rights. The plan for reuse of this water is described in *Cooling Water Reuse Land Application System Management Plan,* CH2M Hill, Portland, Oregon, 1992, a copy of which is provided in Exhibit M. See also Exhibit F.

Applicant has considered a number of other alternatives for discharge of Project effluent, including discharge into the Umatilla or Columbia Rivers, subsurface discharge, discharge to a local municipal wastewater treatment facility, and evaporation. At the present time, the most desirable alternative is beneficial use of the effluent by Madison Farms. However, one or more of these other alternatives may be explored more fully in the future.

Roof and Storm Water Discharge

A storm drainage system will be provided for the entire plant area. Individual roof drain systems will be provided for the turbines, HRSG, water treatment and service buildings. Each roof system will include curbing and will be graded toward a single sampling point, allowing the roofing areas to drain into catch basins located at ground elevation. Runoff from the roof will be collected in a common gutter; it will then be conveyed to an on-site detention basin for quiescent settling.

Stormwater from the Project will be collected by a system of drains and catch basins. Catch basins and manholes will be connected by underground piping into a gravity system. The gravity system will discharge to detention basins designed to detain runoff from the 10 year, 24 hour storm event. Water from the detention basin will be discharged to agricultural re-use. The alternative of possible reuse as make-up to the cooling tower supply water will be examined during the detailed design phase.

Solid Waste

Construction of the Project is expected to generate waste steel, other waste metals, and normal miscellaneous construction debris (consisting of wood, concrete, paper, and other refuse). In addition, approximately forty tons per year of normal domestic waste will be generated during Project operation. Disposal plans for this waste are discussed in Exhibit F.

NOMINAL ELECTRIC GENERATING CAPACITY - OAR 345-21-015(1)(b)

Operating Parameters

The energy facility will have a nominal generating capacity of approximately 468 MW under normal steam supply conditions and net of station power. Its expected ratings are:

Gross power output:	482.2 MW at 50 ^{o} F, adjusted to elevation
Capacity factor:	93 percent
Steam to process:	70,000 lb/hr (normal operating point)
Forced outage rate:	2 percent
Station power:	14.5 MW
Capacity net of station power:	467.7 MW
Generating voltage:	18.0 and 13.8 kV
Step-up voltage:	230 kV

Heat Rate and Fuel Chargeable to Power

Heat Rate

At the ISO standard conditions of 59 ^{o}F, 14.7 pounds per square inch atmospheric pressure, and 60% relative humidity, the performance conditions for the two units operating are:

Net Electrical Output	456 MW
Total Fuel Required	3,303 MMBTU/hr
Calculated Heat Rate	7,243 BTU/kWhr HHV

Fuel Chargeable to Power - OAR 345-23-000(6)

Steam Energy to process (70,000 lb/hr at 1,203 BTU/lb) = 84.2 MMBTU/hr
Condensate Return & Makeup (70,000 lb/hr at a net enthalpy of 187 BTU/lb) = 13 MMBTU/hr

Annual Fuel Displaced, FD = $\frac{84.2 - 13 \times 1.11}{0.85}$ =93.0 MMBTU/hr

Assumes an equivalent Boiler efficiency of 85%

Annual Fuel Input, FI = 3,303 MMBTU/hr HHV

Net Annual Electric Output, P = 456,000 kW

Annual values for each of the above can be calculated by multiplying the hourly value by 8760 x 93% capacity factor. Since this all drops out in the following calculation for fuel chargeable to power it was not carried out above.

Fuel Chargeable to Power, FCP = (FI-FD)/P = $\frac{3303-93}{456}$ = 7,040 BTU/kWhr

Operating Basis

The Project is expected to be operated as a baseload resource. However, Applicant may modify the operating basis of the Project depending on the terms and conditions of the power sales contracts into which Applicant enters. The Project is expected to begin normal operation by January, 1996.

The Project will provide firm energy and capacity substantially at the stated capacity level. However, the output of any gas turbine exhibits a slight inverse variation with temperature, and there will be a slight seasonal variation in energy and capacity from the Project. The variation in the winter is approximately ± 1.5 percent, and the variation during the summer is approximately ± 2.5 percent.

GENERAL DESIGN DRAWINGS - OAR 345-21-015(1)(b); PROJECT ORDER PARAGRAPH 14.B.

The following general design drawings of the Project structures, equipment and their appurtenances are provided:

Figure B-1	Process Flow Diagram
Figure B-2	Site Plan
Figure B-3	Elevation Diagram
Figure B-4	Electrical Single Line
Figure B-5	Interconnection Schematic
Figure B-6	Typical Transmission Poles

The site plan and elevation diagrams include conceptual design drawings of the energy facility structures. The types of structures and their occupancy is described in this Exhibit B.

PROJECT ORDER, PARAGRAPH 14.A.

Applicant intends to comply with all of the codes and standards normally utilized in the design and construction of this type of facility, including the National Electric Code, Uniform Building Code ("UBC"), and specialty codes administered through the American Society of Mechanical Engineers ("ASME") and the American National Standards Institute ("ANSI"). Where the applicable Oregon codes specify added conditions or more stringent requirements, these requirements will be incorporated into the facility's design during the detailed design phase of the Project.

Structural, Wind and Seismic

Structural, wind and seismic design will be in accordance with the 1991 UBC and the State of Oregon Amendments "Structural Specialty Code" 1993 Edition. Specific recognition of the wind and seismic criteria applicable to the Project is noted as follows:

Wind

Umatilla County is recognized as being a high wind area as noted in Figure No. 23-1 of the Oregon Amendments to the UBC. Appropriate design conditions include:

Minimum Basic Wind Speed:	90 mph
Exposure C	
Importance Factor	1.15

Seismic

The 1993 Oregon Amendments to the UBC recognize Umatilla County as a seismic zone 2B. Accordingly the basic seismic design will be:

Seismic Zone	2B
Importance Factor	1.25 (highest value)

Boiler and Pressure Vessel Codes

The primary design basis will be the ANSI and ASME Codes for Unfired Pressure Vessels and Piping. Other codes will be applied as applicable.

Fire and Life Safety

Fire Protection

The Hermiston Project will meet the requirements of the UBC as amended by Oregon, and the NFPA.

A comprehensive on-site fire protection system will be installed to control and extinguish fires within the buildings and yard areas. The system will be designed to conform with the Uniform Fire Code and all applicable fire protection standards. It will include a capability to control fires by means of a fire water system, a dry chemical extinguishing system, a CO_2 extinguishing system,

and portable fire extinguishers. Appropriate response to the range of potential fire situations at the energy facility will, therefore, be possible.

The fire water system will include a fire water supply loop, fire hydrants, sprinkler systems, and hoses placed at key locations. An underground fire main pipeline will be constructed, and hydrants with associated hose stations at appropriate intervals will be strategically located throughout the HRSG, turbine and natural gas handling areas. The two 500,000 gallon raw water storage tanks will serve as fire water storage.

The turbine housings, the mechanical and the electrical/control enclosures of the turbines, the battery room, and the switchgear room will be protected by foam or CO_2 fire protection systems. Upon actuation, an alarm or visual indicator will be activated on the gas turbine control panel.

To supplement the other fire prevention systems, portable fire extinguishers will be provided at key locations within the facility. The type and number of extinguishers will satisfy all applicable code requirements.

Medical Facilities

First aid kits, eyewash stations, and drench showers will be provided throughout the facility. This will facilitate rapid medical response in an emergency situation.

FACILITY CONSTRUCTION SCHEDULE

The Project development timetable envisions financial closing by the end of 1993 and commercial operation by early 1996. The total construction period is estimated to be approximately 25 months. A more complete discussion of the construction schedule is provided in Exhibit X.

The construction work force is expected to average approximately 120 personnel over the 25 month construction period, with a peak work force of 200. The work force is expected to start at less than 50 during initial mobilization for clearing and rough grading. Construction activities will include the following:

- Set-up and assembly of temporary office and warehouse;
- Installation of temporary utilities (electricity, water, phone, sewage);
- Preparation of construction parking and equipment staging areas;
- Site preparation;
- Preparation of erosion and sedimentation control measures;
- Disposal of wastes during construction;
- Excavation and construction of foundations; and
- Erection of permanent Facility components.

PROJECT OPERATION AND OCCUPANCY

The Project will be designed to operate continually (24 hours per day, seven days per week) to provide baseload power. The operational labor force will consist of approximately 25 permanent full-time employees, with the majority working the normal day shift (8:00 AM to 4:30 PM). The remaining employees will perform shift work to maintain a 24-hour operation.

The control and warehouse/office structures will generally be occupied on a continuous basis. The combustion turbine and steam turbine structures will generally not be occupied, except during maintenance, testing, and inspection activities.

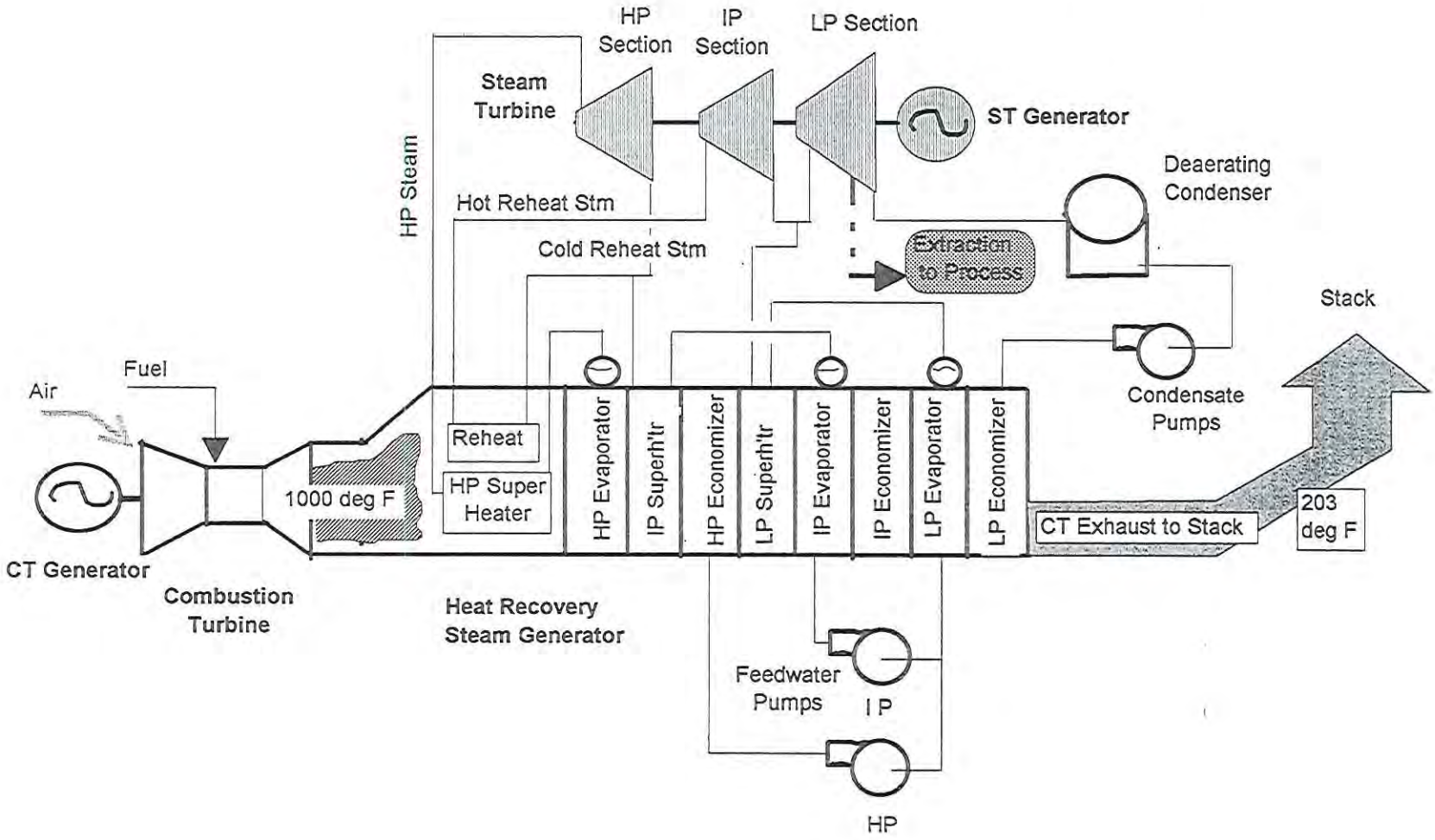
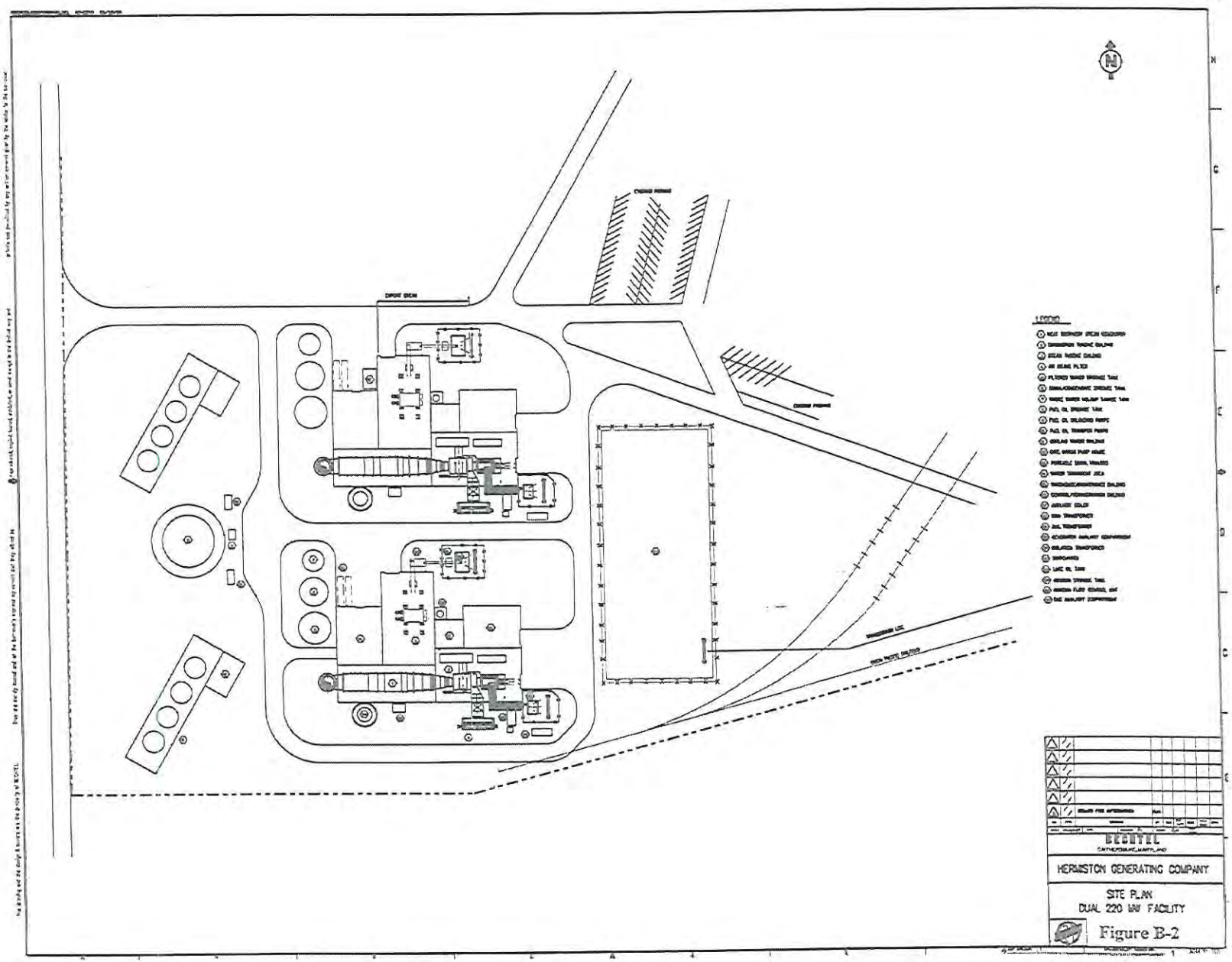
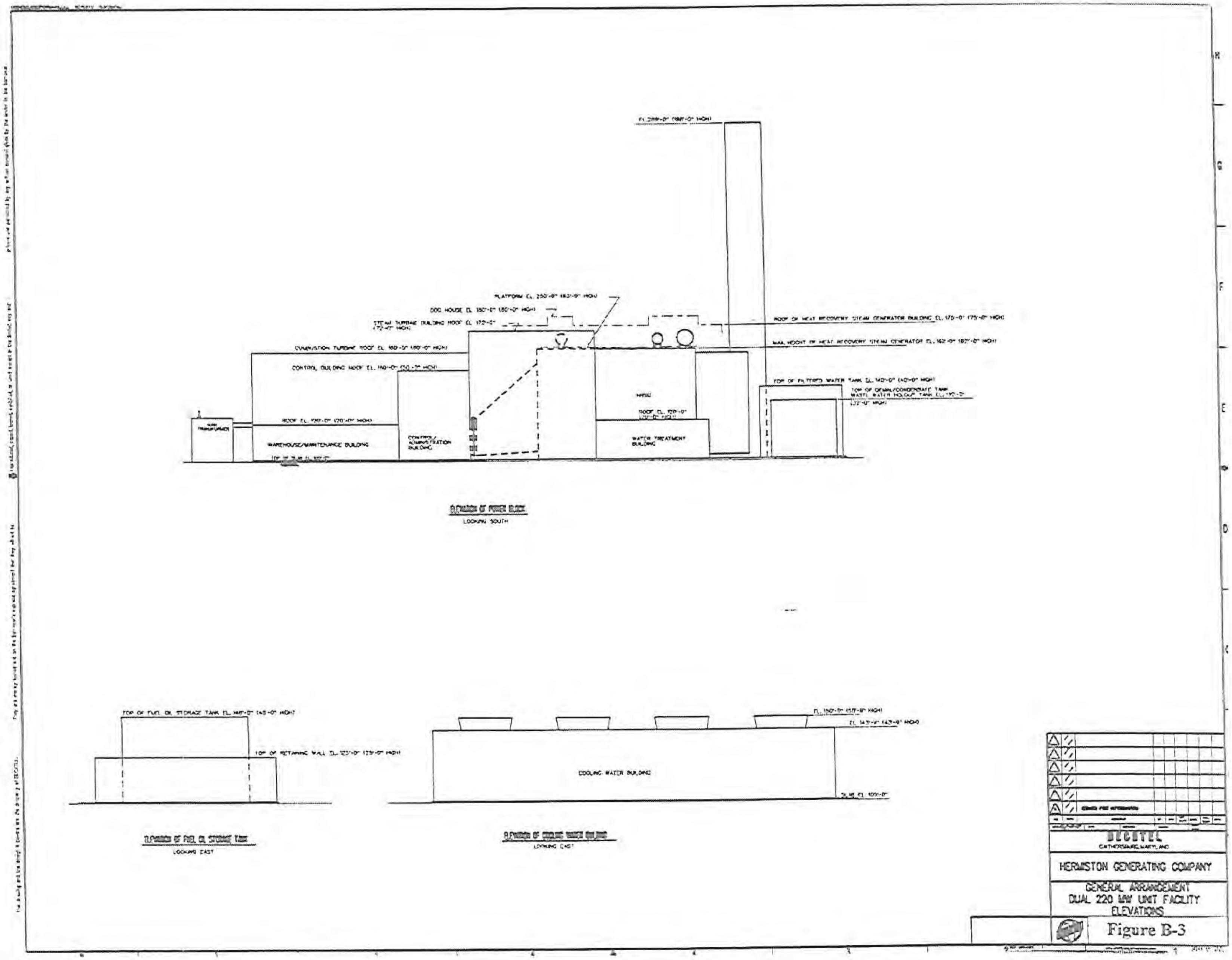


