

1 **THERMAL POWER PLANT**
2
3 **FOURTH AMENDED SITE CERTIFICATE**
4
5 **for the**
6
7 **HERMISTON POWER PROJECT**
8

9 (Includes Amendment No. 1, March 19, 1998, Amendment No. 2, January 23, 1998,
10 Amendment No. 3, February 24, 2000, Amendment No. 4, May 4, 2001,
11 and Amendment No. 5, September 15, 2005)
12

13 This Site Certificate is made and entered into in the manner provided by ORS Chapter 469 by and
14 between the State of Oregon (State), acting by and through its Energy Facility Siting Council
15 ("EFSC" or "the Council"), and Hermiston Power Partnership ("HPP") an Oregon General
16 Partnership.
17

18 **I. SITE CERTIFICATION**
19

20 A. To the extent authorized by State law and subject to the conditions set forth herein, the State
21 approves and authorizes the construction, operation and retirement by HPP of a natural gas-
22 fired combustion turbine energy facility, together with certain related or supporting
23 facilities, at the site near Hermiston in Umatilla County, Oregon, in the manner described in
24 the EFSC's Final Order, which by this reference is incorporated herein. The terms used in
25 this Site Certificate shall have the meaning set forth in ORS 469.300 and Oregon
26 Administrative Rules OAR 345-01-010. The facts, reasoning, conclusions and conditions
27 relied on for approval are set out in EFSC's Final Order.
28

29 Subject to the conditions herein, this certificate binds the State and all counties, cities and
30 political subdivisions in this State as to the approval of the site and the construction,
31 operation and retirement of the facility, as to matters that are included in and governed by
32 this Site Certificate. The Site Certificate is not binding with respect to matters not governed
33 by and included in the Site Certificate, including permits issued under statutes and rules for
34 which the decision on compliance has been delegated by the Federal government to a state
35 agency other than EFSC.
36

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

1 For a permit, license or other approval addressed in the Site Certificate, HPP shall comply
2 with applicable state and federal laws adopted in the future to the extent that such
3 compliance is 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
6 in effect on the date the Site Certificate is executed. The EFSC rules in effect on the date
7 the Site Certificate is executed are attached as Exhibit B. In addition, upon a clear showing
8 of a significant threat to the public health, safety or the environment that requires
9 application of later-adopted laws or rules, EFSC may require compliance with such later-
10 adopted laws or rules.
11

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

13

14 The Hermiston Power Project is a combined-cycle combustion turbine electric generating
15 plant, fueled primarily by natural gas, with a nominal capacity of 546 MW at annual average
16 conditions. Distillate (diesel) fuel will be used if needed as a backup fuel. In addition to the
17 generation of electricity, the facility will be designed to supply steam to the J.R. Simplot Company
18 potato processing plant. [Amendment No. 4]
19

20 *Energy Facility Site:* The energy facility site is located on a 17 acre site adjacent to the J.R.
21 Simplot ("Simplot") potato processing plant, approximately 3 miles south of Hermiston, Oregon.
22 The energy facility site is on land zoned Heavy Industrial (HI). The location of the energy facility
23 site is shown on the attached Figure 1.
24

25 *Power Plant Structures and Major Equipment:* The proposed energy facility will consist of
26 several structures: a turbine-generator building; two heat recovery steam generator (HRSG)
27 structures; two exhaust stacks approximately 195 feet in height; an administration/control building;
28 storage tanks for raw and demineralized water; an electrical substation occupying approximately
29 50,000 square feet; two above ground 1,000,000 gallon distillate storage tanks; and two five-cell
30 mechanical induced draft evaporative cooling towers, each with a height of approximately 42 feet.
31 The combustion turbine will be surrounded with an acoustically insulated enclosure to reduce noise
32 levels and to provide containment for automatic fire suppression equipment. The facility's water
33 system, including treatment, component cooling, fire protection and condensate return is described
34 in the ASC, Exhibit B, pp. 13 and 14a.
35

36 *Power Enhancement Technology:* The energy facility has peaking capability due to three
37 power enhancement technologies: duct burners within the HRSG, steam augmentation and inlet
38 fogging. The addition of these technologies allows the facility to produce approximately
39 100 MW of additional power during periods of peak demand. [Amendment No. 4]
40

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

1 The two natural gas pipelines will deliver natural gas from the Pacific Gas Transmission
2 (PGT) and Northwest Pipeline (NWP) interstate pipeline systems. Each pipeline would be
3 approximately 12 inches in diameter and will be located underground. The PGT pipeline
4 connection will be approximately 4.1 miles long and the NWP pipeline will be approximately 8.8
5 miles long. Both pipelines are related and supporting facilities as defined in OAR 345-01-010.
6 HPP may construct one or both pipelines. The routes for these pipelines are described in the land
7 use section of the EFSC Final Order and shown on Figures I-4 and I-5 in the ASC.
8

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

17 This Site Certificate permits construction along either one of two transmission line routes.
18 Only one of the two will be built. The two transmission line routes include a 230 kV option and a
19 500 kV option.
20

21 The 230 kV option will be approximately 15.9 miles long. The route for the 230 kV
22 transmission line is shown on Figures I-7A, I-7B and I-7C in the ASC. Approximately 12.3 miles of
23 this would use the 230 kV transmission line route from the Westland Substation to the BPA
24 McNary Substation, which is a double circuit steel pole 230/115 kV line. The Hermiston
25 Generating Company L.P ("HGC") holds a Site Certificate for the 230 kV line in connection with
26 its energy facility. The Umatilla Electric Cooperative Association ("UECA") owns and will operate
27 the 230/115 kV line. If this option is chosen, HPP would replace UECA's 115 kV conductors and
28 insulators with 230 kV conductors and insulators, thereby upgrading the line to a 230/230 kV line.
29 No new right of way will be required for the 230 kV transmission line from the Westland
30 Substation to the McNary Substation. UECA may relocate portions of the displaced 115 kV line
31 along different routes elsewhere in Umatilla County. HPP intends to deed the 230 kV line to
32 UECA.
33

34 The 500 kV option would require construction of approximately 14.2 miles of new 500 kV
35 transmission line between the energy facility site and the McNary Substation. The route for the
36 500 kV transmission line is shown on Figures I-6A and I-6B in the ASC, as modified by Exhibit E
37 to the Fourth Request to Amend Site Certificate. Most transmission line structures would be
38 placed within existing BPA right of way with the remainder located on private lands. All
39 construction will be entirely within Umatilla County with a portion also located within the City of
40 Umatilla. The 500 kV line would be deeded to BPA. [Amendment No. 4]
41

42 Upon leaving the facility site, the 500 kV line will proceed north across the rail yard and
43 then proceed approximately due east paralleling the rail yard. On the east side of Hinkle Road
44 the 500 kV line will turn north and parallel Hinkle Road until it intersects Feedville Road. At

1 Feedville Road the line will proceed east for approximately 3.2 miles. At the intersection with
2 Canal Road the line will proceed north for approximately .9 miles to its intersection with the BPA
3 McNary-Roundup transmission line corridor. From this point the 500 kV line will parallel the
4 McNary-Roundup line within BPA's existing 250 foot right-of way, and head in a northwesterly
5 direction approximately 7.6 miles. Approximately 0.8 miles of this 7.6 mile section will include
6 construction of a double-circuit 500/230 kV line with PacifiCorp. As the line approaches the
7 McNary substation it will occupy existing double-circuit transmission structures now being used by
8 the BPA Slatt-McNary and McNary-Lower Monument 500 kV lines. [Amendment No. 4]
9

10 The existing BPA 500 kV McNary-Lower Monumental transmission line will be displaced
11 by the facility's 500 kV transmission line and will be relocated about 500 - 800 feet east of its
12 present location, as shown on document ODOE-285.3 of the contested case record. This relocated
13 section will be about one mile (5000 feet) in length. The relocation begins about 150 feet north of
14 the intersection of Margaret Avenue and Lind Road at the existing 500 kV McNary-Lower
15 Monumental transmission line to the east of Lind Road. The relocated line will then proceed north
16 generally paralleling Lind Road, crossing Highway 730, and continuing north across the existing
17 railroad tracks near the McNary Substation. After crossing the railroad tracks, the line would turn
18 northwest and proceed about 700 feet to the McNary Substation.
19

