

1 **THERMAL POWER PLANT**

2
3 **SECOND AMENDED SITE CERTIFICATE**

4
5 **for the**

6
7 **HERMISTON POWER PROJECT**

8 (Includes Amendment No. 1, March 19, 1998, Amendment No. 2, January 23, 1998,
9 and Amendment No. 3, February 24, 2000)

10
11 This Site Certificate is made and entered into in the manner provided by ORS Chapter 469 by and
12 between the State of Oregon (State), acting by and through its Energy Facility Siting Council ("EFSC"
13 or "the Council"), and Hermiston Power Partnership ("HPP") an Oregon General Partnership.

14
15 **I. SITE CERTIFICATION**

16
17 A. To the extent authorized by State law and subject to the conditions set forth herein, the State
18 approves and authorizes the construction, operation and retirement by HPP of a natural gas-
19 fired combustion turbine energy facility, together with certain related or supporting facilities, at
20 the site near Hermiston in Umatilla County, Oregon, in the manner described in the EFSC's
21 Final Order, which by this reference is incorporated herein. The terms used in this Site
22 Certificate shall have the meaning set forth in ORS 469.300 and Oregon Administrative Rules
23 OAR 345-01-010. The facts, reasoning, conclusions and conditions relied on for approval are
24 set out in EFSC's Final Order.

25
26 Subject to the conditions herein, this certificate binds the State and all counties, cities and
27 political subdivisions in this State as to the approval of the site and the construction, operation
28 and retirement of the facility, as to matters that are included in and governed by this Site
29 Certificate. The Site Certificate is not binding with respect to matters not governed by and
30 included in the Site Certificate, including permits issued under statutes and rules for which the
31 decision on compliance has been delegated by the Federal government to a state agency other
32 than EFSC.

33
34 B. Each affected state agency, county, city and political subdivision with authority to issue a permit,
35 license or other approval addressed in or governed by the Site Certificate or EFSC's Final
36 Order shall, upon submission by HPP of the proper application and payment of the proper fees,
37 issue such permit, license or other approval without hearing or other proceeding, subject only to
38 conditions set forth in the Site Certificate. Each state agency or local government that issues a
39 permit, license or other approval to HPP shall continue to exercise enforcement authority over
40 such permit, license or other approval.

41 /

1 For a permit, license or other approval addressed in the Site Certificate, HPP shall comply with
2 applicable state and federal laws adopted in the future to the extent that such compliance is
3 required under the respective state agency statutes and rules.
4

- 5 C. Both the State and HPP shall abide by local ordinances and state law and the rules of EFSC in
6 effect on the date the Site Certificate is executed. The EFSC rules in effect on the date the Site
7 Certificate is executed are attached as Exhibit B. In addition, upon a clear showing of a
8 significant threat to the public health, safety or the environment that requires application of later-
9 adopted laws or rules, EFSC may require compliance with such later-adopted laws or rules.
10

11 **II. DESCRIPTION OF SITE AND FACILITY**
12

13 The Hermiston Power Project is a combined-cycle combustion turbine electric generating plant,
14 fueled primarily by natural gas, with a nominal capacity of 460 MW at annual average conditions.
15 Distillate (diesel) fuel will be used if needed as a backup fuel. In addition to the generation of electricity,
16 the facility will be designed to supply steam to the J.R. Simplot Company potato processing plant.
17

18 *Energy Facility Site:* The energy facility site is located on a 17 acre site adjacent to the J.R.
19 Simplot ("Simplot") potato processing plant, approximately 3 miles south of Hermiston, Oregon. The
20 energy facility site is on land zoned Heavy Industrial (HI). The location of the energy facility site is
21 shown on the attached Figure 1.
22

23 *Power Plant Structures and Major Equipment:* The proposed energy facility will consist of
24 several structures: a turbine-generator building; two heat recovery steam generator (HRSG) structures;
25 two exhaust stacks approximately 195 feet in height; an administration/control building; storage tanks for
26 raw and demineralized water; an electrical substation occupying approximately 50,000 square feet; two
27 above ground 1,000,000 gallon distillate storage tanks; and two five-cell mechanical induced draft
28 evaporative cooling towers, each with a height of approximately 42 feet. The combustion turbine will be
29 surrounded with an acoustically insulated enclosure to reduce noise levels and to provide containment
30 for automatic fire suppression equipment. The facility's water system, including treatment, component
31 cooling, fire protection and condensate return is described in the ASC, Exhibit B, pp. 13 and 14a.
32

33 *Related and Supporting Facilities:* Related and supporting facilities include two natural gas
34 pipelines that will bring natural gas to the energy facility from interstate pipelines, a water pipeline which
35 will carry raw water to the energy facility site, and one of two electrical transmission lines that will
36 deliver output from the power plant to the BPA McNary substation.
37

38 The two natural gas pipelines will deliver natural gas from the Pacific Gas Transmission (PGT)
39 and Northwest Pipeline (NWP) interstate pipeline systems. Each pipeline would be approximately 12
40 inches in diameter and will be located underground. The PGT pipeline connection will be approximately
41 4.1 miles long and the NWP pipeline will be approximately 8.8 miles long. Both pipelines are related

1 and supporting facilities as defined in OAR 345-01-010. HPP may construct one or both pipelines.
2 The routes for these pipelines are described in the land use section of the EFSC Final Order and shown
3 on Figures I-4 and I-5 in the ASC.
4

5 The raw water supply line for the energy facility will be approximately 16 inches in diameter and
6 approximately 1.1 miles long. The route for the raw water supply line is shown on Figure I-3 in the
7 ASC. This line will connect the energy facility site to the Port of Umatilla water supply project. HPP
8 has an agreement to purchase water from the Port of Umatilla. The Port will obtain the water from the
9 Columbia River under an existing municipal water permit issued by WRD, # 49497 ("Permit # 49497").
10 The Port's water supply project is not an energy facility and is not subject to EFSC regulation.
11

12 This Site Certificate permits construction along either one of two transmission line routes. Only
13 one of the two will be built. The two transmission line routes include a 230 kV option and a 500 kV
14 option.
15

16 The 230 kV option will be approximately 15.9 miles long. The route for the 230 kV
17 transmission line is shown on Figures I-7A, I-7B and I-7C in the ASC. Approximately 12.3 miles of
18 this would use the 230 kV transmission line route from the Westland Substation to the BPA McNary
19 Substation which is a double circuit steel pole 230/115 kV line. The Hermiston Generating Company
20 L.P ("HGC") holds a Site Certificate for the 230 kV line in connection with its energy facility. The
21 Umatilla Electric Cooperative Association ("UECA") owns and will operate the 230/115 kV line. If
22 this option is chosen, HPP would replace UECA's 115 kV conductors and insulators with 230 kV
23 conductors and insulators, thereby upgrading the line to a 230/230 kV line. No new right of way will be
24 required for the 230 kV transmission line from the Westland Substation to the McNary Substation.
25 UECA may relocate portions of the displaced 115 kV line along different routes elsewhere in Umatilla
26 County. HPP intends to deed the 230 kV line to UECA.
27

28 The 500 kV option would require construction of approximately 14.2 miles of new 500 kV
29 transmission line between the energy facility site and the McNary Substation. The route for the 500 kV
30 transmission line is shown on Figures I-6A and I-6B in the ASC. Most transmission line structures
31 would be placed within existing BPA right of way with the remainder located on private lands. All
32 construction will be entirely within Umatilla County with a portion also located within the City of
33 Umatilla. The 500 kV line would be deeded to BPA.
34

35 Upon leaving the energy facility site, the 500 kV line will proceed north and east approximately
36 1.5 miles to Feedville Road. This portion of the route is primarily occupied by an existing Pacific Power
37 & Light 69 kV transmission line. The new transmission line would be constructed as a double circuit
38 69/500 kV in this section. At Feedville Road the line will proceed east for approximately 3.2 miles. At
39 the intersection with Canal Road the line will proceed north for approximately .9 miles to its intersection
40 with the BPA McNary-Roundup transmission line corridor. From this point the 500 kV line will parallel
41 the McNary-Roundup line within BPA's existing 250 foot right-of way, and head in a northwesterly

1 direction approximately 7.6 miles. Approximately 0.8 miles of this 7.6 mile section will include
2 construction of a double-circuit 500/230 kV line with PacifiCorp. As the line approaches the McNary
3 substation it will occupy existing double-circuit transmission structures now being used by the BPA
4 Slatt-McNary and McNary-Lower Monument 500 kV lines.
5

6 The existing BPA 500 kV McNary-Lower Monumental transmission line will be displaced by
7 the facility's 500 kV transmission line and will be relocated about 500 - 800 feet east of its present
8 location, as shown on document ODOE-285.3 of the contested case record. This relocated section
9 will be about one mile (5000 feet) in length. The relocation begins about 150 feet north of the
10 intersection of Margaret Avenue and Lind Road at the existing 500 kV McNary-Lower Monumental
11 transmission line to the east of Lind Road. The relocated line will then proceed north generally
12 paralleling Lind Road, crossing Highway 730, and continuing north across the existing railroad tracks
13 near the McNary Substation. After crossing the railroad tracks, the line would turn northwest and
14 proceed about 700 feet to the McNary Substation.
15