Figure B-1
Process Flow Diagram


LEGEND
BECHTEL
HERMISTON GENERATING COMPANY
SITE PLAN
DUAL 220 MW FACILITY
Figure B-2

HOUSTON COGENATING COMPANY
GENERAL ARRANGEMENT
DUAL 220 MW UNIT FACILITY
GROUND FLOOR PLAN
Figure B-2A



WAREHOUSE/MAINTENANCE BUILDING
CONTROL/ ADMINISTRATION BUILDING
WATER TREATMENT BUILDING
LOOKING SOUTH
COOLING WATER BUILDING
LOOKING EAST
BECHTEL
HERMISTON GENERATING COMPANY
GENERAL ARRANGEMENT
DUAL 220 MW UNIT FACILITY
ELEVATIONS

Figure B-3

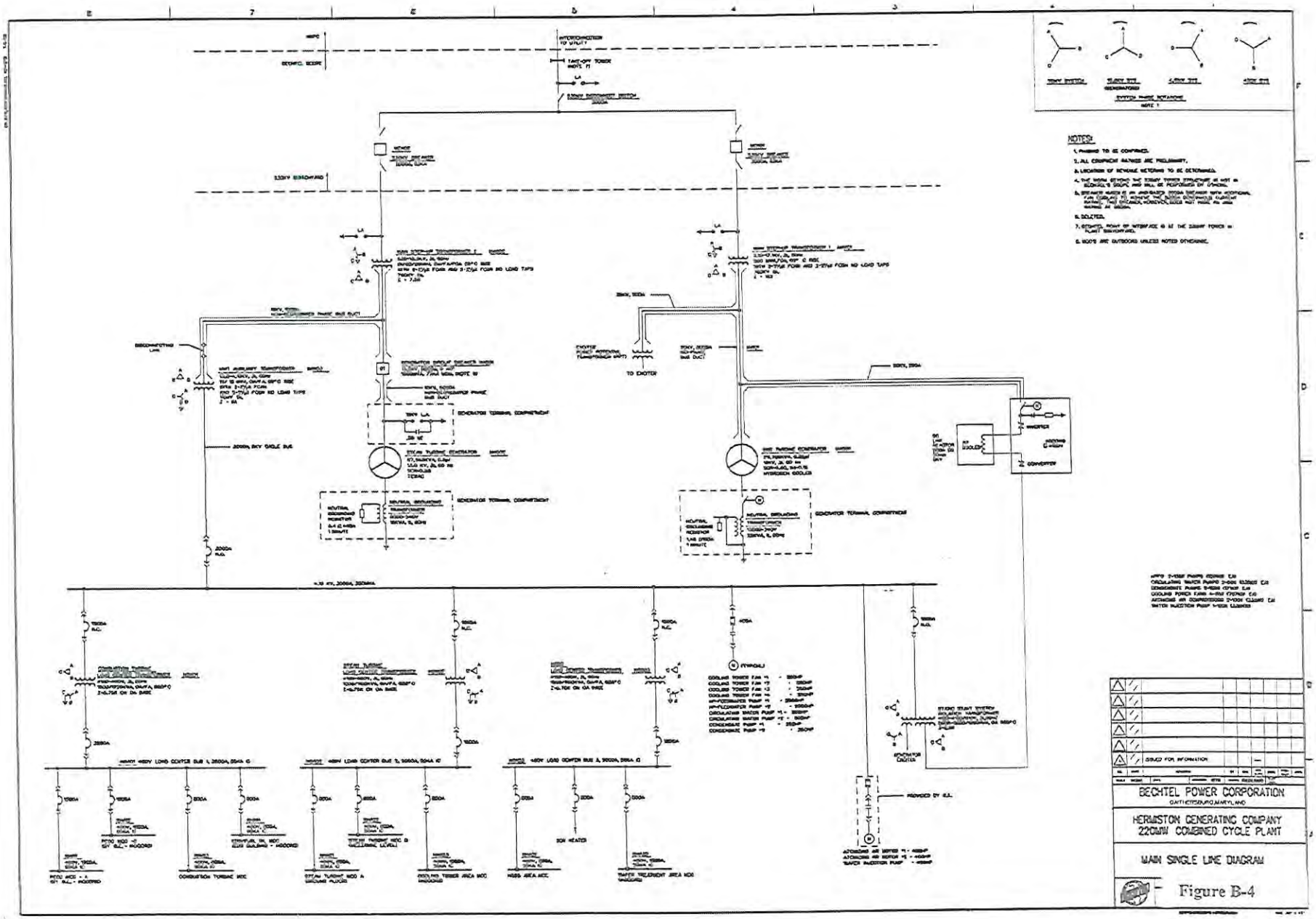

NOTES:
BECHTEL POWER CORPORATION
GAITHERSBURG, MARYLAND
HERMISTON GENERATING COMPANY
220MW COMBINED CYCLE PLANT
MAIN SINGLE LINE DIAGRAM
ISSUED FOR INFORMATION

Figure B-4

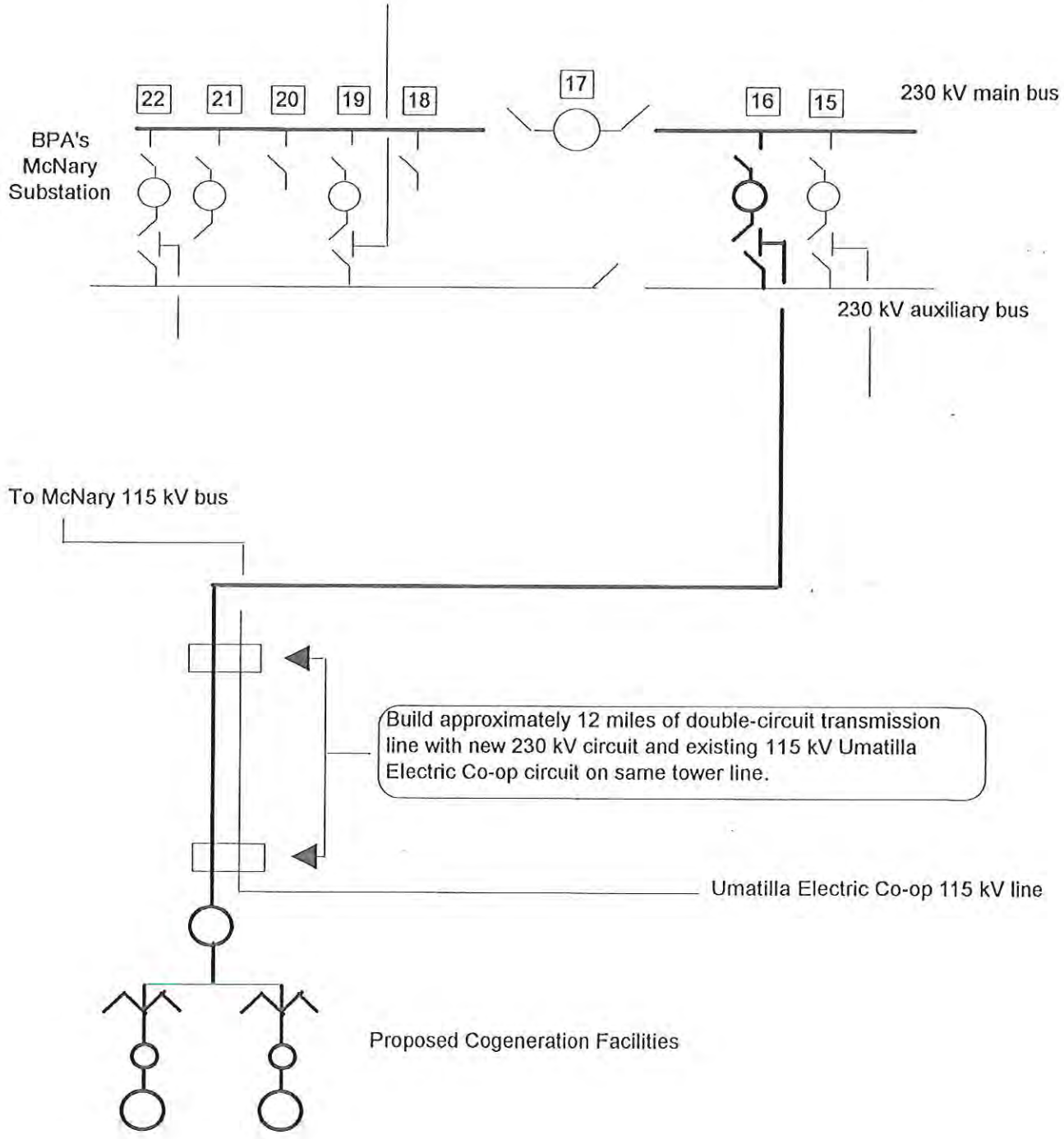
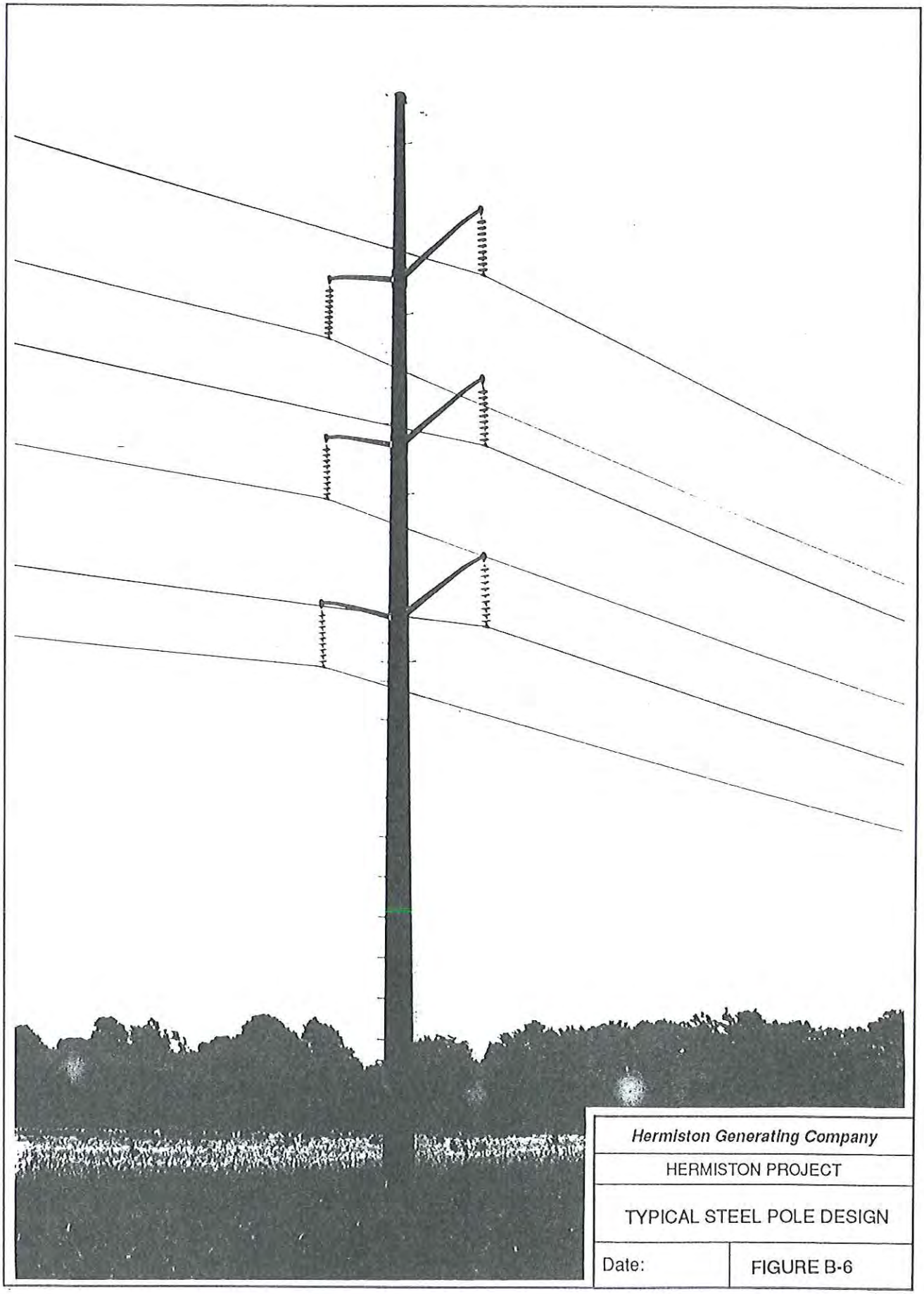


Figure B-5
Interconnection Schematic



Hermiston Generating Company	
HERMISTON PROJECT	
TYPICAL STEEL POLE DESIGN	
Date:	FIGURE B-6

92-4345b.009/rs/0
12-24-92

EXHIBIT C

SITE SUITABILITY

INTRODUCTION

This Exhibit discusses the suitability of the Project site. The Project will be located on a site southwest of Hermiston, Oregon directly adjacent to a potato processing facility owned and operated by Lamb-Weston, Inc. A natural gas pipeline will deliver gas to the Project from a tap on the Pacific Gas Transmission ("PGT") pipeline approximately four miles to the south. Power from the Project will be delivered to the McNary Substation approximately 12 miles to the north through an existing transmission line that will be upgraded.