20 The corridor for the relocated BPA 500 kV line includes a currently occupied residence.
21 Pursuant to an agreement with the occupant of that residence, HPP will not place the centerline of
22 the relocated 500 kV line closer than 80 feet to that property if it is occupied as a residence at the
23 time of construction.
24

25 *Power Generation Process Description:* The Hermiston Power Project will consist of two
26 identical, natural gas-fired, combined-cycle units. A gas turbine-generator is essentially a jet engine
27 on a stationary mount that derives its power from the combustion of natural gas, which is used to
28 turn an electric generator. The high-temperature exhaust from the gas turbine-generator is ducted to
29 a heat recovery steam generator (HRSG) to generate steam. This steam, in turn, is used to drive a
30 steam turbine-generator. The term "combined-cycle power plant" describes the sequential use of the
31 fuel energy in both the gas turbine-generator and the steam turbine-generator.
32

33 The Hermiston Power Project will use approximately 4,136 million British thermal units
34 (MMBtu) of natural gas fuel per hour at full load. A BTU (British thermal unit) is the amount of
35 energy needed to heat one pound of water one degree Fahrenheit. Fuel for the turbines will
36 primarily be natural gas with distillate used only as backup fuel. [Amendment No. 4]
37

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

1 The cooling tower provides a flow of relatively cold water to the condenser and receives
2 heated water back from the condenser. The cooling tower is used to dissipate heat by evaporating a
3 portion of the water circulating within the loop. Water lost through evaporation is replaced by the
4 facility's cooling water makeup supply source. Cooling tower makeup water will be provided and
5 sold to the facility by the Port of Umatilla. The Port of Umatilla will obtain the water sold to the
6 Hermiston Power Project from the Columbia River under Permit # 49497. The evaporation rate
7 from the cooling tower will vary between 960 gallons per minute and 2,667 gallons per minute,
8 depending on steam turbine load and ambient weather conditions. The water use of the entire
9 energy facility under full load conditions, while operating at an average ambient temperature of 53
10 degrees Fahrenheit, will be approximately 2,422_gallons per minute. [Amendment No. 4]
11

12 The proposed power plant will produce wastewater from cooling tower blowdown,
13 demineralization system backwash and from sanitary wastewater. The combined wastewater
14 stream will be discharged to Simplot's existing wastewater discharge system, which reuses treated
15 wastewater for irrigation. Simplot has an existing Water Pollution Control Facility (WPCF) permit
16 administered by the Department of Environmental Quality ("DEQ"). Simplot has requested and
17 obtained a modification to its WPCF permit to accommodate the additional discharge from the
18 proposed energy facility. This permit is a "third party" permit under OAR 345-22-010(2).
19

20 **III. CONDITIONS**

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

22
23
24 (1) Prior to commencement of construction, the site certificate holder shall submit to the
25 State of Oregon through the Council a guaranty substantially in the form of Amended Exhibit
26 B-2, executed by Calpine Corporation in the amount of the monetary path payment requirement
27 (in 1998 dollars) as determined by the calculations set forth in Condition 4 and based on the
28 estimated heat rate and capacity certified pursuant to Condition 4(e) below and as adjusted in
29 accordance with the terms of this site certificate pursuant to Condition 4(d). For the purposes of
30 this site certificate, the "monetary path payment requirement" means the offset funds determined
31 pursuant to ORS 469.503(2)(c) and the selection and contracting funds determined pursuant to
32 ORS 469.503(2)(d)(A)(ii) that the site certificate holder must disburse to the Oregon Climate
33 Trust, as the qualified organization, pursuant to ORS 469.403(2)(d)(A). The calculation of
34 1998 dollars shall be made using the index set forth below.
35

36 The guaranty shall remain in effect until such time as the site certificate holder has
37 disbursed the full amount of the monetary path payment requirement to the Oregon Climate
38 Trust ("Oregon Climate Trust") as provided in ORS 469.503(2)(d)(A).
39

40 In lieu of the guaranty requirement set forth above that the site certificate holder must provide
41 prior to commencement of construction, the site certificate holder may instead provide a letter of
42 credit in the amount of the monetary path payment requirement as calculated pursuant to
43 Condition 4 below (in 1998 dollars) and based on the estimated capacity and heat rate of the
44 plant as certified by the site certificate holder pursuant to Condition 4(e). If the site certificate

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

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

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

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

35 (4) The site certificate holder shall use the following methodology to calculate the amount of
36 the monetary path payment requirement that it must make available to the qualified organization
37 pursuant to ORS 469.503(2)(d)(A). The same methodology shall apply to a one-unit or a two-
38 unit facility. All calculations shall be made assuming that no steam is supplied for cogeneration.
39 The site certificate holder shall use the contracted design parameters for capacity and heat rate for
40 the facility that it reports pursuant to Condition 4(e) to calculate the estimated monetary path
41 payment requirement. The site certificate holder shall use the Year One Capacities and Year One
42 Heat Rates that it reports for the facility pursuant to Condition 4(f) to calculate whether it owes
43 additional monetary path payments.
44

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

3
4 (A) The site certificate holder shall use the respective capacity, heat rate, and carbon
5 dioxide emission factor for each fuel. The carbon dioxide emission factor for natural gas
6 is 0.000117 lb. CO₂/Btu, and for distillate fuel it is 0.000161 lb. CO₂/Btu;

7
8 (B) The site certificate holder shall determine the time the plant will operate using each
9 fuel. For distillate fuel, the time shall be the average number of hours annually that this
10 site certificate permits the facility to use distillate fuel pursuant to Condition 4(g). The
11 site certificate holder shall determine the annual average hours of operation on natural gas
12 by subtracting the annual average hours on distillate fuel from 8,760 hours;

13
14 (C) The site certificate holder shall calculate the total CO₂ emissions (lb. CO₂) for each
15 fuel:

16
17 (i) First, the site certificate holder shall multiply the nominal power of the facility
18 (kW) while operating on natural gas by the annual average hours of operation on
19 natural gas. It shall then multiply that product by 30 years to determine the total
20 net plant output (kWh). It shall multiply the total net plant output by the heat rate
21 (Btu/kWh) while operating on natural gas and by the carbon dioxide emission
22 factor for natural gas (0.000117 lb. CO₂/Btu) to determine the total CO₂ emissions
23 (lb.) from operating on natural gas;

24
25 (ii) Second, the site certificate holder shall multiply the nominal power of the
26 facility (kW) while operating on distillate fuel by the annual average hours of
27 operation on distillate fuel. It shall then multiply that product by 30 years to
28 determine the total net plant output (kWh). It shall multiply the total net plant
29 output by the heat rate (Btu/kWh) while operating on distillate fuel and by the
30 carbon dioxide emission factor for distillate fuel (0.000161 lb. CO₂/Btu) to
31 determine the total CO₂ emissions (lb.) from operating on distillate fuel; then,

32
33 (D) The site certificate holder shall calculate the average CO₂ emissions rate
34 (lb. CO₂/kWh) for the two fuels. It shall add the total CO₂ emissions that each fuel
35 contributes for 30 years to determine the total combined CO₂ emissions from the facility
36 (lb.). Then, it shall add the total net plant output from operation on each fuel for 30 years
37 to determine the total combined plant output (kWh). Then it shall divide the total
38 combined CO₂ emissions by the total combined plant output to determine the average
39 CO₂ emissions rate for the facility (lb. CO₂/kWh);

40
41 (E) The site certificate holder shall subtract the carbon dioxide standard of 0.7 lb.
42 CO₂/kWh from the average CO₂ emissions rate for the facility to determine its excess
43 CO₂ emissions rate (lb. CO₂/kWh);
44

1 (F) The site certificate holder shall multiply the total combined plant output (kWh) by the
2 facility's excess CO₂ emissions rate (lb. CO₂/kWh). It shall then divide that product by
3 2,000 pounds to determine the total tons of CO₂ emissions it must mitigate (tons); then,
4

5 (G) The site certificate holder shall multiply the total tons of CO₂ emissions it must
6 mitigate by \$0.57 per ton of CO₂ to determine the sub-total for the offset funds.
7