16 The corridor for the relocated BPA 500 kV line includes a currently occupied residence.
17 Pursuant to an agreement with the occupant of that residence, HPP will not place the centerline of the
18 relocated 500 kV line closer than 80 feet to that property if it is occupied as a residence at the time of
19 construction.
20

21 *Power Generation Process Description:* The Hermiston Power Project will consist of two
22 identical, natural gas-fired, combined-cycle units. A gas turbine-generator is essentially a jet engine on a
23 stationary mount that derives its power from the combustion of natural gas, which is used to turn an
24 electric generator. The high-temperature exhaust from the gas turbine-generator is ducted to a heat
25 recovery steam generator (HRSG) to generate steam. This steam, in turn, is used to drive a steam
26 turbine-generator. The term "combined-cycle power plant" describes the sequential use of the fuel
27 energy in both the gas turbine-generator and the steam turbine-generator.
28

29 The Hermiston Power Project will use approximately 3,400 million British thermal units
30 (MMBtu) of natural gas fuel per hour at full load. A BTU (British thermal unit) is the amount of energy
31 needed to heat one pound of water one degree Fahrenheit. Fuel for the turbines will primarily be natural
32 gas with distillate used only as backup fuel.
33

34 A power plant's steam cycle describes the process where water enters the heat recovery steam
35 generator (HRSG) as a liquid and is changed into a high-temperature, high-pressure vapor (steam)
36 whose energy can then be used to drive the steam turbine. In order to complete the steam cycle,
37 low-pressure, low-temperature steam exiting the steam turbine-generator must be cooled to condense
38 the steam back to liquid (water). The change from steam to liquid occurs in the condenser. Cooling of
39 the condenser is provided by a separate circulating water system known as the condenser/cooling tower
40 loop.
41

1 The cooling tower provides a flow of relatively cold water to the condenser and receives heated
2 water back from the condenser. The cooling tower is used to dissipate heat by evaporating a portion of
3 the water circulating within the loop. Water lost through evaporation is replaced by the facility's cooling
4 water makeup supply source. Cooling tower makeup water will be provided and sold to the facility by
5 the Port of Umatilla. The Port of Umatilla will obtain the water sold to the Hermiston Power Project
6 from the Columbia River under Permit # 49497. The evaporation rate from the cooling tower will vary
7 between 1,300 gallons per minute and 2,000 gallons per minute, depending on steam turbine load and
8 ambient weather conditions. The water use of the entire energy facility under full load conditions, while
9 operating at an average ambient temperature of 53 degrees Fahrenheit, will be approximately 1969
10 gallons per minute.

11
12 The proposed power plant will produce wastewater from cooling tower blowdown,
13 demineralization system backwash and from sanitary wastewater. The combined wastewater stream
14 will be discharged to Simplot's existing wastewater discharge system, which reuses treated wastewater
15 for irrigation. Simplot has an existing Water Pollution Control Facility (WPCF) permit administered by
16 the Department of Environmental Quality ("DEQ"). Simplot has requested and obtained a modification
17 to its WPCF permit to accommodate the additional discharge from the proposed energy facility. This
18 permit is a "third party" permit under OAR 345-22-010(2).

19
20 **III. CONDITIONS**

21
22 **Carbon Dioxide Emissions Standard, ORS 469.503(2)**

23
24 (1) Prior to commencement of construction, the site certificate holder shall submit to the State of
25 Oregon through the Council a guaranty substantially in the form of Amended Exhibit B-2, executed by
26 Calpine Corporation in the amount of the monetary path payment requirement (in 1998 dollars) as
27 determined by the calculations set forth in Condition 4 and based on the estimated heat rate and
28 capacity certified pursuant to Condition 4(e) below and as adjusted in accordance with the terms of this
29 site certificate pursuant to Condition 4(d). For the purposes of this site certificate, the "monetary path
30 payment requirement" means the offset funds determined pursuant to ORS 469.503(2)(c) and the
31 selection and contracting funds determined pursuant to ORS 469.503(2)(d)(A)(ii) that the site certificate
32 holder must disburse to the Oregon Climate Trust, as the qualified organization, pursuant to ORS
33 469.403(2)(d)(A). The calculation of 1998 dollars shall be made using the index set forth below.

34
35 The guaranty shall remain in effect until such time as the site certificate holder has disbursed the full
36 amount of the monetary path payment requirement to the Oregon Climate Trust ("Oregon Climate
37 Trust") as provided in ORS 469.503(2)(d)(A).

38
39 In lieu of the guaranty requirement set forth above that the site certificate holder must provide prior to
40 commencement of construction, the site certificate holder may instead provide a letter of credit in the
41 amount of the monetary path payment requirement as calculated pursuant to Condition 4 below (in

1 1998 dollars) and based on the estimated capacity and heat rate of the plant as certified by the site
2 certificate holder pursuant to Condition 4(e). If the site certificate holder has provided a letter of credit
3 prior to commencing construction and if calculations pursuant to Condition 4(d) demonstrate that the
4 site certificate holder must increase its monetary path payments, the site certificate holder shall increase
5 the letter of credit sufficiently to meet the adjusted monetary path payment requirement within the time
6 required by Condition 4(d). The site certificate holder may reduce the amount of the letter of credit
7 commensurate with payments it makes to the Oregon Climate Trust.
8

9 The calculation of 1998 dollars shall be made using the US Gross Domestic Product Deflator for Total
10 Non-Residential Fixed Investment, as published by the US Department of Commerce, Bureau of
11 Economic Analysis, or any successor agency ("the index"). The amount of the letter of credit shall
12 increase annually by the percentage increase in the index and shall be pro-rated within the year to the
13 date of disbursement to the Oregon Climate Trust. If at any time the index is no longer published, the
14 Council shall select a comparable calculation of 1998 dollars. The letter of credit shall not be subject to
15 revocation prior to disbursement of the full monetary path payment requirement, including any adjusted
16 monetary path payment requirement. The terms of the letter of credit and identity of the issuer shall be
17 subject to approval by the Council, which approval shall not be unreasonably withheld. [Amendment No.
18 3]
19

20 (2) The site certificate holder shall disburse to the Oregon Climate Trust offset funds and
21 contracting and selection funds as requested by the Oregon Climate Trust up to the monetary path
22 payment requirement as determined by the calculations set forth in Condition 4 and based on the
23 estimated heat rate and capacity certified pursuant to Condition 4(e) below (in 1998 dollars) and as
24 adjusted in accordance with the terms of this site certificate pursuant to Condition 4(d). Disbursements
25 shall be made in response to requests from the Oregon Climate Trust in accordance with the
26 requirements of ORS 469.503(2)(d)(A).
27

28 (3) Notwithstanding anything in this amended site certificate to the contrary, the site certificate
29 holder shall have no obligation with regard to offsets, the offset funds and the selection and contracting
30 funds other than to make available to the Oregon Climate Trust the total amount required under this site
31 certificate, nor shall any nonperformance, negligence or misconduct on the part of the Oregon Climate
32 Trust be a basis for revocation of this site certificate or any other enforcement action by the Council with
33 respect to the site certificate holder.
34

35 (4) The site certificate holder shall use the following methodology to calculate the amount of the
36 monetary path payment requirement that it must make available to the qualified organization pursuant to
37 ORS 469.503(2)(d)(A). The same methodology shall apply to a one-unit or a two-unit facility. All
38 calculations shall be made assuming that no steam is supplied for cogeneration. The site certificate
39 holder shall use the contracted design parameters for capacity and heat rate for the facility that it reports
40 pursuant to Condition 4(e) to calculate the estimated monetary path payment requirement. The site

1 certificate holder shall use the Year One Capacities and Year One Heat Rates that it reports for the
2 facility pursuant to Condition 4(f) to calculate whether it owes additional monetary path payments.

3
4 (a) To calculate the offset funds payment requirement as provided in ORS 469.503(2)(c), the site
5 certificate holder shall use the following methodology:

6 /

7 (A) The site certificate holder shall use the respective capacity, heat rate, and carbon dioxide
8 emission factor for each fuel. The carbon dioxide emission factor for natural gas is 0.000117 lb.
9 CO₂/Btu, and for distillate fuel it is 0.000161 lb. CO₂/Btu;

10
11 (B) The site certificate holder shall determine the time the plant will operate using each fuel.
12 For distillate fuel, the time shall be the average number of hours annually that this site certificate
13 permits the facility to use distillate fuel pursuant to Condition 4(g). The site certificate holder
14 shall determine the annual average hours of operation on natural gas by subtracting the annual
15 average hours on distillate fuel from 8,760 hours;

16
17 (C) The site certificate holder shall calculate the total CO₂ emissions (lb. CO₂) for each fuel:

18
19 (i) First, the site certificate holder shall multiply the nominal power of the facility (kW)
20 while operating on natural gas by the annual average hours of operation on natural gas.
21 It shall then multiply that product by 30 years to determine the total net plant output
22 (kWh). It shall multiply the total net plant output by the heat rate (Btu/kWh) while
23 operating on natural gas and by the carbon dioxide emission factor for natural gas
24 (0.000117 lb. CO₂/Btu) to determine the total CO₂ emissions (lb.) from operating on
25 natural gas;