This Exhibit is relevant to the finding that the Energy Facility Siting Council ("EFSEC") must make under a number of provisions, including OAR 345-22-040, OAR 345-22-060, OAR 345-22-070, OAR 345-22-90 and OAR 345-22-100.

LOCATION MAP - OAR 345-21-015(c)

A map showing the proposed location of the Project is provided as Figure C-1.

A DESCRIPTION OF THE LAND AREA OF THE SITE - OAR 345-21-015(c)

Energy Facility Site

The energy facility will be constructed on 7 acres of a 10 acre site, approximately 3 miles southwest of the town of Hermiston, Umatilla County, Oregon. The site is in the northwest quarter of Section 30, Township 4 North, Range 28 East. It is about 3/4 miles north of Interstate-84 and 1/2 mile east of Interstate-82, and is bounded on the north by the access road to Lamb-Weston's potato processing facility, on the west by Westland Road, and on the south by the Union Pacific Railroad. The site consists of essentially flat, vacant land, mostly vegetated with non-native grasses.

A layout diagram of the energy facility is provide as Figure C-2.

Transmission Line Right-of-Way

The Project will deliver electric power to the McNary Substation through the existing Umatilla Electric Cooperative Association ("UECA") Westland-McNary transmission line, which will be upgraded from 115 kV to 230 kV. The line will continue to utilize the current right-of-way, which runs generally due north from the site, roughly following the eastern boundary of the Umatilla Ordnance Depot about 7 miles to the city of Umatilla, then about three miles east and north to near the McNary Substation. The upgraded line will be extended approximately 1/4 mile into the McNary Substation. The transmission line route lies entirely within Umatilla County and partially within the City of Umatilla. The total land area of the right-of-way is approximately 110 acres . A map of the proposed transmission line route is provided as Figure C-3.

Gas Pipeline Right-of-Way

A gas pipeline will be constructed to carry natural gas from the existing PGC Transmission pipeline less than five miles south to the energy facility site. The total land area of the right-of-way is approximately 28 acres. A map of the proposed pipeline route is provided as Figure C-4.

STATUS OF IMPACT AREAS UNDER OAR CHAPTER 345, DIVISION 40 - OAR SECTION 345-21-015 (c)

Extent and Location of Impact Areas

The first amendment to the Project Order for the Hermiston Project identifies the Impact Areas for the energy facility as the "study areas" for combustion turbine facilities specified in OAR 345-01-010(27)(a). It also identifies the Impact Areas for the related and supporting transmission line and gas pipeline as the "study areas" for linear facilities specified in OAR 345-01-010(27)(f). Accordingly, the Impact Areas for the Hermiston Project are as follows:

Air Quality

Within five miles of the energy facility site.

Surface Water and Groundwater Quality and Availability

Within five miles of the energy facility site, and within the proposed rights-of-way for the gas pipeline and transmission line.

Solid and Hazardous Wastes

Within the site boundary of the energy facility.

Wildlife and Wildlife Habitat (Except Threatened and Endangered Species)

Within the site boundary of the energy facility and within five hundred feet on either side of the proposed rights-of-way for the gas pipeline and transmission line.

Threatened and Endangered Plant and Animal Species

Within five miles of the energy facility site, and within five hundred feet of the proposed right-of-way for the gas pipeline and transmission line.

Scenic and Aesthetic Areas

The line of sight from highest point of the energy facility, gas pipeline, or transmission line not to exceed thirty miles.

Cultural Resources

Within the site boundary of the energy facility, and within the proposed right-of-way for the gas pipeline and transmission line.

Land Use

The greater of the noise boundary as determined by ten dBA over ambient background noise under normal circumstances or one-half mile from the energy facility, gas pipeline, or transmission line.

Recreational Opportunities

Within five miles of the energy facility site, and within the proposed right-of-way for the gas pipeline and transmission line.

Socio-economic

Within thirty miles of the energy facility site.

Geological

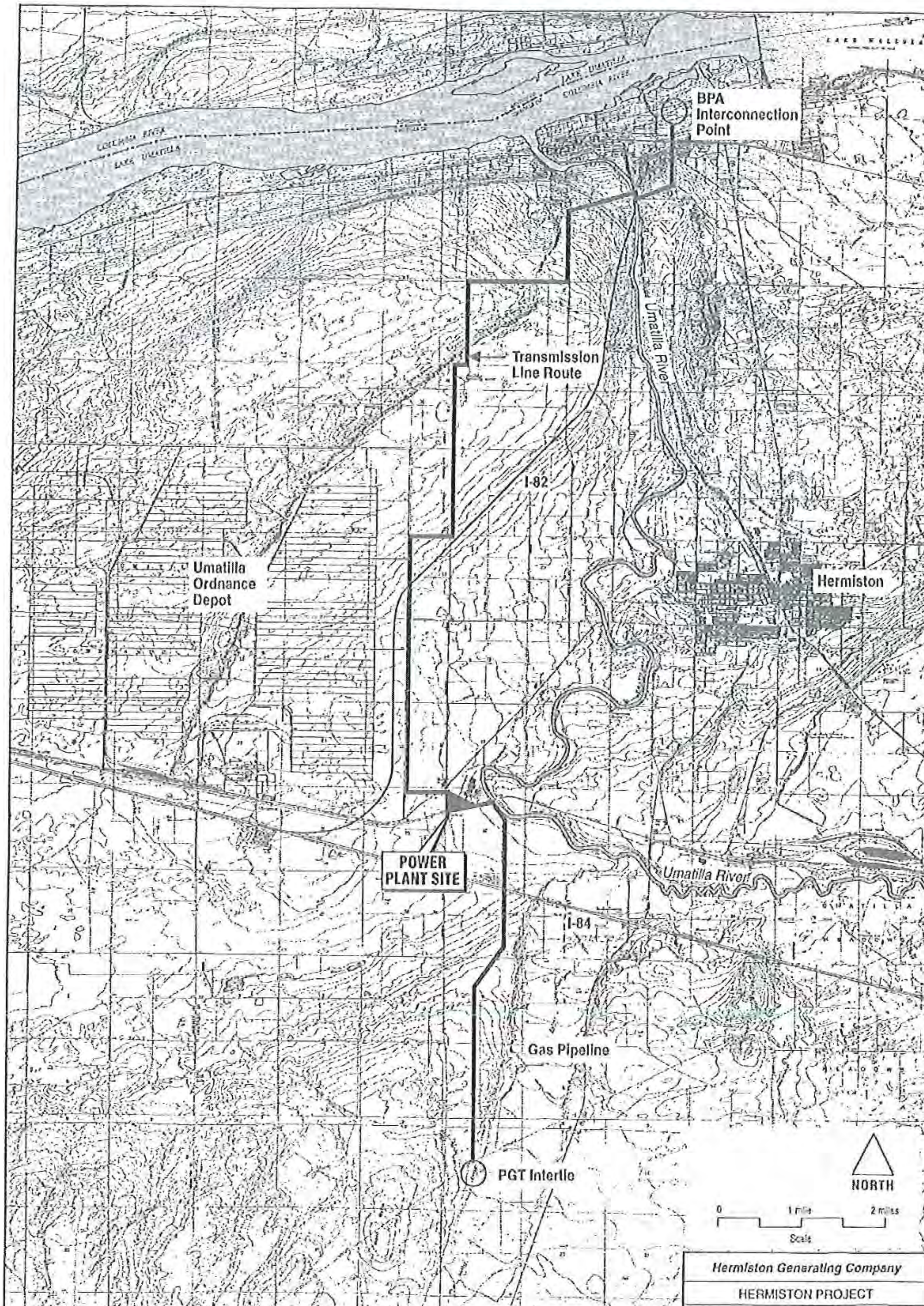
Within the energy facility site boundary, and within the proposed right-of-way for the gas pipeline and transmission line.

Protected Areas

Within twenty miles of the energy facility, gas pipeline, or transmission line.

Status of Impact Areas

OAR 345-040-040 designates the area in Eastern Oregon between the crest of the Cascade Range and the Oregon-Idaho border as suitable for use as sites for nuclear and fossil-fuel thermal power plants. The Project site and Impact Areas are located entirely within the area designated as suitable for use as a fossil-fuel thermal power plant.