8 (b) To calculate the selection and contracting funds sub-total as provided in ORS
9 469.503(2)(d)(A)(ii), the site certificate holder shall subtract \$500,000 from the offset funds
10 subtotal; then multiply the remaining amount by 4.286 percent; then add \$50,000 to that product.
11

12 (c) To determine its monetary path payment requirement, the site certificate holder shall add
13 the sub-total for the offset funds and the sub-total for the selection and contracting funds.
14

15 (d) When the site certificate holder submits the Year One Test report required in Condition
16 4(f), it shall increase its guaranty or letter of credit for the monetary path payment requirement if
17 the calculation using reported data shows that the adjusted monetary path payment requirement
18 exceeds the monetary path payment requirement for which the site certificate holder had
19 provided a guaranty or letter of credit prior to commencing construction, pursuant to Condition 1.
20

21 (A) The site certificate holder shall make the appropriate calculations and increase its
22 guaranty or letter of credit, if necessary, within 30 days of filing its Year One Test report
23 with the Council.
24

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

30 (e) Prior to commencement of construction, the site certificate holder shall notify the Council
31 in writing of its final selection of gas turbine vendor and shall submit written design information
32 to the Council sufficient to verify the facility's designed new and clean heat rate and its nominal
33 electric generating capacity at average annual site conditions for each fuel type. The information
34 that the site certificate holder submits shall include the proposed binding annual average number
35 of hours of facility operation on distillate fuel oil. The report shall also include an affidavit or
36 other evidence from the site certificate holder to confirm that the vendor has guaranteed the heat
37 rate and that the site certificate holder's contract with the vendor includes a liquidated damages
38 provision adequate to fund any increased monetary path payment requirement calculated under
39 Condition 4(d) resulting from vendor's failure to achieve the guaranteed heat rates or capacities.
40

41 (f) Within two months of completion of the first year of commercial operation, the site
42 certificate holder shall provide to the Council pursuant to ORS 469.503(2)(e)(G) a test report
43 (Year One Test) of the actual heat rates (Year One Heat Rates) and nominal generating capacities
44 (Year One Capacities) for each fuel type used, without degradation, assuming no steam is

1 supplied for cogeneration, as determined by a 100-hour test at full power completed during the
2 first 12 months of commercial operation, with the results adjusted for the average annual site
3 condition for temperature, barometric pressure and relative humidity and use of alternative fuels,
4 and using a rate of 117 pounds of carbon dioxide per million Btu of natural gas fuel and a rate of
5 161 pounds of carbon dioxide per million Btu of distillate fuel.
6

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

19 Notwithstanding the number of hours permitted annually of distillate fuel use based on a
20 five-year rolling average or during the first five years, in no year shall the facility's use of
21 distillate fuel exceed 10 percent of its expected total annual fuel use in Btu, higher heating value.
22

23 **Shelf Life: OAR 345-27-020(3)**
24

25 (5) The Site Certificate holder shall begin construction of proposed facility by November 30,
26 2000 and shall complete construction by January 1, 2003.
27

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

33 **Organizational, Managerial And Technical Expertise: OAR 345-22-010**
34

35 (7) Prior to commencement of construction, the Site Certificate holder shall demonstrate to
36 ODOE that the Port has not forfeited its legal right to perfect the 2400 gpm contracted to HPP.
37

38 (8) Prior to commencement of construction, HPP shall have a contract or other agreement with
39 Simplot to accept and dispose of HPP's wastewater.
40

41 (9) Prior to construction, HPP shall identify for the Council's approval the EPC contractor
42 chosen to construct the facility. Prior to commercial operation, HPP shall identify for the Council's
43 approval the contractor chosen to operate the facility. Any such approval shall not be unreasonably
44 withheld.

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

3
4 (11) Any change of operator shall be reported to the Department.

5
6 (12) Any matter of non-compliance under this Site Certificate shall be the responsibility of the
7 partnership. Any notices of violation issued will be issued to the partnership. Any civil penalties
8 levied will be the responsibility of the partners jointly and severally.

9
10 (13) In the annual report submitted to the Council, the Site Certificate holder shall describe any
11 change in the membership or voting requirements of its management committee or any admission
12 or withdrawal of a partner not described in any earlier annual report previously submitted to the
13 Council. Any (a) such change in such membership or voting requirements resulting in a material
14 change to the Site Certificate holder's existing management structure and procedures; (b) such
15 admission resulting in a new partner's active participation in the business and affairs of the Site
16 Certificate holder; or (c) such withdrawal resulting in the complete removal of an existing partner
17 from its previously active participation in the business and affairs of the Site Certificate holder,
18 shall be subject to approval of the Council, which approval shall not be unreasonably withheld or
19 delayed.

20
21 (14) The Site Certificate holder shall contractually require the EPC contractor and all
22 independent contractors and subcontractors involved in the construction and operation of the
23 proposed facilities to comply with all applicable laws and regulations and with the terms and
24 conditions of the Site Certificate. Such contractual provision shall not operate to relieve the Site
25 Certificate holder of responsibility under the Site Certificate.

26
27 [Condition 15 deleted under Amendment No. 5]

28
29 [Condition 16 deleted under Amendment No. 5]

30
31 [Condition 17 deleted under Amendment No. 5]

32
33 **Structural: OAR 345-22-020**

34
35 (18) Prior to the start of construction, HPP shall conduct an investigation as described by Mr. D.
36 Wermiel of DOGAMI in a letter dated May 9, 1995 to Mr. A. Bless, ODOE which would confirm
37 HPP's characterization of ground response to potential seismic events. The ground response
38 evaluation will include drilling one deep boring to bedrock and measuring downhole shear wave
39 velocity profile beneath the energy facility site. Based on the site-specific measurements, ground
40 response and amplification will be evaluated.

41
42 The geotechnical investigation shall be peer reviewed by the DOGAMI or by a private engineering
43 geologist or geotechnical engineer registered in the state of Oregon that is independent from HPP
44 and the HPP's contractors and subcontractors. If a private engineering geologist or geotechnical

1 engineer is used, the choice of peer reviewer shall be approved by ODOE in consultation with
2 DOGAMI.

3
4 (19) If the detailed survey reveals evidence that is not as described in the ASC, then the HPP
5 shall revise the facility design parameters to comply with corresponding Oregon Building Code
6 requirements. If pre-construction seismic analysis reveals features unique to the energy facility site
7 that justify enhanced seismic design, HPP shall design safety structures critical to public health or
8 safety in consultation with the Building Codes Division of the Department of Consumer and
9 Business Services ("DCBS"), subject to approval by ODOE. Critical structures include hazardous
10 material storage areas and control rooms.

11
12 (20) Except as provided for in condition 2 above, HPP shall design and construct the proposed
13 facility to be consistent with Seismic Zone 2b requirements, in compliance with the laws and
14 regulations administered by the DCBS.

15
16 (21) HPP shall place electrical transmission towers to avoid, to the greatest extent possible given
17 the existing alignment, the narrow strip of alluvium along the Umatilla River that may be subject to
18 liquefaction. If this strip cannot be avoided, the transmission towers shall be constructed so as to
19 otherwise mitigate for the risk of liquefaction. Mitigation measures shall be developed in
20 consultation with DOGAMI.

21
22 (22) HPP shall design the energy facility in accordance with a design basis seismic event of
23 magnitude 4.5 along the service Anticline at a distance of 1 km from the energy facility site, as
24 described on p. 14a of Exhibit G of the ASC, and in accordance with a Seismic Zone 2b
25 classification by the Oregon Building Code.

26
27 (23) HPP shall embed transmission line tower foundations below significant loose soils as
28 described on p. 16 of Exhibit G of the ASC.

29
30 (24) The PGT pipeline shall be embedded below loose soil deposits combined, if necessary with
31 the use of free draining, coarse granular backfill as described in the ASC, Exhibit G p. 17.

32
33 (25) Along the 500 kV transmission line right of way in the vicinity of Maxwell Canal, near
34 Diagonal Road, east and north of Hermiston, along the relocated BPA 500 kV McNary to Lower
35 Monumental line between Highway 730 and Power City Road, and in the area near Power City,
36 transmission line poles will be constructed in upland areas and/or on higher ground underlain by
37 dense granular soil with negligible liquefaction potential as described in ASC Exhibit G p. 17.