26
27 (ii) Second, the site certificate holder shall multiply the nominal power of the facility
28 (kW) while operating on distillate fuel by the annual average hours of operation on
29 distillate fuel. It shall then multiply that product by 30 years to determine the total net
30 plant output (kWh). It shall multiply the total net plant output by the heat rate
31 (Btu/kWh) while operating on distillate fuel and by the carbon dioxide emission factor
32 for distillate fuel (0.000161 lb. CO₂/Btu) to determine the total CO₂ emissions (lb.)
33 from operating on distillate fuel; then,

34
35 (D) The site certificate holder shall calculate the average CO₂ emissions rate (lb. CO₂/kWh) for
36 the two fuels. It shall add the total CO₂ emissions that each fuel contributes for 30 years to
37 determine the total combined CO₂ emissions from the facility (lb.). Then, it shall add the total
38 net plant output from operation on each fuel for 30 years to determine the total combined plant
39 output (kWh). Then it shall divide the total combined CO₂ emissions by the total combined
40 plant output to determine the average CO₂ emissions rate for the facility (lb. CO₂/kWh);
41

1 (E) The site certificate holder shall subtract the carbon dioxide standard of 0.7 lb. CO₂/kWh
2 from the average CO₂ emissions rate for the facility to determine its excess CO₂ emissions rate
3 (lb. CO₂/kWh);
4

5 (F) The site certificate holder shall multiply the total combined plant output (kWh) by the
6 facility's excess CO₂ emissions rate (lb. CO₂/kWh). It shall then divide that product by 2,000
7 pounds to determine the total tons of CO₂ emissions it must mitigate (tons); then,
8

9 (G) The site certificate holder shall multiply the total tons of CO₂ emissions it must mitigate by
10 \$0.57 per ton of CO₂ to determine the sub-total for the offset funds.
11

12 (b) To calculate the selection and contracting funds sub-total as provided in ORS 469.503(2(d)(A)(ii),
13 the site certificate holder shall subtract \$500,000 from the offset funds subtotal; then multiply the
14 remaining amount by 4.286 percent; then add \$50,000 to that product.
15

16 (c) To determine its monetary path payment requirement, the site certificate holder shall add the sub-
17 total for the offset funds and the sub-total for the selection and contracting funds.
18

19 (d) When the site certificate holder submits the Year One Test report required in Condition 4(f), it shall
20 increase its guaranty or letter of credit for the monetary path payment requirement if the calculation using
21 reported data shows that the adjusted monetary path payment requirement exceeds the monetary path
22 payment requirement for which the site certificate holder had provided a guaranty or letter of credit prior
23 to commencing construction, pursuant to Condition 1.
24

25 (A) The site certificate holder shall make the appropriate calculations and increase its guaranty
26 or letter of credit, if necessary, within 30 days of filing its Year One Test report with the
27 Council.
28

29 (B) In no case shall the site certificate holder diminish the guaranty or letter of credit it provided
30 prior to commencing construction or receive a refund from the qualified organization based on
31 the calculations made using the Year One Capacities and the Year One Heat Rates.
32

33 (e) Prior to commencement of construction, the site certificate holder shall notify the Council in writing
34 of its final selection of gas turbine vendor and shall submit written design information to the Council
35 sufficient to verify the facility's designed new and clean heat rate and its nominal electric generating
36 capacity at average annual site conditions for each fuel type. The information that the site certificate
37 holder submits shall include the proposed binding annual average number of hours of facility operation
38 on distillate fuel oil. The report shall also include an affidavit or other evidence from the site certificate
39 holder to confirm that the vendor has guaranteed the heat rate and that the site certificate holder's
40 contract with the vendor includes a liquidated damages provision adequate to fund any increased

1 monetary path payment requirement calculated under Condition 4(d) resulting from vendor's failure to
2 achieve the guaranteed heat rates or capacities.

3
4 (f) Within two months of completion of the first year of commercial operation, the site certificate holder
5 shall provide to the Council pursuant to ORS 469.503(2)(e)(G) a test report (Year One Test) of the
6 actual heat rates (Year One Heat Rates) and nominal generating capacities (Year One Capacities) for
7 each fuel type used, without degradation, assuming no steam is supplied for cogeneration, as determined
8 by a 100-hour test at full power completed during the first 12 months of commercial operation, with the
9 results adjusted for the average annual site condition for temperature, barometric pressure and relative
10 humidity and use of alternative fuels, and using a rate of 117 pounds of carbon dioxide per million Btu of
11 natural gas fuel and a rate of 161 pounds of carbon dioxide per million Btu of distillate fuel.

12
13 (g) The combustion turbine units shall be fueled solely with natural gas or with synthetic gas with a
14 carbon content per million Btu no greater than natural gas, except that the site certificate holder may use
15 distillate fuel for no more than an average of 378 hours per year calculated on a rolling average of the
16 previous five years. For the first five years, distillate fuel use may fluctuate, provided that the average
17 use, when calculated at the end of five years, does not exceed 378 hours per year. However, if prior to
18 the commencement of construction the site certificate holder proposes in its written submission to the
19 Council made pursuant to Condition 4(e) to use distillate fuel more or less than 378 hours on average
20 per year, the number proposed by the site certificate holder shall replace 378 hours as the binding
21 annual average number of hours for distillate fuel use under this Condition 4(g) and for calculations of
22 the monetary path payment requirement.

23
24 Notwithstanding the number of hours permitted annually of distillate fuel use based on a five-year rolling
25 average or during the first five years, in no year shall the facility's use of distillate fuel exceed 10 percent
26 of its expected total annual fuel use in Btu, higher heating value.

27
28 **Shelf Life: OAR 345-27-020(3)**

29
30 (5) The Site Certificate holder shall begin construction of proposed facility by November 30, 2000
31 and shall complete construction by January 1, 2003.

32
33 (6) Construction completion of the facility shall be defined as the commercial operation date of the
34 facility. If the Site Certificate holder begins construction by November 30, 2000 but cannot complete
35 construction by January 1, 2003, then the Council may grant extensions of the construction completion
36 date in accordance with OAR 345-27-030.

37
38 **Organizational, Managerial And Technical Expertise: OAR 345-22-010**

39
40 (7) Prior to commencement of construction, the Site Certificate holder shall demonstrate to ODOE
41 that the Port has not forfeited its legal right to perfect the 2400 gpm contracted to HPP.

1
2 (8) Prior to commencement of construction, HPP shall have a contract or other agreement with
3 Simplot to accept and dispose of HPP's wastewater.

4
5 (9) Prior to construction, HPP shall identify for the Council's approval the EPC contractor chosen
6 to construct the facility. Prior to commercial operation, HPP shall identify for the Council's approval the
7 contractor chosen to operate the facility. Any such approval shall not be unreasonably withheld.

8
9 (10) All modifications to the partnership agreement shall be submitted to the Department for
10 incorporation in the Site Certificate file.

11
12 (11) Any change of operator shall be reported to the Department.

13
14 (12) Any matter of non-compliance under this Site Certificate shall be the responsibility of the
15 partnership. Any notices of violation issued will be issued to the partnership. Any civil penalties levied
16 will be the responsibility of the partners jointly and severally.

17
18 (13) In the annual report submitted to the Council, the Site Certificate holder shall describe any
19 change in the membership or voting requirements of its management committee or any admission or
20 withdrawal of a partner not described in any earlier annual report previously submitted to the Council.
21 Any (a) such change in such membership or voting requirements resulting in a material change to the Site
22 Certificate holder's existing management structure and procedures; (b) such admission resulting in a new
23 partner's active participation in the business and affairs of the Site Certificate holder; or (c) such
24 withdrawal resulting in the complete removal of an existing partner from its previously active
25 participation in the business and affairs of the Site Certificate holder, shall be subject to approval of the
26 Council, which approval shall not be unreasonably withheld or delayed.

27
28 (14) The Site Certificate holder shall contractually require the EPC contractor and all independent
29 contractors and subcontractors involved in the construction and operation of the proposed facilities to
30 comply with all applicable laws and regulations and with the terms and conditions of the Site Certificate.
31 Such contractual provision shall not operate to relieve the Site Certificate holder of responsibility under
32 the Site Certificate.

33
34 **Financial Assurance: OAR 345-022-0050**

35
36 (15) Prior to commencement of construction, the site certificate holder shall submit to the State of
37 Oregon through the Council, a guaranty substantially in the form of Second Amended Exhibit A,
38 executed by Calpine Corporation in the amount of \$8,202,000 (in 1995 dollars). The calculation of
39 1995 dollars shall be made using the index set forth below. The guaranty shall remain in effect until such
40 time as the total security in the retirement fund described in Condition 16 below reaches \$8,202,000 (in
41 1995 dollars). For the purposes of this site certificate, "total security in the retirement fund" means the

1 total amount of all cash, letters of credit and performance bonds deposited, issued or posted as security
2 for the performance of the site certificate holder's obligation under OAR 345-022-0130.