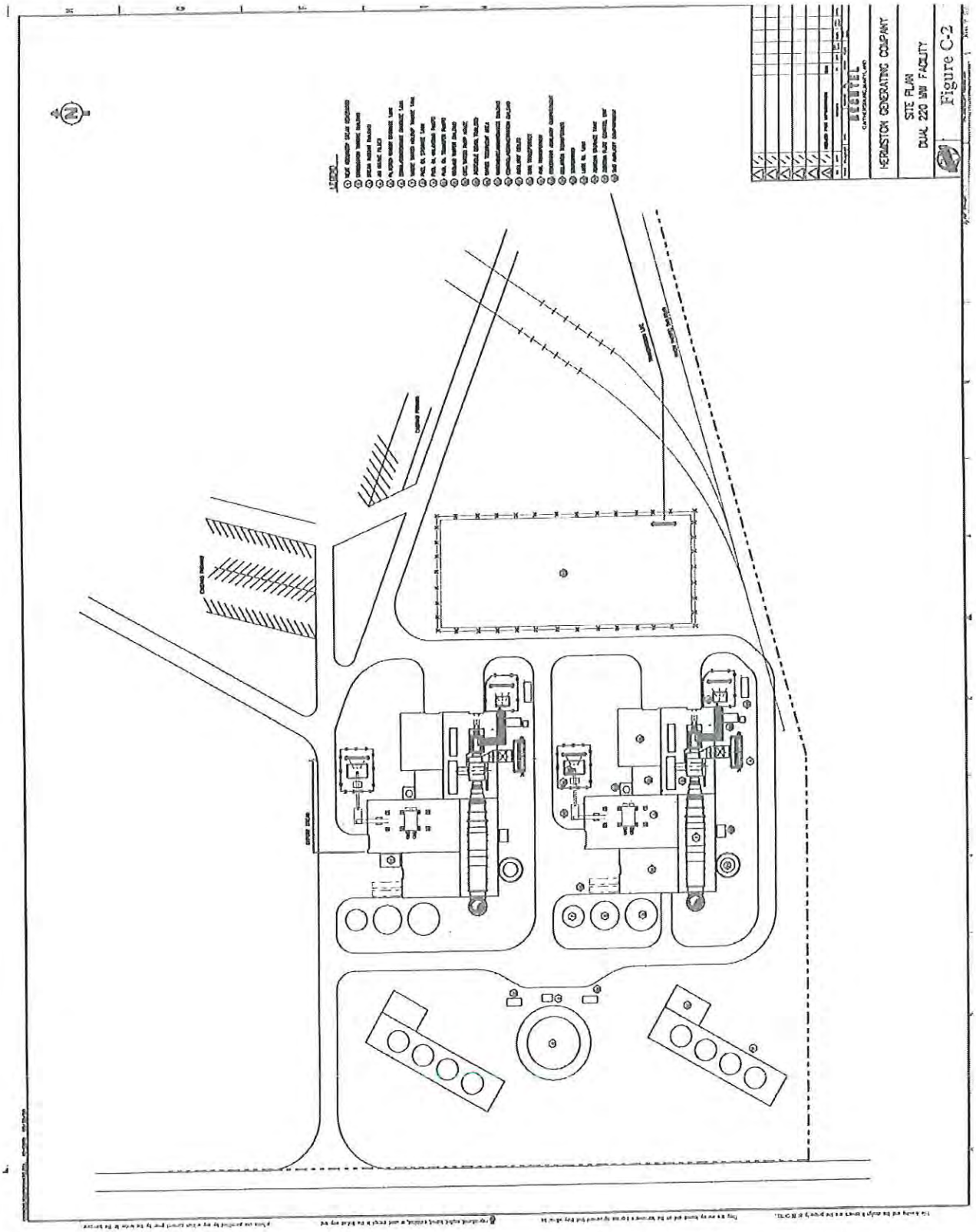


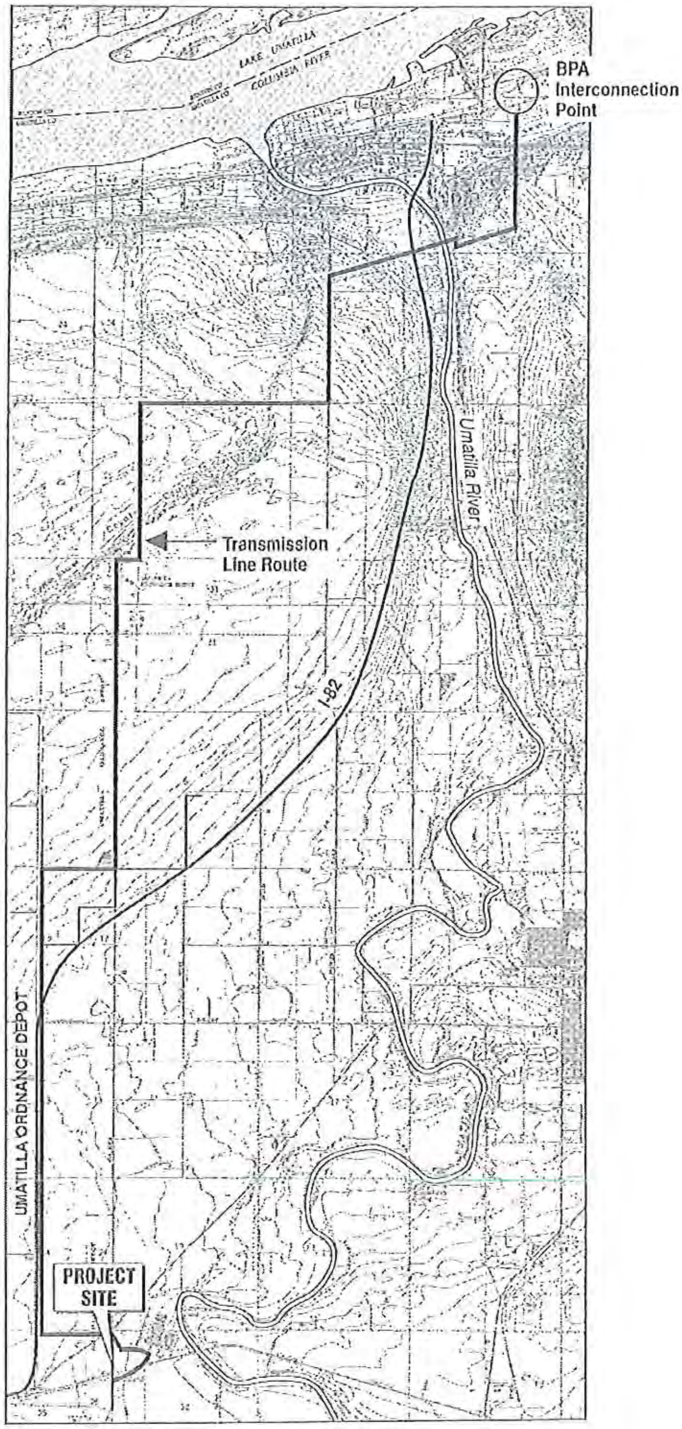
Hermiston Generating Company

HERMISTON PROJECT

Project Location

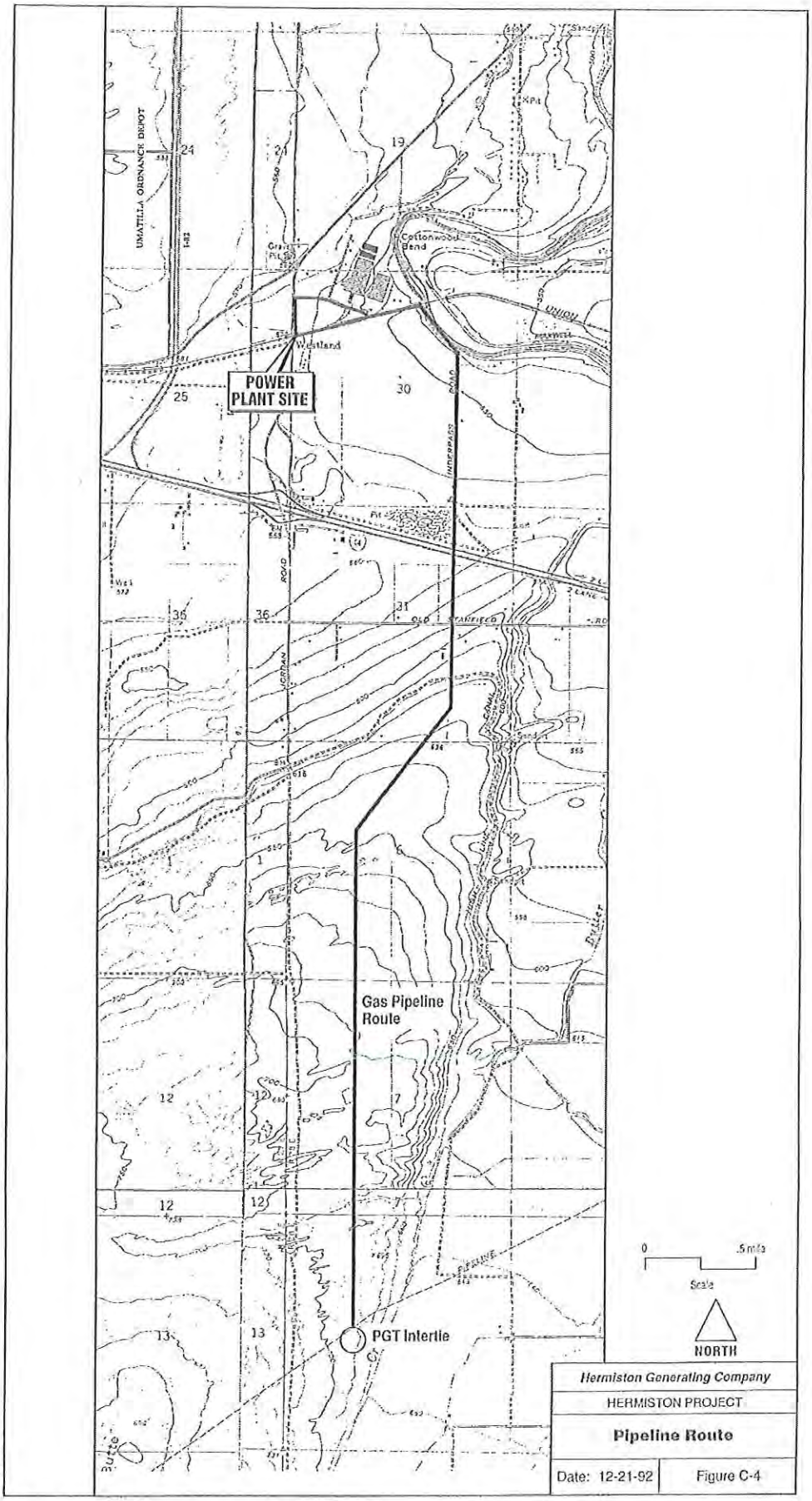
Date: 12-21-92	Figure C-1


HERMISTON GENERATING COMPANY
SITE PLAN
DUAL 220 MW FACILITY
Figure C-2



NORTH

Hermiston Generating Company	
HERMISTON PROJECT	
Transmission Line Route	
Date: 12-21-92	Figure C-3



Hermiston Generating Company	
HERMISTON PROJECT	
Pipeline Route	
Date: 12-21-92	Figure C-4

EXHIBIT D

APPLICANT'S ORGANIZATIONAL, MANAGERIAL, AND TECHNICAL EXPERTISE

INTRODUCTION

Under OAR 340-22-010, the EFSC must find Applicant has a reasonable assurance of successfully constructing and operating the Project. This Exhibit describes the sources and extent of Applicant's organizational managerial and technical expertise.

THE APPLICANT'S PREVIOUS EXPERIENCE - OAR SECTION 345-21-015(1)(d)(A)

Overview

Applicant is a special-purpose limited partnership created solely to construct, operate and maintain the Project. Like the Applicant, its constituent partners, Larkspur Power Corporation, Buckeye Power Corporation and PG&EE Generating Company, are wholly-owned subsidiaries of PG&E Enterprises and Bechtel Enterprises. PG&E Enterprises and Bechtel Enterprises are, in turn, wholly owned subsidiaries of Pacific Gas and Electric and the Bechtel Group, Inc.

Applicant will draw upon the experience of three organizations that are affiliated with PG&E Enterprises and Bechtel Enterprises. They are: U.S. Generating Company ("USGen"); Bechtel Power Corporation, and U.S. Operating Services ("USOSC"). On behalf of Applicant, USGen will develop and arrange for the financing of the Project as well as manage the Project's

construction and operation. Bechtel Power Corporation will construct the Project for Applicant. USOSC will operate the Project on a day-to-day basis for Applicant.

As described more fully below, the creation of single purpose limited partnerships to develop, construct, operate and maintain individual projects that USGen manages, Bechtel Power Corporation constructs and USOSC operates has resulted in the development of over 900 MWs of electrical generating capacity, which represents approximately $2.25 billion dollars of investment. To date, none of the special purpose limited partnerships developing these facilities have received any regulatory citations.

U.S. Generating Company

Formed in January, 1989, USGen develops, owns and operates electric power and cogeneration facilities that supply needed sources of electricity to America's public utilities and steam to industrial customers. USGen is experienced in the entire spectrum of services necessary to develop, finance, construct, operate and maintain environmentally sound electric power and cogeneration plants. USGen is a partnership of PG&E Enterprises, Pacific Gas & Electric Company's unregulated subsidiary, and Bechtel Enterprises, a unit of Bechtel Group, Inc.

USGen currently is managing the construction of an 80-MW, $202 million, waste-coal facility in Pennsylvania; two pulverized coal cogeneration plants, one 224-MW $574 million unit and the other a 202 MW $512 million unit , in New Jersey; one 330-MW $825 million pulverized coal cogeneration plant in Florida; and a 96-MW, $139 million natural gas-fueled plant in New York. Another five projects, two of which are natural gas-fueld, are in advanced stages of development. Together they represent 373 MWs of capacity and approximately $485 million of investment. A summary of these projects follows this Exhibit as Exhibit D-1.

Bechtel Power Corporation

Since its establishment in 1898, the Bechtel Group has grown into the preeminent worldwide engineer-constructor, providing a comprehensive range of services for the successful realization of projects. These services include economic and technical studies, master planning, engineering design, procurement, construction, licensing, project management and operation.

Bechtel Power Corporation, a member of the Bechtel Group, provides engineering, procurement, construction and operating services for steam and power projects, including industrial plants and related facilities. It has provided combustion turbine electricity generating expertise to domestic and international utility, industrial and governmental clients for more than forty years. These generating facilities have ranged from small, aircraft-derivative, simple-cycle installations to multiple combined-cycle installations utilizing industrial gas turbines. Bechtel Power Corporation has provided services for more than 400 combustion turbine units with a combined capacity of over 8,000 MWs.

Building on this experience, Bechtel has created modular approaches using standardized design and integrated systems that can be easily combined and expanded. Packaging these proven elements to meet specific project needs has helped bring numerous electric facilities on-line quickly and efficiently, with many completed ahead of schedule and under budget.

Exhibit D-2 lists Bechtel's combustion turbine plant experience.

U.S. Operating Services Company

PG&E and Bechtel Power Corporation have joined forces to create a company equipped to meet the growing demand for power plant operations and maintenance services. This company, U.S. Operating Services Company (USOSC), combines the former PG&E Operating Services Company and Bechtel Power Corporation Fossil Operations Group. USOSC, in association with its parent companies and affiliates, is well qualified to perform the kinds and quality of services necessary to assure reliable and profitable operation and maintenance of power plants. The diverse experience and resources of PG&E and Bechtel have allowed USOSC to fulfill its commitment to operations which supply safe, technologically advanced, and economical electric power plants. USOSC currently provides day-to-day management services for plant operation and maintenance at five operating non-utility power plants, ranging in size from 54 MWs to 664 MWs.

USOSC's current projects are summarized on Exhibit D-3.

QUALIFICATION OF APPLICANT'S PERSONNEL - OAR 345-21-015(1)(d)(B)

The qualifications of Applicant's officers and other key individuals on the project team follow:

Applicant's Officers

Joseph P. Kearney, President and Chief Executive Officer, is responsible for all aspects of policy and operations at USGen. Kearney's 20 years of managerial experience encompass all aspects of the energy industry: cogeneration and private power production; natural gas transmission and distribution; coal combustion; synthetic fuel production from coal and tar sands; and refining of very heavy crude oils. Between 1979 and 1989, he held senior management positions at the Coastal Corporation. From 1974 to 1979, Kearney served as Chief of Energy Technology, White House Office of Management & Budget. He had Executive Office responsibility for financial, policy, legislative, management and budgetary proposals by the Department of Energy and the Nuclear Regulatory Commission. He holds a Ph.D. in Nuclear Engineering from MIT.

P. Chrisman Iribe, Senior Vice President and Secretary, oversees corporate activities in accounting and treasury, environmental and utility regulatory affairs, government and public relations, strategic planning and technical support services, including O&M, engineering and fuel management and procurement. Iribe comes to USGen from ANR Pipeline Company, where he was Senior Vice President for Planning, State Relations and Public Affairs. In addition to serving as an officer of the American Gas Association in the late 1970s, Iribe has had several federal government appointments, including Energy Economist in the Office of Commercialization, Energy Research and Development Administration and Policy Analyst in the Office of Policy, Federal Energy Administration and for the Cost of Living Council, Executive Office of the President. Iribe holds a B.A. degree and has completed course work leading to a Doctorate in Economics from George Washington University.

John R. Cooper, Vice President, Finance and Assistant Treasurer, oversees all aspects of analyzing, structuring and arranging financing for USGen projects, mergers and acquisitions, equity sell-downs and other corporate finance matters. He manages a group of in-house professionals and others on temporary assignment from Bechtel Financing Services, Inc. Cooper has 17 years of project finance experience, having spent ten years with Bechtel Financing Services, Inc., leaving as Vice President and General Manager, and four years in international banking with Continental Bank of Chicago. Immediately prior to joining USGen, he spent three years as Chief Financial Officer of a European oil, shipping, banking and venture capital group in Switzerland. Cooper holds an M.B.A. in Finance from the Kellogg Graduate School of Management at Northwestern, an M.A. in Development Economics from the Johns Hopkins School of Advanced International Studies and a B.A. from Trinity College, Connecticut.

Francis X. De Rosa, Vice President , is responsible for project development activities in the western United States and manages USGen's San Francisco office. Prior to joining USGen, he

was Director of Project Development for PG&E Enterprises, the non-utility subsidiary of Pacific Gas & Electric. He has held government positions with the U. S. Office of Management & Budget and with the Massachusetts Executive Office of Energy Affairs. De Rosa attended Harvard University's Kennedy School of Government, receiving a Master's Degree in Public Policy and he holds a B.A. in Biology from Boston University.

David N. Bassett, Treasurer, oversees all activities in accounting, auditing, treasury functions, insurance and employee benefit plan administration. He has 15 years of domestic and international accounting experience in the engineering and construction business with the Bechtel Group. Immediately prior to joining USGen, Bassett spent three years with Bechtel Enterprises overseeing financial operations activities in the construction, start-up and operation of an independent power facility. Bassett holds a B.S.C. in accounting from the University of Santa Clara and an M.B.A. in Financial Systems from Idaho State University.

Stephen A. Herman, General Counsel, oversees legal services for USGen's projects and activities. Prior to joining USGen, Herman was a partner for 15 years with the Washington, D.C., firm of Kirkland and Ellis. His practice included commercial, regulatory and litigation matters involving electricity, natural gas and petroleum. He has represented clients before state and federal regulatory agencies and courts in the United States and Canada. Herman received his B.S. from the Wharton School of Finance and Commerce at the University of Pennsylvania and his LL.B. from the University of Virginia. He has been an instructor at the University of Chicago Law School and serves as President of the Federal Energy Bar Association.

Other Key Project Participants

Peter B. Evans, Project Developer, is directly responsible for all aspects of the development of the Project. He has over ten years of experience in the design, operation, and financing of electric generating projects at Pacific Gas & Electric Company and PG&E Enterprises, with positions as Staff Engineer at Diablo Canyon Power Plant, Systems Engineer on the Diablo Canyon Project, and Financial Analyst in PG&E's corporate finance department. Prior to joining USGen, he was responsible for evaluating and recommending investments within PG&E Enterprises' portfolio of unregulated subsidiary companies in independent energy, oil and gas exploration, and real estate development, as well as in other strategic areas. Evans holds an M.B.A. from the University of California at Berkeley Haas School of Business, and B.S. degrees in Chemical Engineering and Nuclear Engineering from the University of California at Berkeley. He is a former N.R.C.-licensed nuclear reactor operator, a registered Professional Mechanical Engineer in California, and a Chartered Financial Analyst.

Sanford L. Hartman, Assistant General Counsel, performs legal services in connection with USGen's projects and activities. Prior to joining USGen, Hartman was Counsel to Long Lake Energy Corporation, an independent power producer with headquarters in New York City, and an attorney with Bishop, Cook, Purcell & Reynolds, a Washington, D.C., law firm. His practice included commercial, regulatory and litigation matters involving the development, construction

and operation of electric generating facilities. He has represented clients before federal and state regulatory agencies and in federal and state courts. Hartman received his B.A. in Political Science from Drew University and his J.D. from Temple University.

Jeffrey J. McParland, Director, Project Finance, is responsible for structuring and negotiating financing arrangements for USGen projects, including development capital, equity investment and non-recourse construction and term financing. Prior to joining USGen, he was Vice President and Manager Project Finance, Bechtel Financing Services, Inc., with responsibility for managing the finance and development aspects of Bechtel's east coast project finance activities. McParland has eleven years of experience in project and export credit financing, project development and conceptual process engineering and has handled all aspects of independent power project development and financing. He also manages USGen's team of finance associates, who are responsible for financial analysis. McParland holds an M.B.A. from the University of California, Berkeley; Masters and Bachelor of Engineering degrees from the Thayer School of Engineering, Dartmouth College; and an A.B. from Dartmouth College.

Ernest K. Hauser, Vice President, Project Development (Eastern Region), has direct responsibility for all phases of project development, including preliminary project review, site, utility and industrial steam host negotiations (including bid responses to RFPs), power purchase contract development and implementation and execution of the project financing plan through to financial close. Prior to joining USGen, Hauser was Project Director for Cogeneration and Alternative Fuel Technology Projects at Coastal Power Production. Hauser worked for more than ten years as energy Project Manager and Senior Engineer for the Combustion Engineering family of companies. Hauser holds a B.S. in Engineering Science from the University of Virginia.

Christopher R. Sauer, Vice President, Project Development (Southern Region), has more than 20 years' experience in all aspects of major energy and civil engineering projects throughout the United States. Prior to joining USGen, Sauer was Vice President of Project Development for Wheelabrator Environmental Systems, Inc., where he was responsible for successful development, management and execution of cogeneration, small power production, recycling and trash-to-energy projects. Sauer received a B.S. in Civil Engineering from the University of Illinois in Chicago. He is a member of the American Society of Civil Engineers.

Gilbert J. Celedonia, Manager, Plant O&M Services, is responsible for managing and supporting technically all aspects of operations and maintenance activities for USGen's projects from proposal through development, engineering, construction, start-up and commercial operation. Celedonia has more than twenty years of engineering and plant operations experience in the power industry in both the utility and industrial sectors. Immediately prior to joining USGen, he spent 2½ years as a divisional power engineer overseeing and managing the O&M contractor's activities at Aluminum Company of America's 582 MW pulverized coal-fired power plant in Warrick County, Indiana. He spent 7 years with Ohio Valley Electric Corporation, leaving as senior performance engineer, and eleven years with ALCOA in various

corporate staff and plant roles. Celedonia holds an M.S. in Mechanical Engineering from the University of Toledo. He is a registered professional engineer in Ohio and Pennsylvania.

Kent L. Fickett, Director of Regulatory Affairs, provides the president, senior management and project developers with advice and direction on environmental, regulatory and legislative issues affecting corporate strategic planning, project permitting and the company business plan. Prior to joining USGen, Fickett was Manager of Regulatory and Government Affairs for the California Energy Company, Inc., a geothermal exploration and development company. From 1980 to 1983, he worked as an energy and environmental advisor in the California Governor's Office of Planning and Research. Prior to that, he worked for Pacific Gas & Electric as a Project Manager in the Facility Siting Department. Fickett holds a B.S. degree from the University of California and an M.S. degree from the University of San Francisco.