38
39 (26) Transmission pole and pipeline locations that could be subject to settling, slumping or
40 liquefaction shall be tested for soil properties prior to pole and pipe installation, as described on
41 page 19 on Exhibit G of the ASC.

1 **Soil Protection: OAR 345-22-022**

2
3 (27) Ground disturbing activities and incidental activities (e.g., personal vehicle parking, sanitary
4 facilities, temporary staging areas, etc.) for the facility shall be confined to a limited number of
5 locations identified by HPP and approved by the Department prior to commencement of
6 construction.

7
8 (28) Only existing roadways shall be used for access along the pipelines; access for transmission
9 line construction and maintenance shall utilize existing roads wherever practicable and temporary
10 transmission line access roads shall only be constructed where there is open terrain with no existing
11 access road; and no permanent impacts shall be associated with pipeline or transmission line access
12 road construction or maintenance.

13
14 (29) Topsoils and subsoils resulting from excavation for gas and water pipelines shall be
15 segregated and the topsoil restored to minimize impacts on soil fertility.

16
17 (30) The Site Certificate holder shall utilize site watering or other methods to reduce wind
18 erosion during site earthwork or construction. Post construction soil stabilization methods shall be
19 utilized as described on ASC Exhibit G p. 18.

20
21 **Protected Areas: OAR 345-22-040**

22
23 (31) The Site Certificate holder shall not operate the Circulating Water System at above 5,200
24 ppm, TDS equivalent on an annual average basis. Drift rate shall not result in solids carryover
25 exceeding the equivalent of 0.005% drift rate at 5,200 ppm, TDS.

26
27 **Fish and Wildlife: OAR 345-22-060**

28
29 (32) Any trimming, side cutting or other removal of riparian vegetation that may be required
30 under the proposed 500 kV transmission line shall be kept to a minimum and shall only be
31 conducted to meet National Electric Safety Code clearances.

32
33 (33) Construction and maintenance of the transmission lines and natural gas pipelines shall
34 avoid all wetlands, except for the two wetland areas (wetlands #4 and #15) that will be
35 unavoidably impacted as stated in the ASC (Exhibit H, p. 11f; Exhibit P, p. 11b) and the one
36 wetland area, wetland #13, that may be impacted by pole placement.

37
38 (34) No ground disturbing activities shall be conducted in the Umatilla River, no water
39 withdrawals from the Umatilla River shall occur, and the energy facility shall not discharge water
40 into the river (ASC, Exhibit P, p. 15).

41
42 (35) Non-wetland areas disturbed by construction of the energy facility, the equipment
43 storage/staging area and employee parking staging area, the natural gas pipelines, the water
44 supply pipeline, and the transmission lines shall be revegetated upon completion of construction.

1 Revegetation shall emphasize the use of native species and shall be conducted in accordance with
2 the Revegetation and Wetland Mitigation Plan, Hermiston Power Project, dated June 26, 1995.

3 [Amendment No. 4]
4

5 (36) Subject to Condition (37), if feasible, construction of the natural gas pipelines, water
6 supply line and transmission line shall occur outside of sensitive time periods (as described in the
7 ASC, Exhibit P/P-1, page 44a, and Exhibit L, Fourth Request to Amend Site Certificate) for the
8 following wildlife species of concern which were documented within the impact area of the
9 proposed natural gas pipelines, water supply line and transmission line: painted turtle, long-billed
10 curlew, grasshopper sparrow, Swainson's hawk, burrowing owl, bank swallow, loggerhead
11 shrike, *Lanius ludovicianus*, sagebrush lizard, *Sceloporus graciosus*, and white-tailed jackrabbit,
12 *Lepus townsendii*. [Amendment No. 4]
13

14 (37) Notwithstanding Condition (36), prior to construction of the gas pipelines, water supply
15 line and transmission line HPP shall provide to ODOE a construction schedule, including
16 activities and locations, if any, of planned construction of the gas pipelines, water supply line and
17 transmission line during the sensitive time periods for the species listed above. HPP shall consult
18 with ODFW to make every effort to schedule construction activities to avoid adverse impact on
19 the species listed above.
20

21 Not less than 60 days prior to the sensitive time periods for species listed above, HPP
22 shall notify ODOE in writing of any construction activities on the gas pipelines, water supply line
23 and transmission line scheduled for those time periods. If construction activities cannot be
24 scheduled to occur outside the sensitive time periods for the above listed species of concern, pre-
25 construction biological surveys shall be conducted by a wildlife biologist within the impact area
26 of the proposed natural gas pipelines, water supply line and transmission line to identify the
27 location of wildlife species of concern or their nest sites. HPP shall develop the methodology for
28 these pre-construction surveys in consultation with ODFW prior to conducting the surveys.
29 Mitigation for potential impacts to any wildlife species of concern and/or their nest sites found
30 during pre-construction surveys shall be developed by HPP prior to construction of the gas
31 pipelines, water supply line and transmission line and in consultation with ODFW. The
32 mitigation plan shall be submitted to ODFW and ODOE for review and approval prior to
33 construction of the gas pipelines, water supply line and transmission line. ODOE shall make a
34 final determination on the mitigation plan within 45 days of its submission.
35

36 (38) Upon completion of construction of the energy facility, two raptor perching poles shall be
37 placed near the outside edge of the 17 acre energy facility site. The design and location of these
38 raptor perching poles shall be developed in consultations with ODFW. Raptor perching poles
39 shall be located to benefit raptors without interfering with the energy facility plant operation and
40 maintenance.
41

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

6
7 (40) The following areas shall be flagged in the field prior to the start of construction to
8 delineate the maximum extent of project disturbance:

- 9
- 10 i. the natural gas pipeline and transmission line routes through wetlands #4, #13,
11 and #15;
 - 12
 - 13 ii. any natural gas pipeline, water supply line, and transmission line routes within 50
14 feet of the Umatilla River; and
 - 15
 - 16 iii. the transmission line crossings of the Umatilla River.
 - 17

18 (41) Notification shall be provided to the ODFW's Pendleton District office at least one week
19 (7 days) prior to the start of construction for the power plant, natural gas pipelines, water supply
20 pipeline, and transmission lines.

21
22 (42) Measures taken to mitigate impacts to fish and wildlife and their habitats shall be
23 monitored by HPP. Monitoring methodologies and schedules shall be developed in consultation
24 with ODFW. A mitigation monitoring plan shall be submitted to ODFW and ODOE for review
25 and approval prior to issuance of a notice to proceed. If any mitigation measures are determined
26 by the HPP or ODFW to be unsuccessful, corrective actions shall be taken by the applicant after
27 consultation with ODFW.

28
29 (43) A minimum of ten (10) cottonwood (*Populus trichocarpa*) tree saplings shall be planted,
30 in an appropriate habitat area, and within the vegetation impact area for the natural gas pipelines
31 and electrical transmission lines for every cottonwood tree removed during construction of the
32 natural gas pipelines and electrical transmission lines.

33
34 (44) The project shall not impact any native vegetation within the U.S. Army's Umatilla
35 Ordinance Depot.

36
37 (45) HPP shall design transmission lines with a separation between conductors greater than 5
38 feet, and shall consider other techniques to reduce collision potential (e.g., clustering lines,
39 placing colored serial marker ball on the line, etc.)

40
41 (46) Top soils and subsoils resulting from excavation for gas and water pipelines shall be
42 segregated and the top soil restored.