3
4 In the event that Calpine Corporation's long-term unsecured debt is rated below "BB" or its equivalent
5 by S&P and Moody's or their successors, the site certificate holder shall provide a letter of credit in the
6 amount of \$8,202,000 (in 1995 dollars) less all amounts then on deposit in the retirement fund. The
7 calculation of 1995 dollars shall be made using the U.S. Gross Domestic Product Deflator for Total
8 Non-Residential Fixed Investment, as published by the U.S. Department of Commerce, Bureau of
9 Economic Analysis, or any successor agency ("the index"). The amount of the letter of credit shall
10 increase annually by the percentage increase in the index. If at any time the index is no longer published,
11 the Council shall select a comparable calculation of 1995 dollars. The letter of credit shall not be
12 subject to revocation during the lifetime of the facility. The terms of the letter of credit and identity of the
13 issuer shall be subject to approval by the Council, which approval shall not be unreasonably withheld.
14 All funds received by the site certificate holder from the salvage of equipment or buildings shall be
15 committed to the restoration of the facility site to the extent necessary to fund the approved restoration.

16 [Amendment No. 3]

17
18 (16) This condition shall apply only while the site certificate holder satisfies Condition 15 with a
19 guaranty instead of a letter of credit.

20
21 Starting with the first year of commercial operation, the site certificate holder shall establish a retirement
22 fund and begin making commitments to the fund in the amount of \$800,000 (or more if the site
23 certificate holder chooses) in the form of a letter of credit, performance bond, or cash ("annual
24 commitments"). The terms of the security and identity of the issuer of a letter of credit or performance
25 bond shall be subject to approval by the Council, which approval shall not be unreasonably withheld.
26 Such annual commitments shall continue until the total security in the retirement fund reaches
27 \$8,202,000 (in 1995 dollars) in no event later than 10 years from the date of commercial operation.
28 The calculation of 1995 dollars shall be made using the U.S. Gross Domestic Product Deflator for Total
29 Non-Residential Fixed Investment, as published by the U.S. Department of Commerce, Bureau of
30 Economic Analysis, or any successor agency ("the index"). After the security in the fund reaches
31 \$8,202,000 (in 1995 dollars), the fund shall increase annually by the percentage increase in the index. If
32 at any time the index is no longer published, the Council shall select a comparable calculation of
33 1995 dollars. In the event the security in the retirement fund is less than \$8,202,000 (in 1995 dollars) at
34 the time the site certificate holder notifies the Council of its intent to retire the facility, the annual
35 commitments to the retirement fund shall be adjusted so as to assure that the total security in the funds is
36 \$8,202,000 (in 1995 dollars) at the time of retirement. the site certificate holder shall describe the status
37 of the fund in the annual report submitted to the Council. All funds received by the site certificate holder
38 from the salvage of equipment or buildings shall be committed to the restoration of the facility site, to the
39 extent necessary to fund the approved restoration. [Amendment No. 3]

1 (17) In the event construction is begun but not completed by the deadlines set forth in the Site
2 Certificate, or the energy facility is closed permanently before the end of its useful life, HPP shall restore
3 the site to a useful condition. Restoration shall include but not be limited to the removal of transmission
4 line towers erected by the Site Certificate holder unless the Council determines that such towers are
5 likely to be used by another facility, electric utility or other entity that provides electric service.
6

7 **Structural: OAR 345-22-020**
8

9 (18) Prior to the start of construction, HPP shall conduct an investigation as described by Mr. D.
10 Wermiel of DOGAMI in a letter dated May 9, 1995 to Mr. A. Bless, ODOE which would confirm
11 HPP's characterization of ground response to potential seismic events. The ground response evaluation
12 will include drilling one deep boring to bedrock and measuring downhole shear wave velocity profile
13 beneath the energy facility site. Based on the site-specific measurements, ground response and
14 amplification will be evaluated.
15

16 The geotechnical investigation shall be peer reviewed by the DOGAMI or by a private engineering
17 geologist or geotechnical engineer registered in the state of Oregon that is independent from HPP and
18 the HPP's contractors and subcontractors. If a private engineering geologist or geotechnical engineer is
19 used, the choice of peer reviewer shall be approved by ODOE in consultation with DOGAMI.
20

21 (19) If the detailed survey reveals evidence that is not as described in the ASC, then the HPP shall
22 revise the facility design parameters to comply with corresponding Oregon Building Code requirements.
23 If pre-construction seismic analysis reveals features unique to the energy facility site that justify enhanced
24 seismic design, HPP shall design safety structures critical to public health or safety in consultation with
25 the Building Codes Division of the Department of Consumer and Business Services ("DCBS"), subject
26 to approval by ODOE. Critical structures include hazardous material storage areas and control rooms.
27

28 (20) Except as provided for in condition 2 above, HPP shall design and construct the proposed
29 facility to be consistent with Seismic Zone 2b requirements, in compliance with the laws and regulations
30 administered by the DCBS.
31

32 (21) HPP shall place electrical transmission towers to avoid, to the greatest extent possible given the
33 existing alignment, the narrow strip of alluvium along the Umatilla River that may be subject to
34 liquefaction. If this strip cannot be avoided, the transmission towers shall be constructed so as to
35 otherwise mitigate for the risk of liquefaction. Mitigation measures shall be developed in consultation
36 with DOGAMI.
37

38 (22) HPP shall design the energy facility in accordance with a design basis seismic event of
39 magnitude 4.5 along the service Anticline at a distance of 1 km from the energy facility site, as described
40 on p. 14a of Exhibit G of the ASC, and in accordance with a Seismic Zone 2b classification by the
41 Oregon Building Code.

1
2 (23) HPP shall embed transmission line tower foundations below significant loose soils as described
3 on p. 16 of Exhibit G of the ASC.

4
5 (24) The PGT pipeline shall be embedded below loose soil deposits combined, if necessary with the
6 use of free draining, coarse granular backfill as described in the ASC, Exhibit G p. 17.

7
8 (25) Along the 500 kV transmission line right of way in the vicinity of Maxwell Canal, near Diagonal
9 Road, east and north of Hermiston, along the relocated BPA 500 kV McNary to Lower Monumental
10 line between Highway 730 and Power City Road, and in the area near Power City, transmission line
11 poles will be constructed in upland areas and/or on higher ground underlain by dense granular soil with
12 negligible liquefaction potential as described in ASC Exhibit G p. 17.

13 /
14 (26) Transmission pole and pipeline locations that could be subject to settling, slumping or
15 liquefaction shall be tested for soil properties prior to pole and pipe installation, as described on page 19
16 on Exhibit G of the ASC.

17
18 **Soil Protection: OAR 345-22-022**

19
20 (27) Ground disturbing activities and incidental activities (e.g., personal vehicle parking, sanitary
21 facilities, temporary staging areas, etc.) for the facility shall be confined to a limited number of locations
22 identified by HPP and approved by the Department prior to commencement of construction.

23
24 (28) Only existing roadways shall be used for access along the pipelines; access for transmission line
25 construction and maintenance shall utilize existing roads wherever practicable and temporary
26 transmission line access roads shall only be constructed where there is open terrain with no existing
27 access road; and no permanent impacts shall be associated with pipeline or transmission line access
28 road construction or maintenance.

29
30 (29) Topsoils and subsoils resulting from excavation for gas and water pipelines shall be segregated
31 and the topsoil restored to minimize impacts on soil fertility.

32
33 (30) The Site Certificate holder shall utilize site watering or other methods to reduce wind erosion
34 during site earthwork or construction. Post construction soil stabilization methods shall be utilized as
35 described on ASC Exhibit G p. 18.

36
37 **Protected Areas: OAR 345-22-040**

38
39 (31) The Site Certificate holder shall not operate the Circulating Water System at above 5,200 ppm,
40 TDS equivalent on an annual average basis. Drift rate shall not result in solids carryover exceeding the
41 equivalent of 0.005% drift rate at 5,200 ppm, TDS.

1
2 **Fish and Wildlife: OAR 345-22-060**
3

4 (32) Any trimming, side cutting or other removal of riparian vegetation that may be required under
5 the proposed 500 kV transmission line shall be kept to a minimum and shall only be conducted to meet
6 National Electric Safety Code clearances.
7

8 (33) Construction and maintenance of the transmission lines and natural gas pipelines shall avoid all
9 wetlands, except for the two wetland areas (wetlands #4 and #15) that will be unavoidably impacted as
10 stated in the ASC (Exhibit H, p. 11f; Exhibit P, p. 11b) and the one wetland area, wetland #13, that
11 may be impacted by pole placement.
12

13 (34) No ground disturbing activities shall be conducted in the Umatilla River, no water withdrawals
14 from the Umatilla River shall occur, and the energy facility shall not discharge water into the river (ASC,
15 Exhibit P, p. 15).
16

17 (35) Non-wetland areas disturbed by construction of the energy facility, the equipment
18 storage/staging area and employee parking staging area, the natural gas pipelines, the water supply
19 pipeline, and the transmission lines shall be revegetated upon completion of construction. Revegetation
20 shall emphasize the use of native species and shall be conducted in accordance with the Recommended
21 Revegetation Plan (July 19, 1994) stated in the ASC (Exhibit P/P-1, Appendix E).
22

23 (36) Subject to Condition (37), if feasible, construction of the natural gas pipelines, water supply line
24 and transmission line shall occur outside of sensitive time periods (as described in the ASC, Exhibit P/P-
25 1, page 44a) for the following wildlife species of concern which were documented within the impact
26 area of the proposed natural gas pipelines, water supply line and transmission line: painted turtle, long-
27 billed curlew, grasshopper sparrow, Swainson's hawk, burrowing owl, and bank swallow.
28