Bernard E. Seals, Director, Asset Management, oversees all aspects of project construction and operation. Mr. Seals comes to USGen from the Marriott Corporation, where he supervised the design and production of more than thirty new hotel properties annually. From 1977 to 1988, he held senior analyst and management positions in Arthur Andersen & Co.'s consulting division. His clients included Baltimore Gas & Electric Company, Southern California Gas Company, Long Island Lighting Company and Potomac Electric Power Company. Mr. Seals' areas of expertise lie in strategic facilities development and in developing management systems for both engineering and construction management functions. He received a B.A. degree in Architecture from Howard University and an M.S. in Architectural Engineering from Penn State University.

Dan G. Tipton, Director, Natural Gas Procurement, is responsible for negotiating and contracting for natural gas supplies and gas pipeline transportation capacity necessary to serve USGen's gas-fired facilities. Tipton comes to USGen from Pacific Gas Transmission Company, where he most recently developed and implemented PGT's open-access gas transportation program. Prior to joining PGT, Tipton was Manager of Gas Transportation and Exchange with Entex, Inc., the major gas distribution subsidiary of Arkla Energy Resources, in Houston, Texas. During his tenure at Entex, he also managed the marketing and supply department of San Jacinto Gas Transmission Company, Entex's intrastate marketing subsidiary. With 10 years' experience in the natural gas industry, Tipton has also held supervisory positions in gas transportation and marketing with Arkla Energy and Tennessee Gas Pipeline Company. Tipton holds a B.B.A. in Marketing Administration from the University of Texas at Austin.

Gary F. Weidinger, Director, Engineering Services, has overall responsibility for the engineering and mechanical functions of USGen projects. He is the liaison for technical services provided by Pacific Gas and Electric Company, Bechtel Power Corporation and others, directing their work for USGen. Weidinger has more than 20 years of experience as a manager and engineer in planning, development, design, construction and operation of power generation projects. Prior to his present position, he was Venture Manager for Hadson Power Incorporated; Plant Manager for California Energy Company, Inc.; Project Manager for Gilbert/Commonwealth and Puget Sound Power & Light Company; and an Engineering

Supervisor for Bechtel Power. In addition, for three years he was an independent consultant to utility and industrial clients. Weidinger has a B.S. in Mechanical Engineering from Montana State University and is a Registered Mechanical Engineer in California and Washington.

QUALIFICATIONS OF KNOWN CONTRACTORS - OAR 345-21-015(1)(d)(C)

Applicant has entered into a turnkey engineering, procurement and construction contract with Bechtel Power Corporation. Under this arrangement, Bechtel Power Corporation is the prime contractor for the Project. It will, in turn, execute various contracts for goods and services (including contracts for significant Facility components) that it needs to perform its obligations under its contract with Applicant. The combustion turbine for the Project will be supplied by General Electric Corporation. Bechtel Power Corporation's qualifications are discussed above . On or before the date upon which Applicant executes a loan or other agreement to secure construction funding for the Project, it will enter into an operations and maintenance agreement with USOSC. This agreement will obligate USOSC to perform day-to-day operations and maintenance activities at the Facility in accordance with an annual budget and operating plan that Applicant will approve. USOSC's qualifications are discussed above.

At the same time, Applicant will also sign a management services agreement with USGen. Pursuant to this agreement, USGen will perform certain management functions on behalf of Applicant, including construction management, management of operations, and administration of the financing agreements into which Applicant will enter. USGen's qualifications are discussed above.

PROJECT ORDER, PARAGRAPH 15

Applicant will obtain the services of a registered engineer as required by ORS Chapter 671.

U.S. Generating Company Summary

Project	Technology Steam User	Location Utility	Project MWs
CONSTRUCTION			
Scrubgrass	Waste coal CFB	Venango County, PA Penn Electric	80
Chambers Works	Pulverized coal, SCR Du Pont	Carneys Point, NJ Atlantic Electric	224
MASSPOWER	Natural gas, CC Monsanto	Springfield, MA Boston Edison, et al.	240
East Syracuse	Natural gas, CC Bristol-Myers Squibb	East Syracuse, NY Niagara Mohawk	96
Keystone	Pulverized coal Monsanto	Logan Township, NJ Atlantic Electric	202
Indiantown	Pulverized coal Caulkins Citrus	Indiantown, FL Florida Power & Light	330
PHASE II			
Northampton	Waste coal CFB	Northampton, PA	87
New Bedford	Coal CFB Polaroid/Acushnet	New Bedford, MA NEP, CommElectric	300
Wallkill	Natural gas, CC	Wallkill, NY Orange & Rockland Util	150
Taunton	Coal CFB	Taunton, MA Taunton MLP	150
Rotterdam	Natural Gas, CC	Rotterdam, NY Niagara Mohawk	223

Exhibit D-1

Bechtel Combustion Turbines and Combined Cycles Engineering and Construction Experience

Plant	Client	Location	Nominal MW	Simple Cycle Combustion Turbine	Combined Type	Fuel	Scope	Completion	HRSG Type	NOx Control	Remarks
Perryman Combined Cycle	Baltimore Gas & Electric Co.	Baltimore	2 x 450	1 (Initial)	I (Final)	Gas/Oil	SE	1994/95	U	WTR/ STM	Phased construction project Dry low NOx combustor and power augmentation
Martin Station Units 3 & 4	Florida Power & Light Co.	Florida	2 x 400		I	Gas/Oil	E	1993/94	U	STM	Phased construction Dry low NOx combustor Steam injection for oil refinery
MASSPOWER Cogen	MASSPOWER	Massachusetts	240		I	Gas/Oil	EPC	1993	U	STM/SCR	
Hay Road Station Units 1, 2, 3, & 4	Delmarva Power & Light	Delaware	460 (Final)	I (Initial 300 MW)	I (Final)	Gas/ Kerosene	E	1989/93	U	WTR	Phased construction project Dry low NOx combustor Water injection for oil firing & power augmentation
March Point Cogen	March Point Cogeneration Co	Washington	140	I (Initial)	I (Final)	Gas/Avjet	EPCSU	1991/92	F	STM/SCR	Phased construction project Multiple fuel types
Selkirk Cogen	Selkirk Cogen Partners	New York	92		I	Gas/Oil	EPCSU	1992	F	STM	Low NOx (quite) combustor
Damietta Combined Cycle	Egyptian Electricity Authority	Egypt	3 x 400 (Final)	I (Initial)	I (Final)	Gas/Oil	EPCM	1989/92	U	WTR/ STM	Phased construction project Dry low NOx combustor
Ocean State Power	Ocean State Power	Rhode Island	2 x 250		I	Gas/Oil	E	1990/91	F	WTR/SCR	Bechtel is Owner's engineer
Chalk Point Units 5 & 6 Combustion Turbine	Potomac Electric Power Co	Washington D.C.	2 x 100	1		Gas/Oil	E	1991	--	WTR	Phased low NOx combustor Water injection for oil firing
Mohave Cogen	Westinghouse Electric Corp	California	55		I	Gas	EPCSU	1990	U	STM/ SCR	CO reduction by catalytic conversion
U.S. Borax	U.S. Borax	California	55		I	Gas	EPC	1990	F	STM	
DeCordova	TU Electric	Texas	4 x 65	I		Gas/Oil	PCM	1989	--	WTR	

LEGEND

SCOPE:
- S - Stud
- E - Engineering
- P - Procurement
- CM - Construction
- CM - Construction Management
- L - Licensing
- SU - Startup
- O - Operation & Maintenance

TURBINE TYPE:
- I - Industrial combustion turbine
- AD - Aircraft-derivative combustion turbine

HRSG TYPE:
- U - Unfired HRSG
- F - Fired HRSG

NOx CONTROL:
- STM - Steam Injection
- WTR - Water Injection
- SCR - Selective catalytic reduction
- STIG - Steam injection for power

Exhibit D-2

Bechtel Combustion Turbines and Combined Cycles Engineering and Construction Experience

(Continued)

Plant	Client	Location	Nomina 1 MW	Simple Cycle Combustion Turbine	Combined Type	Fuel	Scope	Completion	HRSG Type	NOx Control	Remarks
Permian Basin	TU Electric	Texas	2 x 65	I		Gas/Oil	PCM	1989	--	WTR	
American I Cogen	Basic American Foods	California	120		I	Gas/Oil	ELPC-SUO	1989	U	SCR	
Port Arthur Refinery Cogen Project	Fina Oil Co	Texas	40	I		Gas	EPCM	1988	F	STM	Phased construction Provisions for future conversion to combined cycle
Oak Creek	Wisconsin Electric Power Co	Wisconsin	200	I		Gas/Oil	S	1988		WTR	Phased construction concept
Gilroy Foods Combined Cycle	Gilroy Foods, Inc.	California	120		I	Gas/Oil	EPC SUO	1988	U	STM	Quiet combustor and CO reduction by catalytic conversion
Sun's Midway Sunset Cogen	Sun Exploration & Production/Southern Sierra Energy Co.	California	225	I	--	Gas	Prelim EL	1987	F	STM	
Tullnerfeld	GKT	Austria	600		I	Gas/Oil	S	1987	U	--	Nuclear-to-fossil-conversion
Belridge	Shell Oil Company	California	40		AD	Gas	ECM	1986	F	SCR	
Calcogen/Dresser	Metropolitan State Hospital	California	28		AD	Gas	EPC	1986	F	SCR	
Chesterfield	Virginia Power	Virginia	400		I	Gas/Oil Syngas	S	1986	F	STM	Phased construction concept, heavy oil studies
Edge Moor	Delmarva Power & Light	Delaware	200		I	Gas/Oil Syngas	S	1986	U	STM	Phased construction concept
Generic	Atlantic Electric	New Jersey	200	I		Gas/Oil Syngas	S	1986	U	SCR	STIG, phased construction concept
Generic	Atlantic Electric	New Jersey	200		I/AD	Gas/Oil Syngas	S	1986	U	SCR	STIG, phased construction concept

LEGEND

SCOPE:

- S - Study
- E - Engineering
- P - Procurement
- CM - Construction
- CM - Construction Management
- L - Licensing
- SU - Startup
- O - Operation & Maintenance

TURBINE TYPE:

- I - Industrial combustion turbine
- AD - Aircraft-derivative combustion turbine

HRSG TYPE:

- U - Unfired HRSG
- F - Fired HRSG

NOx CONTROL:

- STM - Steam Injection
- WTR - Water Injection
- SCR - Selective catalytic reduction
- STIG - Steam injection for power

Bechtel Combustion Turbines and Combined Cycles Engineering and Construction Experience

(Continued)

Plant	Client	Location	Nomina l MW	Simple Cycle Combustion Turbine	Combined Type	Fuel	Scope	Completion	HRSG Type	NOx Control	Remarks
Kern County	Frito Lay	California	6		AD	Gas	EPC	1986	F	SCR	STIG
Modular Plant	In-house Study	Generic	200		I/AD	Gas/Oil Syngas	S	1986	F	STM	STIG, phased construction concept
Pentagon	U.S. Army	Virginia	2	I		Oil	E	1986	--	--	
Texas City Refinery Cogen	Amoco Oil Company	Texas	190		I	Gas	EP	1986	F	STM	
Long Beach Cogen	THUMS Long Beach Co	California	50		I	Gas	SL	1986	U	SCR/ STM	CO catalytic converter as well
Bakersfield	Shell Oil Co.	California	40		AD	Gas	EPC	1985	F	SCR	
Cal. Institute of Tech.	Cal. Tech.	California	4		AD	Gas	EC	1985	F	SCR	
Chevron Offshore	Chevron	California	11		AD	Gas	EPC	1985	F	--	
Cool Water East	EPRI	Virginia	215		I	Syngas	S	1985	F	STM	Phased construction concept
Combined Cycle Cogen	Greenleaf Power Corp	California	50		AD	Gas	EPC	1985	F	SCR	
Port Neches	AES/Texas Chemical	Texas	350		I	Gas	S	1985	F	STM	
Shoubrah El-Kheima	Egyptian Electricity Authority	Egypt	33	I		Gas/Oil	EPC	1985	--	--	Designed for conversion to combined cycle
Tula 1 & 2	Com. Federal de Electr.	Mexico	520		I	Gas/Oil	ECM	1985	F	STM	Phased construction
Cool Water	Southern Cal. Edison	California	100		I	Syngas	EPC	1984	F	STM	Grassroots synthetic fuel design; first IGCC in US
Geismar	Applied Energy Services	Louisiana	120		I	Gas/Oil	E	1984	F	STM	
Gold Bond Paper Products	Stockton Paper Mill	California	25-50		AD	Gas	S	1984	F	SCR	

LEGEND

SCOPE:

- S - Stud
- E - Engineering
- P - Procurement
- CM - Construction
- CM - Construction Management
- L - Licensing
- SU - Startup
- O - Operation & Maintenance

TURBINE TYPE:

- I - Industrial combustion turbine
- AD - Aircraft-derivative combustion turbine

HRSG TYPE:

- U - Unfired HRSG
- F - Fired HRSG

NOx CONTROL:

- STM - Steam Injection
- WTR - Water Injection
- SCR - Selective catalytic reduction
- STIG - Steam injection for power

Bechtel Combustion Turbines and Combined Cycles Engineering and Construction Experience

(Continued)

Plant	Client	Location	Nominal MW	Simple Cycle Combustion Turbine	Combined Type	Fuel	Scope	Completion	HRSG Type	NOx Control	Remarks
Int'l Power Technology	San Jose State University	California	6	AD		Gas	EPCM	1984	--	WTR	
Badak 7	Pertamina	Indonesia	13	AD		Oil	EPC	1983	--	--	
Fawley	Esso	UK	37	AD		Oil	EPC	1983	--	--	
Perryman	Baltimore Gas & Electric	Maryland	600		I	Syngas	S	1983	U	STM	Study of alternative technologies, GCC, CFBC, and FGD
Port Arthur	Texaco	Texas	38		I	Gas/Oil	EPC	1983	F	WTR	
New England Energy Park	EG&G Synfuels	Massachusetts	500		I	Syngas	S	1982	F	STM	
Stony Brook Energy Center	Mass. Municipal Wholesale Electr. Co.	Massachusetts	515 at peak	I (170 MW)	I (345 MW)	Oil/Gas	EPCM	1981	U	STM/WTR	First use of steam for NOx control; designed for conversion to an all combined cycle plant
Bu Hasa 1, 2, 3, & 4	Gasco	Abu Dhabi	100	I		Gas	EPCM	1980	--	--	
Arun 1, 2, 3, 4, & 5	Pertamina	Indonesia	16	AD		Gas	EPC	1978	--	--	
Mildred Lake 1 & 2	Syncrude	Alberta	50	AD		Gas	C	1978	--	--	
Das Island 3 & 4	Abu Dhabi Gas Liquefaction Co	Abu Dhabi	12	AD		Gas	EPCM	1976	--	--	
Dos Bocas 1 & 2	Com Federal de Electric	Mexico	520		I	Gas/Oil	E	1976	F	STM	
Gomez Palacia	Com. Federal de Electric	Mexico	260		I	Oil	E	1976	F	STM	
Morgantown 3, 4, 5, & 6	Potomac Electric Power	Maryland	216	I		Oil	EC	1973	--	--	
Morgantown 1 & 2	Potomac Electric Power	Maryland	40	I		Oil	EC	1970/71	--	--	

LEGEND

SCOPE:

- S - Study
- E - Engineering
- P - Procurement
- CM - Construction
- CM - Construction Management
- L - Licensing
- SU - Startup
- O - Operation & Maintenance

TURBINE TYPE:

- I - Industrial combustion turbine
- AD - Aircraft-derivative combustion turbine

HRSG TYPE:

- U - Unfired HRSG
- F - Fired HRSG

NOx CONTROL:

- STM - Steam Injection
- WTR - Water Injection
- SCR - Selective catalytic reduction
- STIG - Steam injection for power

Bechtel Combustion Turbines and Combined Cycles Engineering and Construction Experience

(Continued)