1 (47) The Swainson's hawk nest south of the proposed energy facility (described in ASC Ex P,
2 page 19) shall be monitored during the two weeks prior to facility construction to determine if
3 the nest is active. If the nest is determined to be active, a qualified biologist shall be retained to
4 monitor the nest during facility construction and maintain contact with ODFW. If monitoring
5 indicates that facility construction is adversely impacting nesting Swainson's hawks or their
6 young, a mitigation plan shall be developed after consultation with ODFW.
7

8 **Threatened and Endangered Species: OAR 345-22-070**
9

10 (48) Raptor protection shall be employed in the design and construction of the transmission
11 towers and transmission lines following the methods described by Olendorf, R.L., A.D. Miller,
12 and R.N. Lehman, 1981, Suggested practices for raptor protection on power lines, Raptor
13 Research Foundation, University of Minnesota, St. Paul, Minnesota. A detailed design shall be
14 submitted to the ODFW for review and approval during the design phase of the project. All
15 energized transmission conductors shall be designed with adequate separation of a minimum of
16 five feet.
17

18 (49) Notification shall be provided to the ODFW's Pendleton District office at least one week
19 (7 days) prior to the start of construction for the power plant, natural gas pipelines, water supply
20 pipeline, and transmission lines.
21

22 (50) HPP shall conduct a pre-construction survey to determine if *Astragalus collinus var.*
23 *laurentii* is present along the route of the relocated BPA 500 kV transmission line where the
24 route crosses the slope that occurs north of Highway 730. The survey shall be conducted during
25 the appropriate field season (May through early July) by a qualified biologist. If the species is
26 found to occur in areas that might be affected by construction of the relocated BPA 500 kV line,
27 HPP shall contact ODOE and the Oregon Department of Agriculture, Plant Conservation biology
28 Program to develop a mitigation plan.
29

30 HPP shall conduct a pre-construction survey to determine if individuals of any rare plant
31 species (*Astragalus collinus var. laurentii*, *A. sclerocarpus*, *A. succumbens*, *Balsamorhiza rosea*,
32 *Cryptantha leucophaea*, and *Lomatium watsonii*) are present along the revised route of the HPP
33 500 kV transmission line described in the Fourth Request to Amend Site Certificate. The survey
34 shall be conducted during the appropriate field season (May or June) by a qualified biologist. If
35 individual plants of a rare species are found to occur in areas that might be affected by
36 construction of the rerouted HPP 500 kV transmission line, HPP shall contact the Office of
37 Energy and the Oregon Department of Agriculture, Native Plant Conservation Program, to
38 develop a mitigation plan prior to construction in the affected area. [Amendment No. 4]
39

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

42 (51) To minimize visual intrusion caused by the stacks, the stacks shall be painted in a matte
43 finished neutral color to minimize the potential for glare caused by reflective surfaces. Colors

1 shall be chosen to blend with the surrounding area, to the extent that the choice does not
2 compromise air traffic safety.

3
4 (52) Landscaping shall be used to screen the energy facility from the nearest residence and
5 roadways to the extent reasonably feasible. Shrubbery and trees planted along the perimeter of
6 the energy facility site and other landscaping shall be well-maintained and include low-
7 maintenance and indigenous plants.

8
9 (53) To minimize project visibility at night, outdoor lighting shall be limited to the extent
10 necessary to maintain safety conditions.

11
12 (54) HPP will not put up signs along Feedville Road without authorization from the County.

13 /

14 /

15 /

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

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

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

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

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

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

1 (60) HPP shall consult with the irrigation district in which the canal is located before
2 construction or the upgrading of the transmission line in the area of the canal to determine
3 whether there are any 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
11 and operation of the Project. A "local" worker is one who resides within a 60 mile radius from
12 the project site encompassing part of Umatilla and Morrow Counties in Oregon and the part of
13 Benton, Franklin and Walla Walla counties in Washington. HPP will establish a single point of
14 contact with the Oregon Employment Department in Pendleton Oregon to coordinate
15 employment opportunities at the project 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
21 event, excess stormwater will be discharged from the settlement basin to the natural drainage.
22 Prior to construction the Site Certificate holder will obtain from the Department of
23 Environmental Quality a general National Pollutant Discharge Elimination System (NPDES)
24 permit 1200-C for construction of the facility. Prior to operation the facility will obtain a general
25 NPDES permit 1200-H as administered by DEQ.
26

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

32 (65) During construction, HPP shall establish a housing clearing house at the energy facility
33 site for construction workers. The clearing house shall coordinate with local officials and housing
34 owners to place workers who need lodging as necessary. During construction, HPP shall monitor
35 the central vacancy rate in the cities of Umatilla, Stanfield and Hermiston. If the vacancy rate
36 falls below seven percent, the clearing house will begin its activity to locate available housing
37 outside of Umatilla, Stanfield and Hermiston so a listing of available housing outside of these
38 cities can be provided to temporary workers should the vacancy rate fall below five percent. If
39 the vacancy rate falls below five percent, HPP shall locate housing outside of Umatilla, Stanfield
40 and Hermiston, or offer temporary housing for any temporary workers that it hires from outside
41 the local area. HPP shall provide a plan of operation for the housing clearing house to ODOE
42 prior to the start of construction. HPP shall provide such a plan at least 60 days prior to the start
43 of construction and ODOE shall review and respond with its approval or comments not later than
44 30 days after the plan is submitted.

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

5
6 (67) Rail delivery shall be used to the extent practical to minimize heavy-haul truck trips
7 during construction.

8
9 (68) HPP shall, in consultation with the Hermiston Rural Fire Protection District, establish a
10 pre-fire plan which shall be available to the local fire district. The plan shall describe key
11 entrances and exits, the floor plan of the energy facility, the location of hydrants and hoses, and
12 the location and description of any hazardous materials.

13
14 **Waste Minimization: OAR 345-22-120**

15
16 (69) During construction of the facility, HPP shall identify means of minimizing waste
17 generation and shall recycle waste to the extent reasonably practicable. HPP shall also implement
18 a waste minimization and recycling program to remain in effect throughout the life of the facility.

19
20 (70) HPP shall ship used batteries, spent demineralizer resins and spent oxidation catalysts to
21 vendor recycling facilities. Used SCR catalysts will be shipped to a metals reclaiming facility.

22
23 (71) During operation, all waste materials shall be contained on the energy facility site within
24 the site perimeter fence and screened from view. Process waste will be stored in closed
25 containers. Used batteries shall be stored indoors. Hazardous waste shall be stored and
26 transported in accordance with applicable state and federal law.

27
28 (72) HPP shall implement, to the extent reasonably practical, design features such as those
29 described in Exhibit V pages 4 through 6 to reduce unnecessary water consumption. Such
30 features may include but are not limited to controls to maximize demineralizer resin efficiency,
31 utilization of optimal cycles of concentration, selection of advanced gas turbines, sizing of the
32 condenser to condense all steam produced in the HRSG, recovery of filter backwash water,
33 reprocessing of filtrate from the sludge dewatering system, and incorporation of a two pass
34 Reverse Osmosis system.

35
36 (73) Non hazardous chemicals shall be selected for water treatment to allow use of waste
37 water for irrigation.

38
39 (74) Steam condensate that is recovered in the potato processing plant will be returned to the
40 energy facility for reuse.

41
42 (75) Upon completion of construction, HPP shall dispose of all temporary structures not
43 required for future operation of the facility and all used timber, brush, refuse, or flammable
44 material resulting from clearing of lands or from construction of the facility.

1 [Condition 76 deleted under Amendment No. 5]

2
3 [Condition 77 deleted under Amendment No. 5]

4
5 [Condition 78 deleted under Amendment No. 5]

6
7 [Condition 79 deleted under Amendment No. 5]

8
9 [Condition 80 deleted under Amendment No. 5]

10
11 [Condition 81 deleted under Amendment No. 5]

12
13 [Condition 82 deleted under Amendment No. 5]

14
15 [Condition 83 deleted under Amendment No. 5]

16
17 [Condition 84 deleted under Amendment No. 5]

18
19 **Mandatory Conditions (General): OAR 345-27-020**

20
21 The following mandatory conditions are either specifically required by OAR 345-27-020 or are
22 appropriate under OAR 345-27-020(6) to address project and site specific conditions and
23 requirements. These mandatory conditions shall apply and should be read together with the
24 specific additional conditions in this Site Certificate to ensure compliance with the siting
25 standards of OAR 345 divisions 22, 23 and 24, and to protect the public health and safety.

26
27 (85) The Site Certificate holder shall submit to the department a legal description of the site to
28 be appended to the Site Certificate prior to construction.