29 (37) Notwithstanding Condition (36), prior to construction of the gas pipelines, water supply line and
30 transmission line HPP shall provide to ODOE a construction schedule, including activities and locations,
31 if any, of planned construction of the gas pipelines, water supply line and transmission line during the
32 sensitive time periods for the species listed above. HPP shall consult with ODFW to make every effort
33 to schedule construction activities to avoid adverse impact on the species listed above.
34

35 Not less than 60 days prior to the sensitive time periods for species listed above, HPP shall notify
36 ODOE in writing of any construction activities on the gas pipelines, water supply line and transmission
37 line scheduled for those time periods. If construction activities cannot be scheduled to occur outside the
38 sensitive time periods for the above listed species of concern, pre-construction biological surveys shall
39 be conducted by a wildlife biologist within the impact area of the proposed natural gas pipelines, water
40 supply line and transmission line to identify the location of wildlife species of concern or their nest sites.
41 HPP shall develop the methodology for these pre-construction surveys in consultation with ODFW

1 prior to conducting the surveys. Mitigation for potential impacts to any wildlife species of concern
2 and/or their nest sites found during pre-construction surveys shall be developed by HPP prior to
3 construction of the gas pipelines, water supply line and transmission line and in consultation with
4 ODFW. The mitigation plan shall be submitted to ODFW and ODOE for review and approval prior to
5 construction of the gas pipelines, water supply line and transmission line. ODOE shall make a final
6 determination on the mitigation plan within 45 days of its submission.

7
8 (38) Upon completion of construction of the energy facility, two raptor perching poles shall be
9 placed near the outside edge of the 17 acre energy facility site. The design and location of these raptor
10 perching poles shall be developed in consultations with ODFW. Raptor perching poles shall be located
11 to benefit raptors without interfering with the energy facility plant operation and maintenance.

12 /
13 (39) Transmission lines shall span the Umatilla River and associated riparian habitat in order to avoid
14 adverse impacts, as described in the ASC (Exhibit P, p. 15). The natural gas pipelines, water supply
15 line, and transmission lines shall be routed to avoid riparian areas and wetlands adjacent to the Umatilla
16 River. All permanent access routes shall be designed to be set back at least 50 feet from the Umatilla
17 River, as described in the ASC (Exhibit N, p. 7a).

18
19 (40) The following areas shall be flagged in the field prior to the start of construction to delineate the
20 maximum extent of project disturbance:

- 21
22 i. the natural gas pipeline and transmission line routes through wetlands #4, #13, and #15;
23
24 ii. any natural gas pipeline, water supply line, and transmission line routes within 50 feet of
25 the Umatilla River; and
26
27 iii. the transmission line crossings of the Umatilla River.
28

29 (41) Notification shall be provided to the ODFW's Pendleton District office at least one week (7
30 days) prior to the start of construction for the power plant, natural gas pipelines, water supply pipeline,
31 and transmission lines.

32
33 (42) Measures taken to mitigate impacts to fish and wildlife and their habitats shall be monitored by
34 HPP. Monitoring methodologies and schedules shall be developed in consultation with ODFW. A
35 mitigation monitoring plan shall be submitted to ODFW and ODOE for review and approval prior to
36 issuance of a notice to proceed. If any mitigation measures are determined by the HPP or ODFW to be
37 unsuccessful, corrective actions shall be taken by the applicant after consultation with ODFW.

38
39 (43) A minimum of ten (10) cottonwood (*Populus trichocarpa*) tree saplings shall be planted, in an
40 appropriate habitat area, and within the vegetation impact area for the natural gas pipelines and electrical

1 transmission lines for every cottonwood tree removed during construction of the natural gas pipelines
2 and electrical transmission lines.

3
4 (44) The project shall not impact any native vegetation within the U.S. Army's Umatilla Ordinance
5 Depot.

6
7 (45) HPP shall design transmission lines with a separation between conductors greater than 5 feet,
8 and shall consider other techniques to reduce collision potential (e.g., clustering lines, placing colored
9 serial marker ball on the line, etc.)

10
11 (46) Top soils and subsoils resulting from excavation for gas and water pipelines shall be segregated
12 and the top soil restored.

13 /

14 (47) The Swainson's hawk nest south of the proposed energy facility (described in ASC Ex P, page
15 19) shall be monitored during the two weeks prior to facility construction to determine if the nest is
16 active. If the nest is determined to be active, a qualified biologist shall be retained to monitor the nest
17 during facility construction and maintain contact with ODFW. If monitoring indicates that facility
18 construction is adversely impacting nesting Swainson's hawks or their young, a mitigation plan shall be
19 developed after consultation with ODFW.

20
21 **Threatened and Endangered Species: OAR 345-22-070**

22
23 (48) Raptor protection shall be employed in the design and construction of the transmission towers
24 and transmission lines following the methods described by Olendorf, R.L., A.D. Miller, and R.N.
25 Lehman, 1981, Suggested practices for raptor protection on power lines, Raptor Research Foundation,
26 University of Minnesota, St. Paul, Minnesota. A detailed design shall be submitted to the ODFW for
27 review and approval during the design phase of the project. All energized transmission conductors shall
28 be designed with adequate separation of a minimum of five feet.

29
30 (49) Notification shall be provided to the ODFW's Pendleton District office at least one week (7
31 days) prior to the start of construction for the power plant, natural gas pipelines, water supply pipeline,
32 and transmission lines.

33
34 (50) HPP shall conduct a pre-construction survey to determine if *Astragalus collinus var. laurentii*
35 is present along the route of the relocated BPA 500 kV transmission line where the route crosses the
36 slope that occurs north of Highway 730. The survey shall be conducted during the appropriate field
37 season (May through early July) by a qualified biologist. If the species is found to occur in areas that
38 might be affected by construction of the relocated BPA 500 kV line, HPP shall contact ODOE and the
39 Oregon Department of Agriculture, Plant Conservation biology Program to develop a mitigation plan.

40
41 **Scenic and Aesthetic Values: OAR 345-22-080**

1
2 (51) To minimize visual intrusion caused by the stacks, the stacks shall be painted in a matte finished
3 neutral color to minimize the potential for glare caused by reflective surfaces. Colors shall be chosen to
4 blend with the surrounding area, to the extent that the choice does not compromise air traffic safety.
5

6 (52) Landscaping shall be used to screen the energy facility from the nearest residence and roadways
7 to the extent reasonably feasible. Shrubbery and trees planted along the perimeter of the energy facility
8 site and other landscaping shall be well-maintained and include low-maintenance and indigenous plants.
9

10 (53) To minimize project visibility at night, outdoor lighting shall be limited to the extent necessary to
11 maintain safety conditions.
12 /

13 (54) HPP will not put up signs along Feedville Road without authorization from the County.
14

15 **Historic, Cultural, and Archaeological Resources: OAR 345-22-090**
16

17 (55) HPP shall consult with CTUIR before commencing construction. HPP shall allow tribal
18 monitoring by CTUIR of earth-moving activities within areas with a high potential for containing
19 archaeological remains. These areas are identified in Figure T-5 of the ASC.
20

21 (56) HPP shall notify the CTUIR before starting construction and shall provide the opportunity for a
22 CTUIR representative, knowledgeable in cultural resources of the area, to be available for periodic on-
23 site monitoring during construction activities.
24

25 (57) If resources are discovered during project construction or construction-related activities that are
26 likely to be eligible for listing on the National Register of Historic Places or to qualify as archeological
27 objects or sites, HPP shall stop all work in the immediate area of the find and consult with the CTUIR
28 and SHPO. HPP shall not restart work in the affected area until it has complied with the archeological
29 permit requirements administered by SHPO (currently set forth in OAR Chapter 736, Division 51).
30

31 (58) HPP shall place the transmission towers/poles away from the banks of the Z, Maxwell, A-Line
32 and Feed canals, and the Hermiston and Stanfield Branch Furnish Ditches, and shall avoid any
33 disturbance at the canal crossings when electrical lines are strung, to avoid disturbance of the canal
34 features during construction and operation of the transmission line.
35

36 (59) If practicable, HPP shall avoid disturbance to the Feed Canal in construction of the NWP
37 pipeline. If construction cannot avoid the canal, HPP shall consult with SHPO and shall take steps
38 required by SHPO to mitigate adverse impacts to the canal. Fill excavated during any construction at
39 the canal shall be monitored by a professional historic archaeologist.
40

1 (60) HPP shall consult with the irrigation district in which the canal is located before construction or
2 the upgrading of the transmission line in the area of the canal to determine whether there are any
3 applicable restrictions.
4

5 **Recreation: OAR 345-22-100**

6
7 None
8

9 **Socio-Economic Impacts: OAR 345-22-110**

10 (61) HPP will hire as many local workers as is reasonably possible for both the construction and
11 operation of the Project. A "local" worker is one who resides within a 60 mile radius from the project
12 site encompassing part of Umatilla and Morrow Counties in Oregon and the part of Benton, Franklin
13 and Walla Walla counties in Washington. HPP will establish a single point of contact with the Oregon
14 Employment Department in Pendleton Oregon to coordinate employment opportunities at the project
15 site.
16