Plant	Client	Location	Nominal MW	Simple Cycle Combustion Turbine	Combined Type	Fuel	Scope	Completion	HRSG Type	NOx Control	Remarks
Mandalay 3	Southern Cal. Edison	California	132	I		Gas/Oil	EPC	1970	--	WTR	
Alamitos 7	Southern Cal. Edison	California	132	I		Gas/Avjet	EPC	1969	--	WTR	
Missouri Ave 1,2,&3	Atlantic City Electric	New Jersey	60	I		Kerosene	EPCM	1969	--	--	
White Pine 4	White Pine Copper	Michigan	27		I	Oil	EPC	1969	--	--	
Huntington Beach 5	Southern Cal. Edison	California	140	I		Gas/Avjet	EPC	1969	--	WTR	
Etiwanda 5	Southern Cal. Edison	California	132	I		Gas/Avjet	EPC	1969	--	WTR	
Buzzard Point	Potomac Electric Power Co.	Washington, D.C.	260	I		Oil	EP	1968	--	--	
Stony Brook 1	Mass. Municipal Wholesale Electr. Co.	Massachusetts	341		I	Gas/Oil	EPCM	1968	U	STM	First use of steam for NOx
USS Portable Power	Army Corps of Engineers	Dockside	20	I		Oil	EP	1968	--	--	Barge-mounted plant
Freeport A&B	Dow Chemical	Texas	186		I	Oil	EPC	1967	F	WTR	Supercharged and evaporator coolers
Continental Paper	Continental Can	Georgia	100		AD	Gas	EPC	1966	F	--	Black liquor, fully-fired boiler (FD fan)
Pittsburgh	Dow	California	60		I	Gas/Oil	EPC	1966	F	--	
San Angelo 1	West Texas Utilities	Texas	100		I	Oil	EP	1966	F	WTR	First supercharge combined cycle plant in USA

LEGEND

SCOPE:
- S - Stud
- E - Engineering
- P - Procurement
- CM - Construction
- CM - Construction Management
- L - Licensing
- SU - Startup
- O - Operation & Maintenance

TURBINE TYPE:
- I - Industrial combustion turbine
- AD - Aircraft-derivative combustion turbine

HRSG TYPE:
- U - Unfired HRSG
- F - Fired HRSG

NOx CONTROL:
- STM - Steam Injection
- WTR - Water Injection
- SCR - Selective catalytic reduction
- STIG - Steam injection for power

U.S. Operating Services Company Summary

Project	Fuel	Location	MW
OPERATIONS			
Gilroy Energy Project	Natural gas-fired cogeneration	Gilroy, California	120
American I	Natural gas-fired cogeneration	King City, California	120
Gilberton Power Company	Waste coal CFB	Frackville, Pennsylvania	80
SEMASS	Waste to energy	Southeastern Massachusetts	54
Doswell Combined Cycle Facility	Natural gas	Ashland, Virginia	660
CONTRACT TO OPERATE			
Scrubgrass Cogeneration Project	Coal-fired cogeneration	Scrubgrass Township, Venango County, Pa.	80
Chambers Works Cogeneration Project	Coal-fired cogeneration	Deepwater, New Jersey	224
Keystone Cogeneration Project	Coal-fired cogeneration	Logan Township, New Jersey	202
East Syracuse Cogeneration Project	Natural gas-fired cogeneration	East Syracuse, New York	100
Energy New Bedford Project	Coal-fired cogeneration	New Bedford, Massachusetts	300

EXHIBIT E

PROPERTY OWNERSHIP

INTRODUCTION

Exhibit E identifies the owners of public and private lands that must be utilized for the Project and describes the specific plans to acquire the right to use these lands, including identification of titles, rights-of-way, easements and conditional or special use permits needed for the Project.

IDENTIFICATION OF LAND OWNERS AND SPECIFIC PLANS TO ACQUIRE NECESSARY LAND RIGHTS - OAR 345-21-051(e)

The energy facility will be located on a site directly adjacent to a potato processing facility owned and operated by Lamb-Weston, Inc. The energy facility site itself is presently owned by Lamb-Weston, and would be leased to Applicant under a long-term agreement. An exclusive letter agreement has been executed among Lamb-Weston and USGen, on Applicant's behalf, in which both parties state their intent to negotiate such lease for the Project.

Access to the site will be from Lamb-Weston's existing access road, which also lies entirely on Lamb-Weston's property, and the lease will provide for Applicant's use of that road. The access road intersects Westland Road at the northwest corner of the site, approximately 1000 feet south of the intersection of Westland Road and Lamb Road. Leaving the site, Interstate-84 can be accessed from Westland Road and Interstate-82 can be accessed from Lamb Road.

Transmission Line Right-of-Way

The Project will deliver electric power to the McNary Substation via the Westland-McNary transmission line, which will be upgraded from 115 kV to 230 kV. UECA currently holds easements giving it the property rights required for the existing 115 kV transmission line. The upgraded line will continue to utilize the current right-of-way. The property easements will be amended as necessary by UECA to perform the line upgrade.

The transmission line right-of-way will be extended approximately 1/4 mile to the McNary Substation, over property presently owned by BPA. Currently, Applicant expects that BPA and UECA will execute easement agreements to permit extension of the right-of-way.

There are no other property owners from which real estate interests must be acquired for the transmission line right-of-way.

Gas Pipeline Right-of-Way

The interconnecting gas pipeline will carry natural gas from the PGT pipeline less than five miles south to the energy facility site. The interconnecting line will tap the PGT line at a point on property owned by Madison Farms and used by PGT under an existing easement. Approximately half of the interconnecting pipeline right-of-way will also be on property owned by Madison Farms. Madison Farms and one of either Cascade Natural Gas, PGT, or Applicant will execute an easement agreement permitting construction and installation of the interconnecting line of this property.

Between Madison Farms and the energy facility site, the gas pipeline will cross several parcels of private property. The owners of these parcels are listed on Table E-1.

The pipeline right-of-way will also cross beneath Interstate-84, the Union Pacific Railroad, and several irrigation canals. Applicant will obtain permission from the U.S. Department of Transportation (or other appropriate governmental authority) to cross beneath Interstate-84, as well as an occupancy permit or easement from the Union Pacific Railroad permitting installation

of the gas pipeline beneath the railroad right-of-way. Applicant will also execute easement agreements with the owners of the real property on which the irrigation canals are located.

All of the real property interests described in Exhibit E will be in place prior to the commencement of Project construction.

CONDITIONAL OR SPECIAL USE PERMITS NEEDED FOR THE PROJECT - OAR 345-21-05(1)(e)

The discussion of conditional or special use permits required for the Project is found in Exhibit I, that addresses land use plans and land use regulations of the local government having land use planning jurisdiction over the Project.

Table E-1: Property Ownership

Owner	Property I.D.	Address
Energy Facility Site		
Lamb-Weston Inc.	R08034N28C00002206	PO Box 1900 Tri Cities, WA 99302
Transmission Line Route		
Leonard, Mervin & Gena	R08035N27000000600	525 W. Hemlock Hermiston, OR 97838
C&B Livestock Inc.	R08035N27000000601	PO Box 109 Hermiston, OR 97838
Peterson, Kenneth D.	R06015N27000001001	PO Box 211 Hermiston, OR 97838
Shafer, John C. & Osta	R06015N27000001010	PO Box J Irrigon, OR 97844
Conforth, Andy L.	R06015N27000001002	PO Box 38 Umatilla, OR 97882
Scott, Bruce A. & Willa	R06015N27000000902	8717 SE Flavel Dr. Portland, OR 97206
Kik, Charles	R06015N28170001100	RT 3 Box 3802 Hermiston, OR 97838
Morrison, Jack M. & Katherine M.	R06045N28B00001600	1339 Havstad Dr. Walla Walla, WA 99362
Nobles, Samual K. & Doubek, M.	R06045N28C00000203	RT 1 Box 88 Umatilla, OR 97882
Bonney, Stuart F.	R06045N28C00000200	PO Box 302 Hermiston, OR 97838
USA Bureau of Land Management	R06045N28B00000900	PO Box 2965 Portland, OR 97208
USA Bureau of Land Management	R06045N28B00001200	PO Box 2965 Portland, OR 97208
State of Oregon Depart. of Trans.	R06045N28B00001201	117 Transportation Bldg Salem, OR 97310
USA Bureau of Land Management	R06045N28B00001202	PO Box 2965 Portland, OR 97208
Lamb, Robert R. c/o Lamb Farms	R08034N2725A000200	1180 SW 17th Hermiston, OR 97838
State of Oregon Depart. of Trans.	R08034N2725A000100	117 Transportation Bldg Salem, OR 97310
Baker, Ronald R. & Jane I.	R08034N27000001200	PO Box 109 Hermiston, OR 97838
Skinner, Malcom & Valdine	R08034N27000001100	RT 1 Box 1620 Hermiston, OR 97838
Westland Irrigation District	R08034N27000000401	PO Box 416 Stanfield, OR 97875
Lamb-Weston Inc.	R08034N27000000206	PO Box C 1900 Tri Cities, WA 99302
Lamb-Weston Inc.	R08034N28B00004300	PO Box C 1900 Tri Cities, WA 99302
State of Oregon (DVA) c/o Nobles, Clyde & Betty, AG	R08034N28B00002202	RT 1 Box 89-T Umatilla, OR 97882
Lamb-Weston Inc.	R08034N28C00002206	PO Box C 1900 Tri Cities, WA 99302
USA Bureau of Land Management	R06045N28B00001000	PO Box 2965 Portland, OR 97208
Jenks, Elden S. & Glenna et al.	R06045N28B00001100	5041 R-170 Mesa, WA 99343
USA (Dept Int Bureau Reclam)	R06045N28B00001001	Box 043 550 W Fort St Boise, ID 83724
Jenks, Elden S. & Glenna et al.	R06045N28B00000100	5041 R-170 Mesa, WA 99343
Jends, Elden S. & Glenna et al.	R06045N2816AA00100	5041 R-170 Mesa, WA 99343
Gas Pipeline Route		
Lamb-Weston Inc.	R08034N28C00002206	PO Box 1900 Tri Cities, WA 99302
Umatilla Electric Co-op Assoc.	R08034N28C00002210	PO Box 1148 Hermiston, OR 97838
Umatilla County		
Westland Irrigation District	R08034N28C00005700	PO Box 416 Stanfield, OR 97825
State of Oregon Depart. of Trans.		117 Transportation Bldg Salem, OR 97310
Barton Properties Inc.	R08034N28C00006400	RT 4 Box 4350 Hermiston, OR 97838
Cox, William & Wanda	R08034N28C00005701	RT 1 Box 1910 Hermiston, OR 97838

Cox, William & Wanda	R08034N28C00006200	RT 1 Box 1910 Hermiston, OR 97838
Wood, Evelyn R. (LE); Wood, Kenneth L. & Kathryn	R08034N28C00006100	RT 1 Box 1918 Hermiston, OR 97838
Oregon Hereford Ranch	R08033N28000002401	HC 70 Box 333 Echo, OR 97826
Madison Ranches Inc.	R08033N28000002600	HC 70 Box 301 Echo, OR 97826
Madison Ranches Inc.	R05043N28000006100	HC 70 Box 301 Echo, OR 97826

EXHIBIT F

MATERIALS ANALYSIS - OAR 345-21-05(1)(f)

INTRODUCTION

This Exhibit identifies the inventory of industrial materials which will flow into and out of the Project in substantial quantities during construction and operation and, where applicable, describes how these materials will be stored and disposed of. It is relevant to the findings that the EFSEC must make under OAR 345-22-120.

FUELS

Natural Gas

The Project will be fueled primarily with natural gas from the Canadian province of Alberta obtained under long term contracts either by shippers holding firm capacity rights in the expansion certified by the Federal Energy Regulatory Commission of the PGT system, or by Alberta producers in conjunction with incremental expansion of the PGT system. Applicant has obtained firm letters of intent from shippers holding expansion capacity on PGT, firm Alberta producers and aggregators, and PGT to provide expansion capacity. A gas pipeline less than five miles will be constructed to bring natural gas from the PGT pipeline to the Project. Proposed routings are shown in Figure C-4 of Exhibit C.

The Project will require approximately 90 MMcf/d of natural gas fuel or its equivalent in fuel oil during normal operations. These fuels will be consumed on site.

Backup Fuel Oil

Because of Applicant's expected firm transmission rights and long-term gas purchase contracts, there will be little need for a backup fuel supply. However, Applicant would use fuel oil as a backup fuel supply if necessary. Operation of the Project using fuel oil is expected to not exceed twenty-eight days annually.

Fuel oil will be delivered by truck to the energy facility's oil unloading area and pumped to one of two above-ground storage tanks. The tanks, each with a capacity of 1.4 million gallons for each unit, will provide approximately four days of Project operation without refilling.

The back-up fuel oil storage system for each unit will consist of a steel tank with secondary containment and diking, a leak monitoring system, level gauges and high level alarms, spill prevention valves, and tank labels. The holding capacity of the containment area will be one hundred and ten percent of the storage tank capacity, and the area will be constructed with an impermeable barrier under the tank floor. Corrosion protection will be provided for both the tank bottom and all underground oil piping. All underground oil piping will also have secondary containment. Interconnecting piping, meeting all applicable codes, will be located in trenches. Spill prevention plans will be in place prior to the delivery of fuel oil.

SOLID WASTE MATERIALS

Construction of the proposed facility is expected to generate waste steel, other waste metals, and normal miscellaneous construction debris (consisting of wood, concrete, paper, and other refuse). Debris will be stored in on-site dumpsters, with periodic hauling via a private contractor, to a properly licensed facility. Construction material and office recycling programs will be implemented to the greatest extent practical to reduce waste. Sewage generated during construction will be stored in tanks, and periodically removed from the site by a sewage disposal vendor. Flushing oils and other wastes will be stored in barrels or tanks prior to disposal by an appropriate vendor licensed for waste disposal.

Minimal solid waste will be generated during plant operations. Approximately 40 tons per year of normal domestic waste will be generated by the Project, which will be disposed of by a private contractor. Recycling programs will be instituted to further minimize waste. Standard maintenance activities at the facility will generate small quantities of solid waste on a periodic basis.

Waste oils and potentially hazardous wastes generated by the facility will be disposed of by an appropriate permitted waste vendor.

WATER USE AND SUPPLY

Introduction

The total daily water demand for the Project is projected to be approximately 2,600 gpm. As described in Exhibit B, the major consumption of water for the facility will be through the evaporative losses from each of the two cooling towers and from the inlet air cooling system. Water will also be required for makeup in other systems, for general maintenance activities, and for domestic purposes.

Approximately 515 gpm of process effluent is expected to be generated by the facility, consisting primarily of cooling tower blowdown. Boiler water pre treatment effluent will be reused within the plant. Regeneration of ion exchange resins will be performed off site. Cooling tower blowdown will be discharged via surface application, as described in Exhibit B and Exhibit M.

Water Balance

A water balance diagram for the proposed facility is shown in Figure F- 1 The water and effluent flowrates listed depict facility requirements based on an ambient air temperature of 95°F assuming that the cooling towers are operated at five cycles of concentration, and with evaporative inlet-air cooling. For the reasons explained in Exhibit O, Columbia River water is assumed to be the supply source.

The total daily water demand for the facility under these conditions is projected to be approximately 2,600 gpm. To minimize the total water requirements for the Project, internal recycle/reuse has been designed into the energy facility. As shown in the water balance (Figure F-1), reverse-osmosis effluent and boiler blowdown will be reused within the plant. The total water savings through reuse will be approximately 50 gpm compared to what the water demand would be without these conservation measures.

Effluent Characteristics and Disposal

Under the water balance conditions specified above, approximately 515 gpm of process effluent is expected to be generated by the facility. Process effluent from the generating plant will originate from three primary sources:

- sanitary wastes
- miscellaneous plant maintenance wastes
- cooling tower blowdown

Reverse-osmosis system reject water and boiler blowdown will be reused within the Project. Sanitary wastes will be diverted to the existing domestic wastewater treatment system at the Lamb-Weston plant.

As shown in Figure F-1, plant maintenance wastes generated during steam turbine area washes, HRSG area washes, cooling tower area washes, and oil loading/unloading area washes will be collected via floor drains, treated for oil and grease removal, and directed to a wastewater equalization tank.

Treated discharge from the equalization tank, along with cooling water flows described further below, will be reused for crop irrigation. The plan for reuse of this water is described in *Cooling Water Reuse Land Application System Management Plan,* CH2M HILL, Portland, Oregon, December, 1992, a copy of which is provided in Exhibit M.

Cooling Tower Blowdown Characteristics

A conventional wet evaporative cooling tower system will be used to dissipate process heat and condense steam back into water in the steam turbine condensers. The cooling system will operate on a continuous basis using a mechanical-draft cooling tower for each steam-turbine condenser. Cooling water in the cooling system will be recirculated continuously. However, some blowdown is required to prevent excessive buildup of dissolved solids, which would otherwise result in scale formation in the condenser and/or increased corrosion rates for system components. Dissolved solids result from the concentration of native dissolved salts and minerals due to evaporative loss from the system.