29
30 (86) The facility shall be designed, constructed, operated and retired:

31
32 (a) Substantially as described in this Site Certificate and in the Final Order;

33
34 (b) In compliance with the requirements of ORS Chapter 469, applicable Council rules,
35 and applicable state and local laws, rules and ordinances in effect at the time the Site Certificate
36 is issued; and

37
38 (c) In compliance with all applicable permit requirements of other state agencies.

39
40 (87) Construction of the facility must begin and be completed by dates specified in Condition
41 5 of this Site Certificate.

42
43 (88) No construction, including clearing of a right of way, except for the initial survey, may
44 commence on any part of the facility until the Site Certificate holder has adequate control, or has
45 the statutory authority to gain control, of the lands on which clearing or construction will occur.

1 (89) The certificate holder shall submit to the State of Oregon, through the Council, a bond or
2 comparable security, satisfactory to the Council, in an amount specified in the certificate
3 adequate to restore the site to a useful condition if the certificate holder:
4

5 (a) Begins but does not complete construction of the facility; or
6

7 (b) Permanently closes the facility before establishing a financial mechanism or
8 instrument, satisfactory to the Council, that will assure funds will be available to adequately
9 retire the facility and restore the site.
10

11 (90) If mitigation is required after an affirmative finding by the Council under any standards of
12 division 22 or division 24 of this chapter, the certificate holder, in consultation with affected state
13 agencies and local governments designated by the Council, shall develop specific mitigation
14 plans consistent with Council findings under the relevant standards. Such plans must be
15 approved by the department prior to the beginning of construction or, as appropriate, operation.
16

17 (91) The certificate holder shall prevent any condition over which the certificate holder has
18 control from developing on the site that would preclude restoration of the site to a useful
19 condition.
20

21 (92) Conditions related to facility retirement and site restoration:
22

23 (a) The certificate holder shall establish a financial mechanism or instrument, satisfactory
24 to the Council, that will assure funds will be available to adequately retire the facility and restore
25 the site;
26

27 (b) At least five years prior to planned retirement of the facility, the certificate holder
28 shall submit a retirement plan to the Council for approval. The plan shall describe how the site
29 will be restored adequately to a useful condition, including options for post-retirement land use,
30 information on how impacts to fish, wildlife and the environment will be minimized during the
31 retirement process and measures to protect the public against risk or danger resulting from post-
32 retirement site conditions; and
33

34 (c) The facility shall be retired after its useful life in accordance with the approved final
35 retirement plan, pursuant to OAR 345-27-110.
36

37 (93) The certificate holder shall restore vegetation to the extent practicable and shall landscape
38 portions of the site disturbed by construction in a manner compatible with its surroundings and/or
39 proposed future use. Upon completion of construction, the certificate holder shall dispose of all
40 temporary structures not required for future use and all timber, brush, refuse and flammable or
41 combustible material resulting from the clearing of land or from construction of the facility.
42

43 (94) The facility shall be designed, engineered and constructed to avoid potential dangers to
44 human safety presented by seismic hazards affecting the site as defined in ORS 455.447(1)(d),

1 and including amplification, that are expected to result from the reasonably probable seismic
2 event.

3
4 **Mandatory Conditions (Site-Specific): OAR 345-27-023**

5
6 (95) The certificate holder shall notify the department, the State Building Codes Division and
7 the Department of Geology and Mineral Industries promptly if site investigations or trenching
8 reveal that conditions in the foundation rocks differ significantly from those described in the
9 Application for Site Certificate. The Council may, at such time, require the certificate holder to
10 propose additional mitigating actions in consultation with the Department of Geology and
11 Mineral Industries and the Building Codes Division.

12
13 (96) The certificate holder shall notify the department, the State Building Codes Division and
14 the Department of Geology and Mineral Industries promptly if shear zones, artesian aquifers,
15 deformations or clastic dikes are found at or in the vicinity of the site.

16
17 **Mandatory Conditions (Monitoring): OAR 345-27-028**

18
19 (97) The certificate holder shall establish, in consultation with affected state agencies and local
20 governments, monitoring programs as required by the Site Certificate for impact on resources
21 protected by the standards of division 22 and 24 of this chapter, and to ensure compliance with
22 the Site Certificate.

23
24 (98) The certificate holder shall establish monitoring programs as required by permitting
25 agencies and local governments, as required by the Site Certificate.

26
27 (99) For each monitoring program that it establishes, the certificate holder shall have quality
28 assurance measures that are reviewed and approved by the department prior to commencement of
29 construction or commencement of commercial operation, as specified in the Site Certificate.

30
31 (100) If the certificate holder becomes aware of a significant environmental change or impact
32 attributable to the facility, the certificate holder shall submit to the department as soon as
33 possible a written report identifying the issue and assessing the impact on the facility and any
34 affected Site Certificate conditions.

35
36 (101) HPP shall report any material violation of any condition of the Site Certificate by HPP or
37 any of its contractors, subcontractors or agents to ODOE within 72 hours of discovery. HPP shall
38 report to ODOE within 24 hours of discovery if HPP or any of its contractors, subcontractors or
39 agents creates any condition by construction or operation of the facility that endangers the public
40 health or safety.

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

2
3 (102) The Site Certificate holder shall design, construct, operate and retire the facility in
4 accordance with all applicable statutes, rules, and ordinances.

5
6 (103) The pipelines shall be constructed in accordance with the requirements of the U.S.
7 Department of Transportation as set forth in Title 49, Code of Federal Regulations, Part 192.

8
9 (104) The pipelines shall have mechanical structures that allow the pipeline to be sealed off, in
10 the event of leakage, in a manner that will minimize the release of flammable materials. This is
11 rebuttably presumed to be satisfied if the pipeline meets the requirements of Title 49, Code of
12 Federal Regulations, Part 192.

13
14 (105) The Site Certificate holder shall develop a program, or assure the development of a
15 program by the entity responsible for the pipelines, using the best available, practicable
16 technology to monitor the proposed pipeline to ensure protection of public health and safety.

17
18 (106) The transmission line shall be designed so that alternating current electric fields shall not
19 exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public
20 within the right of way.

21
22 (107) The transmission line shall be designed so that induced currents resulting from the
23 transmission line and related facilities will be as low as reasonably achievable. The Site
24 Certificate holder shall develop and implement a program which shall provide reasonable
25 assurance that all fences, gates, cattle guards, trailers, or other permanent objects or structures
26 ("structures") that could become inadvertently charged with electricity shall be grounded through
27 the life of the line. The Council interprets this requirement to apply to structures in existence
28 when the line is constructed.

29
30 (108) The transmission line shall be designed, constructed, and operated in a manner consistent
31 with the National Electrical Safety Code, Section C2, 1993 Edition (American National
32 Standards Institute), as well as the Rural Electrification Administration standards, where
33 applicable.

34
35 (109) HPP shall submit to the Department copies of all incident reports required under 49 CFR
36 §192.709 involving the related and supporting natural gas pipelines.

37 /
38 /
39 /

1 **Land Use**

2
3 (110) Following issuance of the Site Certificate and prior to commencement of construction,
4 HPP shall apply for and obtain all appropriate land use approvals from the County, as listed in
5 the Resolution of June 5, 1995 passed by the Umatilla County Board of Commissioners.
6

7 (111) HPP shall file with the County Planning Department a landscaping plan for the power
8 plant prior to issuance of a zoning permit. The landscaping plan shall be implemented and shall
9 provide screening and visual buffering for the power plant and its parking and loading areas to
10 the extent reasonably feasible.
11

12 (112) Prior to issuance of a building permit, HPP shall file a site plan with the County which
13 shall consist of a map showing the property lines, location of buildings, access roads and the
14 names of the owner and developer of the site. The site plan shall also show that county
15 ordinances related to parking and loading requirements, setbacks, signs and vision clearance are
16 satisfied.
17

18 (113) If the energy facility site will not be owned by Simplot, HPP shall file with the County an
19 application for a minor partition of the energy facility site from remainder of the adjacent
20 Simplot property in conformance with the information included in the ASC and file and record a
21 final plat in accordance with County ordinances.
22

23 (114) Prior to construction, HPP shall submit a plan acceptable to ODOE for responding to an
24 emergency at the Umatilla Army Depot. The plan shall be developed in consultation with the
25 Umatilla County Chemical Stockpile Emergency Preparedness Program.
26