17 (62) During construction, contracted portable toilet facilities shall be used. During operation,
18 domestic wastewater will be treated by the Simplot Company treatment system.
19

20 (63) HPP shall retain stormwater on-site in a stormwater detention pond. During an extreme event,
21 excess stormwater will be discharged from the settlement basin to the natural drainage. Prior to
22 construction the Site Certificate holder will obtain from the Department of Environmental Quality a
23 general National Pollutant Discharge Elimination System (NPDES) permit 1200-C for construction of
24 the facility. Prior to operation the facility will obtain a general NPDES permit 1200-H as administered
25 by DEQ.
26

27 (64) The energy facility shall be constructed with fire hydrants and a sprinkler and deluge system. An
28 employee training program will be implemented and records maintained as described in the ASC,
29 Exhibit U p. 19. An early warning gas release system will be installed as described in the ASC Exhibit U
30 p. 19.
31

32 (65) During construction, HPP shall establish a housing clearing house at the energy facility site for
33 construction workers. The clearing house shall coordinate with local officials and housing owners to
34 place workers who need lodging as necessary. During construction, HPP shall monitor the central
35 vacancy rate in the cities of Umatilla, Stanfield and Hermiston. If the vacancy rate falls below seven
36 percent, the clearing house will begin its activity to locate available housing outside of Umatilla, Stanfield
37 and Hermiston so a listing of available housing outside of these cities can be provided to temporary
38 workers should the vacancy rate fall below five percent. If the vacancy rate falls below five percent,
39 HPP shall locate housing outside of Umatilla, Stanfield and Hermiston, or offer temporary housing for
40 any temporary workers that it hires from outside the local area. HPP shall provide a plan of operation
41 for the housing clearing house to ODOE prior to the start of construction. HPP shall provide such a plan

1 at least 60 days prior to the start of construction and ODOE shall review and respond with its approval
2 or comments not later than 30 days after the plan is submitted.

3
4 (66) Construction worker traffic patterns to the energy facility site will be coordinated with the state,
5 county and adjacent Simplot potato processing facility. If necessary, sight distances will be improved
6 and a left turn lane provided on Simplot's private access road at its intersection with State Road 207.

7
8 (67) Rail delivery shall be used to the extent practical to minimize heavy-haul truck trips during
9 construction.

10
11 (68) HPP shall, in consultation with the Hermiston Rural Fire Protection District, establish a pre-fire
12 plan which shall be available to the local fire district. The plan shall describe key entrances and exits, the
13 floor plan of the energy facility, the location of hydrants and hoses, and the location and description of
14 any hazardous materials.

15 /

16 **Waste Minimization: OAR 345-22-120**

17
18 (69) During construction of the facility, HPP shall identify means of minimizing waste generation and
19 shall recycle waste to the extent reasonably practicable. HPP shall also implement a waste minimization
20 and recycling program to remain in effect throughout the life of the facility.

21
22 (70) HPP shall ship used batteries, spent demineralizer resins and spent oxidation catalysts to vendor
23 recycling facilities. Used SCR catalysts will be shipped to a metals reclaiming facility.

24
25 (71) During operation, all waste materials shall be contained on the energy facility site within the site
26 perimeter fence and screened from view. Process waste will be stored in closed containers. Used
27 batteries shall be stored indoors. Hazardous waste shall be stored and transported in accordance with
28 applicable state and federal law.

29
30 (72) HPP shall implement, to the extent reasonably practical, design features such as those described
31 in Exhibit V pages 4 through 6 to reduce unnecessary water consumption. Such features may include
32 but are not limited to controls to maximize demineralizer resin efficiency, utilization of optimal cycles of
33 concentration, selection of advanced gas turbines, sizing of the condenser to condense all steam
34 produced in the HRSG, recovery of filter backwash water, reprocessing of filtrate from the sludge
35 dewatering system, and incorporation of a two pass Reverse Osmosis system.

36
37 (73) Non hazardous chemicals shall be selected for water treatment to allow use of waste water for
38 irrigation.

39
40 (74) Steam condensate that is recovered in the potato processing plant will be returned to the energy
41 facility for reuse.

1
2 (75) Upon completion of construction, HPP shall dispose of all temporary structures not required for
3 future operation of the facility and all used timber, brush, refuse, or flammable material resulting from
4 clearing of lands or from construction of the facility.
5

6 **Retirement: OAR 345-22-130**
7

8 (76) HPP shall manage all hazardous material in accordance with local and state regulatory
9 standards. Documentation will be maintained and hazardous materials will be handled by qualified
10 personnel. Hazardous waste will be stored on site no more than 90 days, followed by transport to a
11 licensed treatment storage disposal facility, as described in ASC, exhibit B p.15a.
12

13 (77) Storage and handling of flammable and combustible liquid chemicals shall be in compliance with
14 National Fire Protection Association Codes 30 and 321. Chemical storage areas will have secondary
15 containment. Storage tanks for distillate shall have secondary containment. HPP shall comply with
16 Uniform Building Code Chapters 79 for Hazardous Materials and 80 for Flammable Liquids. Concrete
17 basins will be provided at each of the large electrical transformers to capture any insulating oil that might
18 spill during a transformer failure or maintenance operation. (ASC Exhibit F p.6) Foundations and slabs
19 for equipment containing lubricating oil, insulating oil or hydraulic fluid shall be designed to contain and
20 collect any spill. Secondary containment for hazardous material storage areas shall have volume equal to
21 100 percent of the maximum chemical volume in primary containment (ASC Exhibit F p. 9)
22

23 (78) HPP shall prevent any condition over which the certificate holder has control from developing
24 on the site that would preclude restoration of the site to a useful condition. (OAR 345-27-020(9)).
25

26 (79) This condition shall apply only while the site certificate holder satisfies Condition 15 with a
27 guaranty instead of a letter of credit.
28

29 Starting with the first year of commercial operation, the site certificate holder shall establish a retirement
30 fund and begin making commitments to the fund in the amount of \$800,000 (or more if the site
31 certificate holder chooses) in the form of a letter of credit, performance bond, or cash (“annual
32 commitments”). The terms of the security and identity of the issuer of a letter of credit or performance
33 bond shall be subject to approval by the Council, which approval shall not be unreasonably withheld.
34 Such annual commitments shall continue until the total security in the retirement fund reaches
35 \$8,202,000 (in 1995 dollars) in no event later than 10 years from the date of commercial operation.
36 The calculation of 1995 dollars shall be made using the U.S. Gross Domestic Product Deflator for Total
37 Non-Residential Fixed Investment, as published by the U.S. Department of Commerce, Bureau of
38 Economic Analysis, or any successor agency ("the index"). After the security in the fund reaches
39 \$8,202,000 (in 1995 dollars), the fund shall increase annually by the percentage increase in the index. If
40 at any time the index is no longer published, the Council shall select a comparable calculation of 1995
41 dollars. In the event the security in the retirement fund is less than \$8,202,000 (in 1995 dollars) at the

1 time the site certificate holder notifies the Council of its intent to retire the facility, the annual
2 commitments to the retirement fund shall be adjusted so as to assure that the total security in the funds is
3 \$8,202,000 (in 1995 dollars) at the time of retirement. The site certificate holder shall describe the
4 status of the fund in the annual report submitted to the Council. All funds received by the site certificate
5 holder from the salvage of equipment or buildings shall be committed to the restoration of the facility
6 site, to the extent necessary to fund the approved restoration. [Amendment No. 3]

7
8 (80) In the event construction is begun but not completed by the deadlines set forth in the Site
9 Certificate, or the energy facility is closed permanently before the end of its useful life, HPP shall restore
10 the site to a useful condition. Restoration shall include but not be limited to the removal of transmission
11 line towers erected by the Site Certificate holder unless the Council determines that such towers are
12 likely to be used by another facility, electric utility or other entity that provides electric service.

13
14 (81) At least five years prior to planned permanent closure of the facility, HPP shall submit a
15 retirement plan to the Council for approval. The plan shall describe how the site will be restored
16 adequately to a useful condition, including options for post-retirement land use, information on how
17 impacts to fish, wildlife and the environment will be minimized during the retirement process, measures
18 to protect the public against risk or danger resulting from post-retirement site conditions. The plan shall
19 provide for restoration of vegetation to the maximum extent consistent with the anticipated use of the site
20 after the facility is retired.

21
22 (82) HPP shall retire the facility at the end of its useful life in accordance with the approved final
23 retirement plan, pursuant to OAR 345-27-110.

24
25 (83) The retirement plan shall provide for restoration of vegetation to the maximum extent consistent
26 with the anticipated use of the site after the facility is retired.

27
28 (84) Not later than four months before commencing construction of the transmission line, or
29 immediately before commencing construction of the energy facility (whichever is sooner) HPP shall
30 notify ODOE of which alternative transmission line route will serve the energy facility. Once this election
31 has been made, Council approval of the other alternative transmission line shall terminate.