Based on available data and information, typical cooling tower chemical additives will include the following:

- **sodium hypo chlorite** as a disinfectant and biocide
- **tolytriazole and a non-hazardous acrylic co-polymer** for corrosion control
- **sulfuric acid** for corrosion control and to neutralize pH
- **sodium bisulfite** to dechlorinate cooling tower blowdown (if required)

The blowdown volume will vary depending on the number of cycles of concentration utilized. Available data and information suggest that expected feedwater characteristics will allow the system to operate at five or more cycles of concentration. The corresponding cooling tower blowdown volume is expected to be approximately 500 gpm at five cycles of concentration.

Constituents in the cooling water effluent will be primarily higher concentrations of native impurities. Concentrations of other additives should be below detectable levels.

Preliminary analysis indicates that phosphate-based additives will not be required to limit scale and corrosion in the cooling tower. Influent phosphate levels of 0.04 - 0.08 mg/L will be concentrated approximately five times resulting in a combined total discharge through the cooling tower blowdown of about 2 lb/day.

Phosphates will be used in limited amounts for corrosion control in the HRSG and will be present in the blowdown proposed to be reused as part of cooling tower make up water. This amount of phosphate, when diluted in the 500,000–600,000 gallon water volume in the cooling tower basin, is not expected to add significantly to the background concentration.

The discharge of free available chlorine from the energy facility will be closely monitored. A low level of free available chlorine will be maintained in the cooling system at all times to protect against biofouling. Prior to discharge, excess chlorine (if any) will be removed from cooling tower blowdown through the addition of sodium bisulfite. Average daily free chlorine concentrations in the discharge will be limited to 0.5 mg/L.

OTHER CHEMICALS

Approximately two to five thousand gallons of sulfuric acid, used for pH control, will be stored in two takes on site. The tanks will be supported on saddles and surrounded by a secondary containment dike. A normally closed drain valve will be provided at the bottom on the dike. The area enclosed by the dike will be partially filed with coarse limestone to passively neutralize any potential leakage from the tank.

Boiler feedwater treatment chemicals (sodium orthophosphates, ammonium hydroxide, and oxygen scavengers) , and ammonium solutions or amines for corrosion protection will be delivered in four hundred gallon totes. The totes provide considerable protection because they include leak proof plastic liners, permitting these materials to be stored in normal warehouse spaces. In the unlikely event of leakage, the barrel would be quickly used or processed through the neutralization tank, described below.

Oxygen scavengers for boiler water treatment will be transported and used directly from shipping containers that are designed to be leak proof and highly resistant to damage. Injection pumps will take suction directly from these containers, so that personnel are not exposed to the solution.

Sodium hypo chlorite for chlorination is required in the pretreatment system. Purchased sodium hypo chlorite solution will be stored in a tank and pumped via metering pumps.

Curbs and drains will be installed at all chemical treatment areas that will route spills along underground gravity feed lines to a chemical sump. Any spilled chemicals would then be pumped to a neutralization tank for containment and treatment prior to disposal. All transport piping will be constructed of compatible material to prevent corrosion or deterioration by the liquid being carried.

OTHER MATERIALS

A number of miscellaneous chemicals and equipment lubricants, in addition to spare parts and equipment, will be stored within either the warehouse or other Project buildings.

Compressed gases used at the energy facility, such as carbon dioxide (CO_2) and nitrogen, will be stored outdoors in returnable cylinders. Hydrogen will be stored outdoors in high pressure storage cylinders mounted above ground and enclosed with a safety fence.

SUMMER OPERATION with 70,000 lb/hr to process

Note Water consumption for evaporative cooling of combustion turbine inlet air

WATER REQUIREMENTS (GPM) Flow rates shown are for one unit. Total flowrates for the facility would be twice the values shown here.

Deliver to Process	Process Return	Cooling Twr Evaporation	Cooling Twr Blowdown	HRSG Blowdown	Steam for NOx Control	Water for Evap Clng.	RO Reject	Demin Reject	Reuse	Total
140.06	70.03	950.00	237.50	8.60	Dry	39.48	32.43	0.00	246.50	1297.01

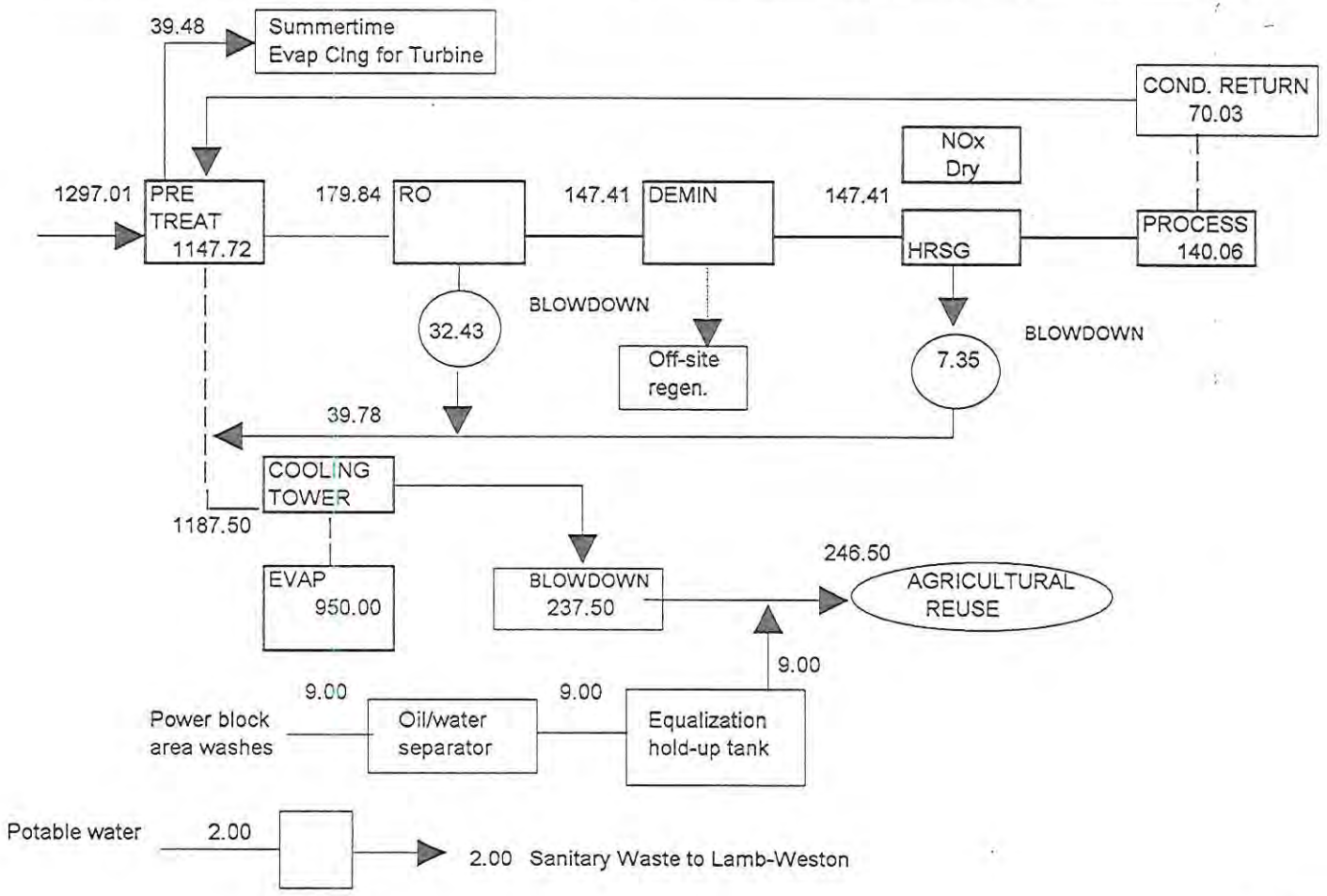


Figure F-1
Unit 1 Water Balance

EXHIBIT G

GEOLOGY, SLOPE STABILITY, AND SEISMICITY

INTRODUCTION

Under OAR 345-22-020, the EFSC must find that the Project will be (1) designed to minimize vulnerability to seismic hazards, and (2) designed, constructed and operated to avoid, to the greatest extent possible, adverse impacts on soils.

This Exhibit discusses the seismicity of the Impact Area, and describes particular design approaches necessitated by seismicity. As required by the Project Order, serious consideration has been given to recent geologic work conducted by Mr. Gary Mann, of the USGS Menlo Park office, and Kevin Pogue, Professor of Geology at Whitman College, Walla Walla, Washington..

As described in Exhibit C, the Project's Impact Area for geology is the area within the energy facility site boundary, and within the proposed rights-of-way for the gas pipeline and transmission line. Soil types in the vicinity of the Project are identified in Exhibit N. This Exhibit, in contrast, addresses potential adverse impacts of construction and operation on these soil types, and describes how any adverse impacts will be minimized.

GEOLOGICAL FEATURES, TOPOGRAPHY AND SOIL CONDITIONS - OAR 345-21-15-(1)(g)(A)

Geological Features

Regional Geology and Structure

The Project is situated in the central portion of the Columbia Plateau physiographic province that extends across northeastern Oregon, southwestern Washington, and western Idaho (Figure G-1). The Columbia Plateau is composed of a thick sequence of flood basalts named the Columbia River Basalt Group (CRBG) that erupted from 17 to 6 million years before present ("m.y.b.p."). These flood basalts cover an area of approximately 63,000 square miles and are up to 12,000 feet thick in the central portion of the plateau. The CRBG actually consists of hundreds of individual basalt flows that have been segregated, based on chemical composition, age, and aerial extent, into five geologic formations. The basalts erupted from feeder dikes injected into north-northwest trending linear fracture zones.

The Columbia Plateau contains a complex system of folds, faults, and basins, as shown on Figure G-2. Based on the predominant structural fabric, the Columbia Plateau has been subdivided into three informal structural subprovinces: Palouse, Blue Mountains, and Yakima Fold Belt. The project is situated within the Yakima Fold Belt of the Columbia Plateau, characterized by narrow, asymmetrical anticlines spaced between 3 to 30 miles apart. The identified folds and faults in the vicinity of the site are shown on Figure G-2. These include the Service anticline, 4 miles east of the power plant site; the Dalles-Umatilla syncline, 7 miles north of the plant site; and the Columbia Hills anticline, 11 miles north of the plant site. Of particular interest is the Rattlesnake-Wallula alignment shown on Figure G-2. This alignment is a zone of faulting and tectonic deformation that is a segment of the larger Olympic-Wallowa Lineament ("OWL") that extends from northwestern Washington to southwestern Idaho.

The Columbia Plateau includes a number of idenified tectonic basins, one of which is the Umatilla Basin, where the Project is located (Hogenson 1964). These basins are subsidence features that developed coincident with emplacement of the CRBG and are associated with dramatic thickening of the basalt and overlying sedimentary deposits. Although the Umatilla basin has not been studied in depth, it is similar to other basins in the region. These basins appear to have continued to subside since the cessation of basaltic volcanism about 6 m.y.b.p.

Local Geology and Structure

The Impact Area is situated in an area that has been referred to as the Umatilla lowlands (Hogenson 1964). This area is characterized by a relatively flat to gently rolling surface that gradually descends from the Blue Mountains to the Columbia River. The surface topography generally mimics the buried surface of the Columbia River Basalt Group (CRBG). The area is drained by the Umatilla River and its tributaries. Elevation across the area ranges from 700 feet above mean sea level (msl) at the southern end of the gas pipeline near Ward Butte to 300 feet msl at the McNary Substation.

The geology of the Project area is presented on Figure G-3. The nearly horizontal basalt flows (CRBG) in this area are blanketed by up to 150 feet of unconsolidated to poorly consolidated, Pleistocene (0.01 to 2 m.y.b.p.), glacial outwash and catastrophic flood deposits (map symbol Qs). These deposits accumulated during glaciation, when major tributaries of the Columbia River were dammed by ice forming large lakes. These ice dams would eventually breach, sending catastrophic floods across the Columbia Plateau through the gorge to the Pacific Ocean. Geologic mapping of these deposits indicate that lake levels and flood crest rose to a maximum elevation of approximately 1,150 feet msl in the Umatilla lowlands area. The floods completely stripped any existing overburden material and scoured the surface of the CRBG forming a scabland topography. The floods and outwash deposits accumulated on the CRBG are crudely stratified clean sand and gravel with occasional boulders and silt lenses. The coarse grained deposits typically contain large cross stratifications developed from the torrential flows. The flood deposits are veneered by wind deposited silt (loess). The silt is loose and typically several feet thick.

Subsurface Conditions

Published information about subsurface geologic conditions suggests that the general geologic conditions are similar throughout the area. The driller's log for a well drilled on the Lamb Weston property, approximately 1,500 feet east of, and at a surface elevation several feet lower than the power plant site, is the closest available subsurface information for the power plant site. This well, named Lamb Well #3, encountered "black broken rock" at 93 feet that presumably is basalt of the CRBG. The basalt is overlain by interbedded gravel, and sand and gravel with clay lenses. This material is interpreted as Pleistocene glacial outwash and catastrophic flood deposits. The upper couple of feet were logged as "brown surface sand" that is interpreted as Holocene wind deposited silt. Two other wells drilled on the same property (Lamb Well #1 and #2) but

about 1/4 mile further from the power plant site encountered bedrock at depths between 120 to 130 feet.

Topography

The Project lies within the central portion of the Umatilla Plateau. This area is characterized by gentle topography that slopes gradually north, from the Blue Mountains to the Columbia River. Slopes are generally less than 5 percent and elevations range from about 300 feet at the Bonneville Substation to the north, to about 700 feet at the PGT intertie to the south. The power plant site is nearly flat, with a slight down-gradient toward the Umatilla River to the east. The gas pipeline route increases in elevation from the power plant site to the PGT intertie to the south. The elevation change over the 4 ½ mile pipeline route is about 150 feet. The transmission line route is nearly flat with the exception of the north end of the transmission line from the Umatilla River to the Bonneville Substation. This area includes moderate slopes with elevations ranging from about 300 to 450 feet.

Soils

In general, all of the soils in the vicinity of the Project have a low clay content and are subject to excessive wind erosion. They have a high permeability and low shrink swell potential. Table G-1 identifies these soils and extent of disturbance that can be expected from the Project. Soils are discussed in greater detail in Exhibit N.

ASSESSMENT OF ANTICIPATED IMPACTS ON CONSTRUCTION AND OPERATION - OAR 345-21-015(1)(g)(B)

Soil Movement, Including Mass Wasting, Slumping and Sliding

Power Plant and Gas Pipeline Route

The gentle (nearly flat) topography across the power plant site precludes the existence or future occurrence of mass wasting, slumping, or sliding. The gas pipeline also traverses relatively gentle areas that are not susceptible to these types of soil movement.

Transmission Line Route

No landslides or other evidence of instability were observed along the transmission line route except in the vicinity of active rock quarries. Although no major landslides or failures were observed in these quarry areas, surface mining has locally undermined some existing transmission poles and towers.

Soil Compaction

Power Plant Site

Soils at the power plant site are poorly consolidated and consist mostly of loose sandy material. The soils are several feet thick and could be subject to compaction. Therefore, constructions plans call for building foundations for facility structures to be founded in more competent materials below the surface soils.

Gas Pipeline and Transmission Line

The gas pipeline will be buried and will not affect soil compaction. Similarly, the only activity along the transmission line route will be replacement of existing poles, which will not cause soil compaction.

Erosion

Because of the high soil permeability and gentle slope of the Project area, water erosion of soils will not be a problem. However, the soils in this area are largely loose sand and silt that are subject to excessive wind erosion. Precautions will be taken in excavation during construction of the Project to minimize wind erosion.

Mitigation of Anticipated Impacts

The following measures will be implemented to offset the potential impacts on soils identified above.

1. Project structures will be founded in dense materials beneath unconsolidated surface materials to offset potential impacts from soil compaction;

2. Placement of electrical transmission towers will include setbacks from cut slopes associated with the quarry east of the Umatilla River, along the electrical transmission line route; and

3. Water will be applied to graded surfaces during construction to reduce the potential for wind erosion and silt fences or similar structures will be provided as necessary to further reduce soil erosion.

MAP SHOWING LOCATION OF EXISTING AND POTENTIAL GEOLOGICAL AND SOIL HAZARDS - OAR 345-21-15-1(g)(C)

The only potential geological and soil hazards and problems on the Project site or in its vicinity which could be aggravated by the construction and operation of the Facility is soil compaction due to power plant construction and soil erosion during construction. The risk of soil compaction would be limited to the power plant site. The location and extent of potential erosion is described in Table G-1 . The location of the energy facility site and its related and supporting structures is shown on Figure C-1.