27 (115) HPP shall take reasonable steps to reduce or manage exposure to electromagnetic fields
28 (EMF), consistent with EFSC findings presented in the "Report of the EMF Subcommittee to the
29 Energy Facility Siting Council," dated March 30, 1993. Prior to and during construction and
30 operation, HPP shall provide information to the public upon public request about EMF levels
31 associated with the power plant and related transmission lines.
32

33 (116) HPP shall enter into an Irrevocable Consent Agreement (ICA) with the County by which
34 HPP agrees to waive the right to oppose the formation of a Local Improvement District (LID) for
35 Co. Rd.No 1324.
36

37 (117) The power plant will incorporate an on-site fire suppression system and will be
38 constructed from fire retardant materials to the extent reasonably feasible. The power plant will
39 incorporate spill prevention and containment designs for the storage of all hazardous materials.
40 Fire suppression and hazardous material safety designs shall be established in consultation with
41 the Hermiston Fire Department and the State Fire Marshall.
42

43 (118) HPP shall provide adequate parking during construction.
44

1 (119) HPP shall coordinate construction traffic with the county Public Works Department. In
2 particular, a traffic plan shall be developed to coordinate peak construction traffic and peak
3 potato harvest traffic.

4
5 (120) The Site Certificate holder shall be responsible for any damages to County Road No.
6 1324 occurring as a result of construction or general operating activities.

7
8 (121) If the 500 kV transmission line alternative is constructed, HPP shall minimize the visual
9 impact of new transmission line structures in the City of Umatilla by the use of steel lattice and
10 wood frame structures, where feasible. Where new single steel pole structures must be installed
11 within the City of Umatilla, HPP shall use non glossy paint coverings in colors that will
12 minimize visual impacts.

13
14 **Noise**

15
16 (122) The Site Certificate holder shall design, select, locate, and/or orient components of the
17 energy facility and provide needed noise controls required to comply with OAR 340-35-035 for
18 new industrial sources located on previously unused industrial sites.

19
20 (123) The Site Certificate holder shall conduct a noise analysis of the final design to insure that
21 the facility will meet DEQ regulations. Results of the analysis shall be submitted to the
22 Department of Energy prior to issuing specifications for the equipment to be installed. The noise
23 study shall include a projection of noise to the noise sensitive properties identified along
24 Umatilla Meadows Road, the daycare facility, and residences west of the plant site west of
25 Highway 207 and south of the Umatilla River. The analysis shall include a listing of the major
26 noise sources and expected sound levels from each source at each receiver.

27
28 (124) The Site Certificate holder shall conduct a survey at locations mentioned in Condition
29 124 above within two months of startup of the first turbine, again within two months of full
30 power operation, within two months of startup of the second turbine, and again within two
31 months of full power operation of both units. Sound measurements of power operation shall be at
32 operation within 3% of full power. Measurements shall be made at each location during
33 atmospheric conditions best for sound propagation. Sound monitoring shall not be conducted
34 when winds are in excess of 5 mph.

35
36 (125) The Site Certificate holder shall consult with Umatilla County and City of Umatilla and
37 with neighbors around the energy facility to minimize the impacts of construction noise.

38
39 (126) The Site Certificate holder shall specify noise rated cooling towers.

40
41 (127) The Site Certificate holder shall design the HRSG and stack with resonant frequency
42 above the lowest natural frequency of the exhaust from the gas turbine.

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

3
4 **Wetlands**

5
6 (129) Prior to construction of the 500 kV transmission line, the Site Certificate holder shall
7 investigate, and where practicable, shall implement opportunities to design the tangent poles of
8 the transmission lines to be high enough to pull the line up so that vegetation maintenance
9 activities in riparian habitats can be minimized or avoided.

10
11 (130) Construction and maintenance of the transmission lines and natural gas pipelines shall
12 avoid all wetlands, except for the two wetland areas (wetlands 4 and 15) that will be unavoidably
13 impacted as stated in the ASC (Exhibit H, p. 11f; Exhibit P, p. 11b) and wetland #13, which may
14 be impacted by placement of the transmission line poles. The permanent impact at these wetlands
15 shall be limited to the area occupied by natural gas pipeline (wetland #4) and the pole
16 foundations and the earthen backfill placed at the base of the poles (wetlands #13 and 15).

17
18 (131) The following areas shall be flagged in the field prior to the start of construction to
19 delineate the maximum extent of project disturbance:

- 20
21 i. the natural gas pipeline and transmission line routes through wetlands 4, 13, and
22 15;
23
24 ii. any natural gas pipeline, water supply line, and transmission line routes within 50
25 feet of the Umatilla River; and
26
27 iii. the transmission line crossings of the Umatilla River.

28
29 Ground disturbing activities in all areas shall be confined to a predefined construction right-of-
30 way corridor. The corridor shall be no wider than is necessary for the safe and practicable
31 completion of the construction tasks. Incidental activities (i.e., personal vehicle parking, sanitary
32 facilities, temporary staging areas, etc.) shall be confined to a limited number of locations that
33 shall be predetermined prior to commencement of construction activities.

34
35 (132) At wetland #13, all ditch crossings shall be culverted with adequate culverts to maintain
36 year round flow.

37
38 (133) If pole placement avoids wetland #13 but is within 45 feet of it, HPP shall place a
39 temporary construction fence and temporary silt barrier at the border of the wetland in the area of
40 the pole to preclude incidental construction-related activity within the wetland and to minimize
41 surface runoff from the construction site into the wetland.

42
43 (134) At wetland #15, construction access for pole placement shall be restricted to the driest
44 period of the year (July through October); all waste and construction debris shall be removed

1 from the wetland area and disposed of on uplands; and construction disturbance shall be
2 restricted to the smallest area practicable.

3
4 (135) At wetland #4, a clay collar shall be placed on the down gradient side of the pipeline at
5 the wetland boundary at each crossing; the pipeline shall be backfilled and stockpiled topsoil
6 shall be replaced at the grade of the trench; and at the location of the outfall, fill material shall be
7 minimized and stabilized to prevent erosion.

8
9 (136) Disturbed wetland and riparian areas shall be revegetated upon completion of
10 construction with seed composition and vegetation species designed to enhance wetland and
11 riparian habitat values and composed only of species commonly associated with wetland and
12 riparian plant communities. Any wetland area that is lost due to project construction shall be
13 compensated by restoring wetland area at a 1:1 wetland impact:wetland restoration ratio, or by
14 creating wetland area at a 1:1.5 wetland impact:wetland creation ration, or by enhancing wetland
15 area at a 1:3.0 wetland impact:wetland enhancement ratio such that there shall be no net loss of
16 wetland habitat units or wetland habitat values. A wetland creation and revegetation plan shall be
17 developed prior to construction in consultation with ODFW and DSL. The wetland creation and
18 revegetation plan shall be submitted to ODOE for review and approval in consultation with
19 ODFW and DSL. HPP shall comply with the approved plan.

20
21 (137) Measures taken to mitigate impacts to wetlands shall be monitored by the Site Certificate
22 holder. Monitoring methodologies and schedules shall be developed in consultation with
23 ODFW, ODA, and DSL. Monitoring shall be conducted for a minimum of seven (7) years
24 following the completion of the restoration efforts unless ODOE, in consultation with DSL and
25 ODFW, approves a shorter monitoring period pursuant to its approval of a specific mitigation
26 monitoring plan. A mitigation monitoring plan shall be submitted to ODOE for review and
27 approval in consultation with ODFW and DSL, prior to the commencement of construction. If
28 any mitigation measures are determined by the Site Certificate holder or ODFW to be
29 unsuccessful, corrective actions shall be taken by the Site Certificate holder after consultation
30 with ODFW (as well as with ODOE and DSL if appropriate).