32
33 **Mandatory Conditions (General): OAR 345-27-020**

34
35 The following mandatory conditions are either specifically required by OAR 345-27-020 or are
36 appropriate under OAR 345-27-020(6) to address project and site specific conditions and
37 requirements. These mandatory conditions shall apply and should be read together with the specific
38 additional conditions in this Site Certificate to ensure compliance with the siting standards of OAR 345
39 divisions 22, 23 and 24, and to protect the public health and safety.

1 (85) The Site Certificate holder shall submit to the department a legal description of the site to be
2 appended to the Site Certificate prior to construction.

3
4 (86) The facility shall be designed, constructed, operated and retired:

5
6 (a) Substantially as described in this Site Certificate and in the Final Order;

7
8 (b) In compliance with the requirements of ORS Chapter 469, applicable Council rules, and
9 applicable state and local laws, rules and ordinances in effect at the time the Site Certificate is issued;
10 and

11
12 (c) In compliance with all applicable permit requirements of other state agencies.

13
14 (87) Construction of the facility must begin and be completed by dates specified in Condition 5 of
15 this Site Certificate.

16
17 (88) No construction, including clearing of a right of way, except for the initial survey, may
18 commence on any part of the facility until the Site Certificate holder has adequate control, or has the
19 statutory authority to gain control, of the lands on which clearing or construction will occur.

20
21 (89) The certificate holder shall submit to the State of Oregon, through the Council, a bond or
22 comparable security, satisfactory to the Council, in an amount specified in the certificate adequate to
23 restore the site to a useful condition if the certificate holder:

24
25 (a) Begins but does not complete construction of the facility; or

26
27 (b) Permanently closes the facility before establishing a financial mechanism or instrument,
28 satisfactory to the Council, that will assure funds will be available to adequately retire the facility and
29 restore the site.

30
31 (90) If mitigation is required after an affirmative finding by the Council under any standards of division
32 22 or division 24 of this chapter, the certificate holder, in consultation with affected state agencies and
33 local governments designated by the Council, shall develop specific mitigation plans consistent with
34 Council findings under the relevant standards. Such plans must be approved by the department prior to
35 the beginning of construction or, as appropriate, operation.

36
37 (91) The certificate holder shall prevent any condition over which the certificate holder has control
38 from developing on the site that would preclude restoration of the site to a useful condition.

39
40 (92) Conditions related to facility retirement and site restoration:
41

1 (a) The certificate holder shall establish a financial mechanism or instrument, satisfactory to the
2 Council, that will assure funds will be available to adequately retire the facility and restore the site;
3

4 (b) At least five years prior to planned retirement of the facility, the certificate holder shall submit
5 a retirement plan to the Council for approval. The plan shall describe how the site will be restored
6 adequately to a useful condition, including options for post-retirement land use, information on how
7 impacts to fish, wildlife and the environment will be minimized during the retirement process and
8 measures to protect the public against risk or danger resulting from post-retirement site conditions; and
9

10 (c) The facility shall be retired after its useful life in accordance with the approved final
11 retirement plan, pursuant to OAR 345-27-110.
12

13 (93) The certificate holder shall restore vegetation to the extent practicable and shall landscape
14 portions of the site disturbed by construction in a manner compatible with its surroundings and/or
15 proposed future use. Upon completion of construction, the certificate holder shall dispose of all
16 temporary structures not required for future use and all timber, brush, refuse and flammable or
17 combustible material resulting from the clearing of land or from construction of the facility.
18 /

19 (94) The facility shall be designed, engineered and constructed to avoid potential dangers to human
20 safety presented by seismic hazards affecting the site as defined in ORS 455.447(1)(d), and including
21 amplification, that are expected to result from the reasonably probable seismic event.
22

23 **Mandatory Conditions (Site-Specific): OAR 345-27-023**
24

25 (95) The certificate holder shall notify the department, the State Building Codes Division and the
26 Department of Geology and Mineral Industries promptly if site investigations or trenching reveal that
27 conditions in the foundation rocks differ significantly from those described in the Application for Site
28 Certificate. The Council may, at such time, require the certificate holder to propose additional mitigating
29 actions in consultation with the Department of Geology and Mineral Industries and the Building Codes
30 Division.
31

32 (96) The certificate holder shall notify the department, the State Building Codes Division and the
33 Department of Geology and Mineral Industries promptly if shear zones, artesian aquifers, deformations
34 or clastic dikes are found at or in the vicinity of the site.
35

36 **Mandatory Conditions (Monitoring): OAR 345-27-028**
37

38 (97) The certificate holder shall establish, in consultation with affected state agencies and local
39 governments, monitoring programs as required by the Site Certificate for impact on resources protected
40 by the standards of division 22 and 24 of this chapter, and to ensure compliance with the Site
41 Certificate.

1
2 (98) The certificate holder shall establish monitoring programs as required by permitting agencies and
3 local governments, as required by the Site Certificate.

4
5 (99) For each monitoring program that it establishes, the certificate holder shall have quality
6 assurance measures that are reviewed and approved by the department prior to commencement of
7 construction or commencement of commercial operation, as specified in the Site Certificate.

8
9 (100) If the certificate holder becomes aware of a significant environmental change or impact
10 attributable to the facility, the certificate holder shall submit to the department as soon as possible a
11 written report identifying the issue and assessing the impact on the facility and any affected Site
12 Certificate conditions.

13
14 (101) HPP shall report any material violation of any condition of the Site Certificate by HPP or any of
15 its contractors, subcontractors or agents to ODOE within 72 hours of discovery. HPP shall report to
16 ODOE within 24 hours of discovery if HPP or any of its contractors, subcontractors or agents creates
17 any condition by construction or operation of the facility that endangers the public health or safety.

18 /

19 **Public Health & Safety: ORS 469.401(2)**

20
21 (102) The Site Certificate holder shall design, construct, operate and retire the facility in accordance
22 with all applicable statutes, rules, and ordinances.

23
24 (103) The pipelines shall be constructed in accordance with the requirements of the U.S. Department
25 of Transportation as set forth in Title 49, Code of Federal Regulations, Part 192.

26
27 (104) The pipelines shall have mechanical structures that allow the pipeline to be sealed off, in the
28 event of leakage, in a manner that will minimize the release of flammable materials. This is rebuttably
29 presumed to be satisfied if the pipeline meets the requirements of Title 49, Code of Federal Regulations,
30 Part 192.

31
32 (105) The Site Certificate holder shall develop a program, or assure the development of a program by
33 the entity responsible for the pipelines, using the best available, practicable technology to monitor the
34 proposed pipeline to ensure protection of public health and safety.

35
36 (106) The transmission line shall be designed so that alternating current electric fields shall not exceed
37 9 kV per meter at one meter above the ground surface in areas accessible to the public within the right
38 of way.

39
40 (107) The transmission line shall be designed so that induced currents resulting from the transmission
41 line and related facilities will be as low as reasonably achievable. The Site Certificate holder shall

1 develop and implement a program which shall provide reasonable assurance that all fences, gates, cattle
2 guards, trailers, or other permanent objects or structures ("structures") that could become inadvertently
3 charged with electricity shall be grounded through the life of the line. The Council interprets this
4 requirement to apply to structures in existence when the line is constructed.

5
6 (108) The transmission line shall be designed, constructed, and operated in a manner consistent with
7 the National Electrical Safety Code, Section C2, 1993 Edition (American National Standards Institute),
8 as well as the Rural Electrification Administration standards, where applicable.

9
10 (109) HPP shall submit to the Department copies of all incident reports required under 49 CFR
11 §192.709 involving the related and supporting natural gas pipelines.

12
13 **Land Use**

14
15 (110) Following issuance of the Site Certificate and prior to commencement of construction, HPP
16 shall apply for and obtain all appropriate land use approvals from the County, as listed in the Resolution
17 of June 5, 1995 passed by the Umatilla County Board of Commissioners.

18 /

19 (111) HPP shall file with the County Planning Department a landscaping plan for the power plant prior
20 to issuance of a zoning permit. The landscaping plan shall be implemented and shall provide screening
21 and visual buffering for the power plant and its parking and loading areas to the extent reasonably
22 feasible.

23
24 (112) Prior to issuance of a building permit, HPP shall file a site plan with the County which shall
25 consist of a map showing the property lines, location of buildings, access roads and the names of the
26 owner and developer of the site. The site plan shall also show that county ordinances related to parking
27 and loading requirements, setbacks, signs and vision clearance are satisfied.

28
29 (113) If the energy facility site will not be owned by Simplot, HPP shall file with the County an
30 application for a minor partition of the energy facility site from remainder of the adjacent Simplot
31 property in conformance with the information included in the ASC and file and record a final plat in
32 accordance with County ordinances.

33
34 (114) Prior to construction, HPP shall submit a plan acceptable to ODOE for responding to an
35 emergency at the Umatilla Army Depot. The plan shall be developed in consultation with the Umatilla
36 County Chemical Stockpile Emergency Preparedness Program.

37
38 (115) HPP shall take reasonable steps to reduce or manage exposure to electromagnetic fields
39 (EMF), consistent with EFSC findings presented in the "Report of the EMF Subcommittee to the
40 Energy Facility Siting Council," dated March 30, 1993. Prior to and during construction and operation,

1 HPP shall provide information to the public upon public request about EMF levels associated with the
2 power plant and related transmission lines.