ASSESSMENT OF SEISMIC HAZARDS - OAR 345-21-015(1)(g)(D)

Existing Conditions and Description of Recorded Earthquakes

The faulting and seismicity of the region has been studied in detail for updating the design of dams on the Columbia River (US Army Corps of Engineers 1983), and for nuclear power plant and nuclear waste siting studies at the Hanford Site in Richland, Washington (DOE 1988). More recent studies performed by Mann and Meyers (in preparation) have concentrated on trenching the Wallula fault zone, a segment of the OWL, to determine the age and rate of movement along this structure.

The Impact Area lies within the seismically active Columbia Plateau. As illustrated on the earthquake epicenter map, Figure G-4, numerous earthquakes have occurred within in the region. The two strongest earthquakes felt in the area are the Milton-Freewater and Umatilla earthquakes.

The strongest, historical, earthquake known to have occurred within the Columbia Plateau occurred on July 16, 1936 in the Milton-Freewater Area. The estimated Richter magnitude for

the Milton-Freewater event has ranged from 5.8 (Jacobson 1986) to 6.2 (Zollweg, personal communication, 1992) and had a Modified Mercalli Intensity of VII-VIII (see Table G-2), with Intensity V in the Hermiston area (US Army Corps of Engineers 1993). In the vicinity of the Wallula fault zone, the earthquake was associated with ground breakage and possible localized liquefaction features (Mann and Meyers, in preparation). The location of these features strongly suggest the earthquake was generated by movement in the Wallula fault zone.

An earthquake centered near Umatilla on March 3, 1893 had a Modified Mercalli Intensity of VII. Jacobson (1986) estimated, based on the Intensity VII, that this earthquake had a Richter magnitude of 5.7. However, Zollweg (personal correspondence 1992), suggests the Umatilla earthquake was a relatively small earthquake on the order of Richter magnitude 4.5 that occurred at a very shallow depth (<2 mi). This is supported by the fact that the Umatilla earthquake was felt over a very localized area. The source structure for the Umatilla earthquake has not been identified.

This past summer, a 3.7 magnitude earthquake was recorded in the Hermiston-Umatilla area; and a 4.2 magnitude earthquake occurred in the Milton-Freewater area.

Pertinent faults within a 100-km radius of the site, and their estimated maximum credible earthquakes ("MCE") and corresponding peak bedrock accelerations ("PGA") are summarized in Table G-3. The MCE for the site corresponds to a 6.5 Richter magnitude event occurring on the Wallula fault zone at a distance of 30 miles from the site. Using the empirically derived curves for PGA (Campbell 1981; Joyner and Boore 1981), the estimated PGA for the site is 0.34 times gravity (g). This compares favorably with the recent Johnson and Scofield (1991) estimate of an MCE of Richter magnitude 6.7 and 0.3+g PGA for northeastern Oregon. A 5.5 Richter magnitude at or near the site, or centered on the Service anticline 4 miles east of the site would produce an estimated PGA of 0.22 to 0.25 g.

Groundwater levels are important in evaluating potential seismic hazards because shallow groundwater in unconsolidated, sandy material can contribute to liquefaction potential. Static water levels recorded during 1969 and 1973 for the three Lamb Weston wells indicate that water levels fluctuate throughout the year with typically the highest levels recorded in the winter and spring and lowest levels at the end of the summer. The lowest water level recorded for the wells was 85 feet for Well #1, the high water level recorded was 31 feet in Well # 3. Similar depths to ground water are anticipated at the plant site.

Probable Behavior of Surface and Subsurface Materials

Seismic Hazards

The Impact Area is subject to periodic earthquake ground shaking. The intensity of the shaking at a particular site depends on the distance between the epicenter and the site, the magnitude of the earthquake, and the site response characteristics of the soils and bedrock beneath the site. For a major earthquake on a nearby fault, the intensity of shaking and subsequent damage for a given site is strongly dependent on the type of soils and rock beneath the site. In general, sites underlain by loose man-made fill or unconsolidated sediments tend to suffer the greatest damage, while sites underlain at shallow depth by bedrock suffer considerably less damage. For site characterization purposes, the Maximum Credible Earthquake (MCE) is conservatively estimated to be a 6.5 magnitude earthquake on the Wallula Fault zone. The anticipated Peak Bedrock Acceleration (PGA) from such an event is 0.34 times the acceleration due to gravity. The duration of this MCE would probably be on the order of 10 to 20 seconds, based on empirical relations developed by Krinitzsky and Chang (1977) for soil sites. The return period for such a design event is not very well-known. Based on the available information, it appears that an MCE may have a return period ranging from a few hundred years to several thousand years. Perhaps a more likely event that may occur during the life of the project is a background 5.5 magnitude earthquake centered in the Umatilla basin area. Depending on the distance to the site, this event could result in a PGA of approximately 0.25 times the acceleration due to gravity.

Differential Settlement

The several feet of loose silt to fine-grained sand that blanket the energy facility site and portions of the pipeline and transmission line routes may be subject to differential settlement caused by earthquake-induced soil compaction.

Liquefaction

Liquefaction occurs most commonly in loose, clay-free, granular sediments that have a uniform grain-size distribution and are saturated with ground water. Liquefaction can result in loss of bearing strength of foundation soil, lateral spreading, and landsliding.

The ground-water conditions beneath the site are not precisely known since no subsurface exploration has been conducted. However, data from the wells adjacent to the site suggest that

ground water is at least 30 feet beneath the surface and probably averages 50 to 80 feet beneath the surface. In addition, the Pleistocene outwash and catastrophic flood deposits, observed in exposed gravel quarries in the area, are relatively dense and therefore are not highly susceptible to liquefaction.

Studies of liquefaction potential in Southern California by Tinsley et al. (1985) indicate that materials susceptible to liquefaction are "sand and silt layers of late Holocene origin." Excluding the upper few feet of wind-blown soil covering the site, the sediments underlying the site are older Pleistocene deposits. In addition, for static water depths of 30 to 50 feet, Tinsley et al. indicate that liquefaction potential is low, and for water levels below 50 feet, liquefaction potential is very low. Based on the estimated depth to ground water discussed above, this information suggests that the risk of liquefaction at the energy facility site is low. However, this assessment should be verified by exploration drilling to determine the depth to ground water and the density and physical properties of the material underlying the site.

The only place where late Holocene alluvium occurs in close proximity to any of the proposed facilities is where the transmission line crosses the Umatilla River, in Umatilla, Oregon. This alluvium is restricted to a narrow ribbon that follows the river channel and adjacent flood plain. These young river deposits are saturated and are probably susceptible to liquefaction.

Faults and Surface Displacement

There are no known active or potentially active faults that traverse the energy facility site. Although extremely remote, as in any seismically active area there is always the possibility for future faulting (surface rupture) to occur in areas where no known potentially active faults previously existed. Historically, surface displacement generally closely follows the trace of geologically young faults. Since there are no known active or potentially active faults on the site or in the site vicinity, the risk of surface faulting is very low.

Near its northern terminus, the transmission line crosses the axis of the Service anticline. Evidence of Pleistocene faulting has been reported on the north side of the Columbia River on the northern continuation of this anticline; therefore, there is some poorly defined risk of surface rupture in this area. However, the return period for surface rupture along this structure is very likely on the order of 10,000 years or greater (US Army Corps of Engineers 1983); therefore the risk of surface rupture in this area during the life of the proposed transmission line is considered low.

Mitigation of Potential Impacts

The following measures will be taken to offset potential seismic impacts associated with the Generating Project:

1. As discussed in Exhibit B, Project structures will be designed and constructed to minimize potential damage from strong ground shaking. This will include compliance with UBC requirements.

2. Project structures will be founded in dense materials beneath unconsolidated surface materials to offset potential impacts from differential settlement.

3. Placement of electrical transmission towers will avoid or other wise mitigate for, to the extent practical, the narrow strip of alluvium along the Umatilla River that may be subject to liquefaction;

In addition, prior to construction, a detailed geotechnical investigation will be performed at the Project site to evaluate the subsurface conditions and further evaluate the potential for liquefaction, as well as provide information for foundation design, site preparation and grading, and roadway design. The investigation will include drilling bore holes to confirm the depth to ground water and sampling of the subsurface materials for testing.

PROJECT ORDER, PARAGRAPH 15.

Consideration was given to work by Mann and Pogue as required in the Project Order. Mann's work evaluated historical movement along the Wallula Fault Zone. His work indicates evidence of Late Quaternary to Holocene movement along this fault zone. This is consistent with work by others in this area. Pogue (1992) was contacted regarding the work he had performed in the Project area. He indicated that his work does not represent the most recent work in this area, and that the work described above is more current.

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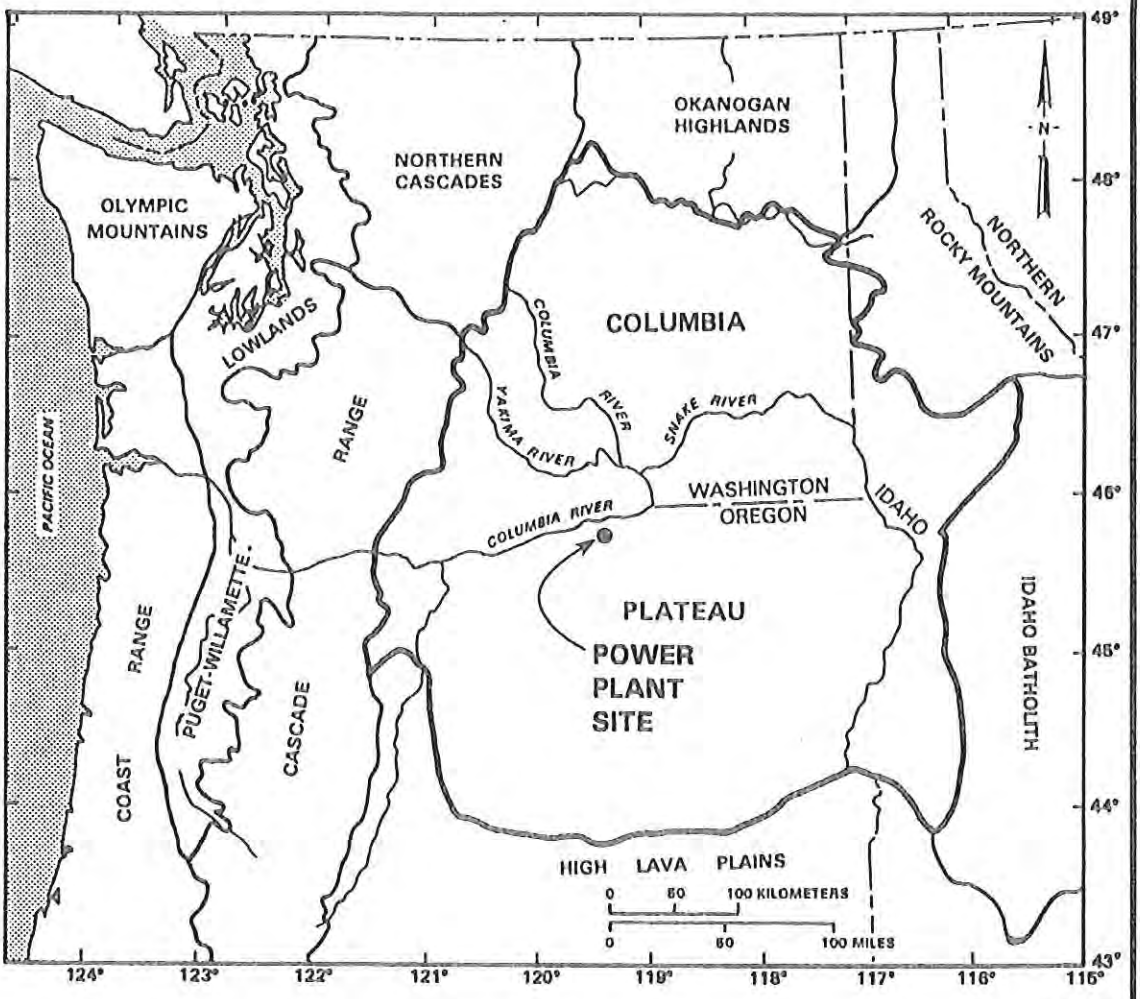

(from DOE, 1988)

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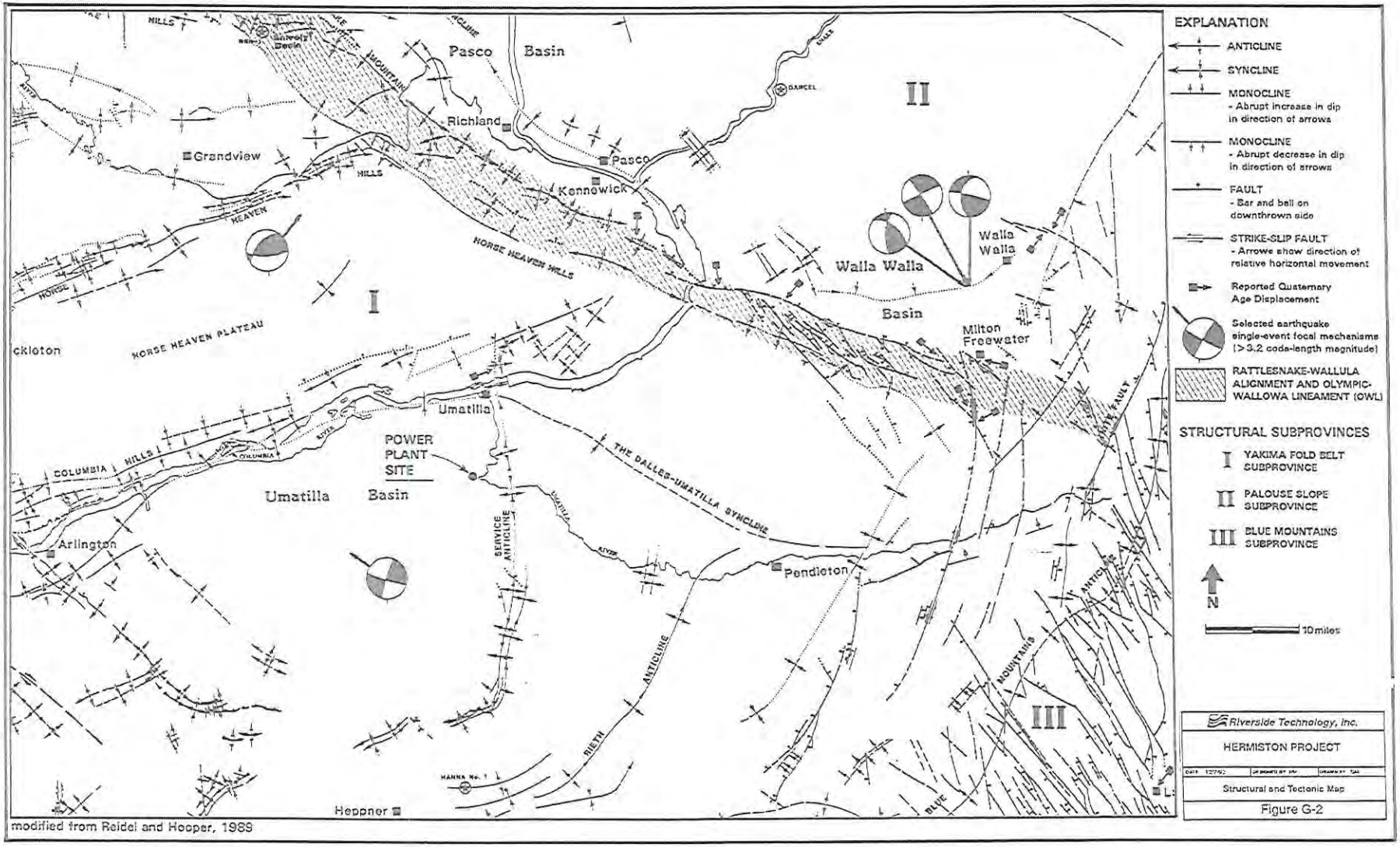
HERMISTON PROJECT		
DATE: 12/7/92	DESIGNED BY: PP	DRAWN BY: SM
Geologic Provinces		
Figure G-1		



modified from Reidel and Hooper, 1989

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HERMISTON PROJECT

Structural and Tectonic Map

Figure G-2