3
4 (116) HPP shall enter into an Irrevocable Consent Agreement (ICA) with the County by which HPP
5 agrees to waive the right to oppose the formation of a Local Improvement District (LID) for Co. Rd.No
6 1324.

7
8 (117) The power plant will incorporate an on-site fire suppression system and will be constructed
9 from fire retardant materials to the extent reasonably feasible. The power plant will incorporate spill
10 prevention and containment designs for the storage of all hazardous materials. Fire suppression and
11 hazardous material safety designs shall be established in consultation with the Hermiston Fire
12 Department and the State Fire Marshall.

13
14 (118) HPP shall provide adequate parking during construction.

15
16 (119) HPP shall coordinate construction traffic with the county Public Works Department. In
17 particular, a traffic plan shall be developed to coordinate peak construction traffic and peak potato
18 harvest traffic.

19
20 (120) The Site Certificate holder shall be responsible for any damages to County Road No. 1324
21 occurring as a result of construction or general operating activities.

22
23 (121) If the 500 kV transmission line alternative is constructed, HPP shall minimize the visual impact of
24 new transmission line structures in the City of Umatilla by the use of steel lattice and wood frame
25 structures, where feasible. Where new single steel pole structures must be installed within the City of
26 Umatilla, HPP shall use non glossy paint coverings in colors that will minimize visual impacts.

27
28 **Noise**

29
30 (122) The Site Certificate holder shall design, select, locate, and/or orient components of the energy
31 facility and provide needed noise controls required to comply with OAR 340-35-035 for new industrial
32 sources located on previously unused industrial sites.

33
34 (123) The Site Certificate holder shall conduct a noise analysis of the final design to insure that the
35 facility will meet DEQ regulations. Results of the analysis shall be submitted to the Department of Energy
36 prior to issuing specifications for the equipment to be installed. The noise study shall include a projection
37 of noise to the noise sensitive properties identified along Umatilla Meadows Road, the daycare facility,
38 and residences west of the plant site west of Highway 207 and south of the Umatilla River. The analysis
39 shall include a listing of the major noise sources and expected sound levels from each source at each
40 receiver.

1 (124) The Site Certificate holder shall conduct a survey at locations mentioned in Condition 124
2 above within two months of startup of the first turbine, again within two months of full power operation,
3 within two months of startup of the second turbine, and again within two months of full power operation
4 of both units. Sound measurements of power operation shall be at operation within 3% of full power.
5 Measurements shall be made at each location during atmospheric conditions best for sound
6 propagation. Sound monitoring shall not be conducted when winds are in excess of 5 mph.
7

8 (125) The Site Certificate holder shall consult with Umatilla County and City of Umatilla and with
9 neighbors around the energy facility to minimize the impacts of construction noise.
10

11 (126) The Site Certificate holder shall specify noise rated cooling towers.
12

13 (127) The Site Certificate holder shall design the HRSG and stack with resonant frequency above the
14 lowest natural frequency of the exhaust from the gas turbine.
15

16 (128) The Site Certificate holder shall specify combustion air inlet silencers to limit noise levels to 46
17 dBA or less at 2900 feet.
18

19 **Wetlands**

20

21 (129) Prior to construction of the 500 kV transmission line, the Site Certificate holder shall investigate,
22 and where practicable, shall implement opportunities to design the tangent poles of the transmission lines
23 to be high enough to pull the line up so that vegetation maintenance activities in riparian habitats can be
24 minimized or avoided.
25

26 (130) Construction and maintenance of the transmission lines and natural gas pipelines shall avoid all
27 wetlands, except for the two wetland areas (wetlands 4 and 15) that will be unavoidably impacted as
28 stated in the ASC (Exhibit H, p. 11f; Exhibit P, p. 11b) and wetland #13, which may be impacted by
29 placement of the transmission line poles. The permanent impact at these wetlands shall be limited to the
30 area occupied by natural gas pipeline (wetland #4) and the pole foundations and the earthen backfill
31 placed at the base of the poles (wetlands #13 and 15).
32

33 (131) The following areas shall be flagged in the field prior to the start of construction to delineate the
34 maximum extent of project disturbance:
35

- 36 i. the natural gas pipeline and transmission line routes through wetlands 4, 13, and 15;
37
- 38 ii. any natural gas pipeline, water supply line, and transmission line routes within 50 feet of
39 the Umatilla River; and
40
- 41 iii. the transmission line crossings of the Umatilla River.

1
2 Ground disturbing activities in all areas shall be confined to a predefined construction right-of-way
3 corridor. The corridor shall be no wider than is necessary for the safe and practicable completion of the
4 construction tasks. Incidental activities (i.e., personal vehicle parking, sanitary facilities, temporary
5 staging areas, etc.) shall be confined to a limited number of locations that shall be predetermined prior to
6 commencement of construction activities.

7
8 (132) At wetland #13, all ditch crossings shall be culverted with adequate culverts to maintain year
9 round flow.

10
11 (133) If pole placement avoids wetland #13 but is within 45 feet of it, HPP shall place a temporary
12 construction fence and temporary silt barrier at the border of the wetland in the area of the pole to
13 preclude incidental construction-related activity within the wetland and to minimize surface runoff from
14 the construction site into the wetland.

15
16 (134) At wetland #15, construction access for pole placement shall be restricted to the driest period
17 of the year (July through October); all waste and construction debris shall be removed from the wetland
18 area and disposed of on uplands; and construction disturbance shall be restricted to the smallest area
19 practicable.

20
21 (135) At wetland #4, a clay collar shall be placed on the down gradient side of the pipeline at the
22 wetland boundary at each crossing; the pipeline shall be backfilled and stockpiled topsoil shall be
23 replaced at the grade of the trench; and at the location of the outfall, fill material shall be minimized and
24 stabilized to prevent erosion.

25
26 (136) Disturbed wetland and riparian areas shall be revegetated upon completion of construction with
27 seed composition and vegetation species designed to enhance wetland and riparian habitat values and
28 composed only of species commonly associated with wetland and riparian plant communities. Any
29 wetland area that is lost due to project construction shall be compensated by restoring wetland area at a
30 1:1 wetland impact:wetland restoration ratio, or by creating wetland area at a 1:1.5 wetland
31 impact:wetland creation ration, or by enhancing wetland area at a 1:3.0 wetland impact:wetland
32 enhancement ratio such that there shall be no net loss of wetland habitat units or wetland habitat values.
33 A wetland creation and revegetation plan shall be developed prior to construction in consultation with
34 ODFW and DSL. The wetland creation and revegetation plan shall be submitted to ODOE for review
35 and approval in consultation with ODFW and DSL. HPP shall comply with the approved plan.

36
37 (137) Measures taken to mitigate impacts to wetlands shall be monitored by the Site Certificate
38 holder. Monitoring methodologies and schedules shall be developed in consultation with ODFW,
39 ODA, and DSL. Monitoring shall be conducted for a minimum of seven (7) years following the
40 completion of the restoration efforts unless ODOE, in consultation with DSL and ODFW, approves a
41 shorter monitoring period pursuant to its approval of a specific mitigation monitoring plan. A mitigation

1 monitoring plan shall be submitted to ODOE for review and approval in consultation with ODFW and
2 DSL, prior to the commencement of construction. If any mitigation measures are determined by the Site
3 Certificate holder or ODFW to be unsuccessful, corrective actions shall be taken by the Site Certificate
4 holder after consultation with ODFW (as well as with ODOE and DSL if appropriate).

5
6 **IV. AMENDMENT OF SITE CERTIFICATION AGREEMENT**

7
8 HPP and EFSC recognize that, because of the length of time that may pass between the date on
9 which this Agreement is executed and the date on which construction will commence, and that will pass
10 between the time construction is commenced and the energy facility is retired, it may be necessary to
11 amend this Agreement.

12
13 Amendments shall be made in accordance with EFSC rules applicable and in effect at the time
14 the amendment is sought.

15
16 **V. SUCCESSORS AND ASSIGNS**

17
18 No Site Certificate, or any portion thereof, may be transferred, assigned, or disposed of in any
19 other manner, directly or indirectly, except in compliance with OAR 345-27-100.

20
21 **VI. SEVERABILITY AND CONSTRUCTION**

22
23 If any provision of this agreement and certificate is declared by a court to be illegal or in conflict
24 with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and
25 obligations of the parties shall be construed and enforced as if the agreement and certificate did not
26 contain the particular provision held to be invalid. In the event of a conflict between the conditions
27 contained in the Site Certificate and EFSC's Final Order, the conditions contained in this Site Certificate
28 shall control.

29
30 **VIII. GOVERNING LAW AND FORUM**

31
32 A. This agreement shall be governed by the laws of the State of Oregon.

33
34 B. Any litigation or arbitration arising out of this agreement shall be conducted in an
35 appropriate forum in Oregon.

36
37 **IN WITNESS WHEREOF**, this Site Certificate has been executed by the State of Oregon,
38 acting by and through its Energy Facility Siting Council, and Hermiston Power Partnership.

39
40 ENERGY FACILITY SITING COUNCIL

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By: _____ Date: February 24, 2000
Karen H. Green, Chair

CALPINE HERMISTON, INC.

By: _____ Date: _____
Ron A. Walter

CPN HERMISTON, INC.

By: _____ Date: _____
Ron A. Walter