31 **Carbon Dioxide Emissions Standard for Operation with Power Augmentation**

32
33
34 Conditions 138 through 142 apply to duct burning and any other power augmentation or
35 enhancement technologies (“power augmentation technologies”) that increase the capacity and
36 heat rate of the facility above the capacity and heat rate that it can achieve as a base-load gas
37 plant on a new and clean basis, as reported pursuant to Condition 4(e). All provisions of these
38 conditions are in addition to the requirements of Conditions 1 through 4. The monetary path
39 payment requirement pursuant to Conditions 138 through 142 are supplemental to the monetary
40 path payment requirement pursuant to Conditions 1 through 4 and thus are referred to hereafter
41 as the “supplemental monetary path payment requirement.” [Amendment No. 4]

42
43 (138) Within 15 days after the effective date of the Final Order for Amendment Number Four,
44 the site certificate holder shall submit to the State of Oregon through the Council a guaranty

1 substantially in the form of Exhibit B-2(A), executed by Calpine Corporation. Exhibit B-2(A)
2 shall include a guaranty for the amount of the supplemental monetary path payment requirement
3 (in 2001 dollars) as determined by the calculations set forth in Condition 140. The site certificate
4 holder shall base the calculations for the supplemental monetary path payment requirement on
5 the estimated annual hours of operation and the estimated heat rate and capacity certified
6 pursuant to Condition 141 below. The guaranty also shall accommodate adjustments to the
7 amount of the guaranty in accordance with the terms of this site certificate pursuant to Conditions
8 140 and 142.

9
10 The site certificate holder shall maintain the supplemental monetary path payment
11 guaranty for 30 years or until such time as the site certificate holder has disbursed the full amount
12 of the supplemental monetary path payment requirement to the Oregon Climate Trust.

13
14 The calculation of 2001 dollars shall be made using the U.S. Gross Domestic Product
15 Implicit Price Deflator, as published by the U.S. Department of Commerce, Bureau of Economic
16 Analysis, or any successor agency (the "GDP-IPD index"). If at any time the GDP-IPD index is
17 no longer published, the Council shall select a comparable calculation of 2001 dollars. The
18 selection of a comparable calculation to the GDP-IPD index by the Council shall not require a
19 site certificate amendment.

20
21 In lieu of the guaranty requirement set forth above, the site certificate holder may instead
22 provide a letter of credit to the Oregon Climate Trust in the amount of the supplemental
23 monetary path payment requirement as described above. Furthermore, in the event that Calpine
24 Corporation's long-term unsecured debt is rated below "BB" or its equivalent by S&P and
25 Moody's or their successors, the site certificate holder shall provide a letter of credit to the
26 Oregon Climate Trust in the amount of supplemental monetary path payments required at that
27 time. If the site certificate holder has provided a letter of credit and subsequent calculations
28 pursuant to Conditions 140 and 142 demonstrate that the site certificate holder must increase its
29 supplemental monetary path payments, the site certificate holder shall increase the letter of credit
30 sufficiently to meet the adjusted supplemental monetary path payment requirement within the
31 time required by Condition 140.

32
33 The site certificate holder may reduce the amount of the letter of credit commensurate
34 with payments it makes to the Oregon Climate Trust. The terms of the letter of credit and
35 identity of the issuer shall be subject to approval by the Council, which approval shall not be
36 unreasonably withheld.

37
38 The amount of the letter of credit shall increase by the percentage increase in the GDP-
39 IPD index and shall be prorated within the year to the date of disbursement to the Oregon
40 Climate Trust. The letter of credit shall not be subject to revocation before disbursement of the
41 full supplemental monetary path payment requirement, including any adjusted supplemental
42 monetary path payment requirement. [Amendment No. 4]

1 (139) The site certificate holder shall disburse to the Oregon Climate Trust offset funds and
2 contracting and selection funds as requested by the Oregon Climate Trust up to the supplemental
3 monetary path payment requirement (in 2001 dollars) as determined by the calculations set forth
4 in Condition 140. Disbursements shall be made in response to requests from the Oregon Climate
5 Trust in accordance with the requirements of OAR 345-024-0710. [Amendment No. 4]
6

7 (140) The site certificate holder shall submit all supplemental monetary path payment
8 requirement calculations to the Oregon Office of Energy for verification. All calculations shall
9 be made assuming that no steam is supplied for cogeneration. The site certificate holder shall use
10 the estimated annual hours of operation for the power augmentation technologies and the
11 contracted design parameters for capacity and heat rate for the facility that it reports pursuant to
12 Condition 141 to calculate the estimated supplemental monetary path payment requirement. The
13 site certificate holder shall use the Year One Capacity and Year One Heat Rate that it reports for
14 the facility pursuant to Condition 142 to calculate whether it owes additional supplemental
15 monetary path payments following the Year One Test and in subsequent five-year periods,
16 pursuant to subsections (c) and (d).
17

18 (a) The net carbon dioxide emissions rate for incremental emissions for the facility
19 operating with power augmentation technologies shall not exceed 0.70 pounds of carbon
20 dioxide per kilowatt hour of net electric power output, with carbon dioxide emissions and
21 net electric power output measured on a new and clean basis, subject to any Council
22 modification pursuant to Condition 141.
23

24 (b) When the site certificate holder submits the Year One Test report required in
25 Condition 142, it shall increase its letter of credit, if one is in effect, for the supplemental
26 monetary path payment requirement if the calculation using reported data shows that the
27 adjusted supplemental monetary path payment requirement exceeds the supplemental
28 monetary path payment requirement for which the site certificate holder had provided a
29 guaranty or letter of credit, pursuant to Conditions 138 and 141.
30

31 (A) The site certificate holder shall make the appropriate calculations and
32 increase its letter of credit, if one is in effect, within 30 days after filing its Year
33 One Test report with the Council.
34

35 (B) In no case shall the site certificate holder diminish the guaranty or letter of
36 credit it provided, or receive a refund from the Oregon Climate Trust, based on
37 the calculations made using the Year One Capacity and the Year One Heat Rate or
38 payments required by calculations pursuant to subsections (c) and (d).
39

40 (c) Each five years after commencing commercial operation of the facility (“five-year
41 reporting period”), the site certificate holder shall report to the Office of Energy the
42 annual average hours the facility operated with power augmentation technologies during
43 that five-year reporting period, pursuant to OAR 345-024-0590(6). The site certificate

1 holder shall submit five-year reports to the Office of Energy within 30 days of the
2 anniversary date of beginning commercial operation.

3
4 (d) If the Office of Energy determines that the facility exceeds the projected
5 incremental net total carbon dioxide emissions, prorated for five years, during any five-
6 year reporting period described in subsection (c), the site certificate holder shall offset
7 excess emissions for the specific reporting period according to subsection (A) and shall
8 offset the estimated future excess emissions according to subsection (B) pursuant to
9 OAR 345-024-0600(4). The certificate holder shall offset excess emissions using the
10 monetary path as described in OAR 345-024-0710, except that contracting and selecting
11 funds shall equal 20 percent of the value of any additional offset funds up to the first
12 \$250,000 (in 2001 dollars) and 4.286 percent of the value of any offset funds in excess of
13 \$250,000 (in 2001 dollars). The site certificate holder shall make the funds available to
14 the Oregon Climate Trust within 30 days after notification by the Office of Energy of the
15 amount it owes.

16
17 (A) In determining the excess carbon dioxide emissions that the site certificate
18 holder must offset for a five-year period, the Office of Energy shall apply OAR
19 345-024-0600(4)(a). The certificate holder shall pay for the excess emissions at
20 \$0.57 per ton of carbon dioxide emission (in 2001 dollars). The Office of Energy
21 shall notify the certificate holder of the amount of payment required, using the
22 monetary path, to offset excess emissions.

23
24 (B) The Office of Energy shall calculate estimated future excess emissions and
25 notify the certificate holder of the amount of payment required, using the
26 monetary path, to offset them. To estimate excess emissions for the remaining
27 period of the deemed 30-year life of the facility, the Office of Energy shall use the
28 parameters specified in OAR 345-024-0600(4)(b). The certificate holder shall pay
29 for the estimated excess emissions at \$0.57 per ton of carbon dioxide emissions
30 (in 2001) dollars. [Amendment No. 4]

31
32 (141) Within 15 days of the effective date of this amendment, the site certificate holder shall
33 submit written design information to the Council sufficient to verify the facility's designed new
34 and clean heat rate and its nominal electric generating capacity at average annual site conditions
35 when operating with power augmentation technologies at full power. The site certificate holder
36 shall also specify the estimated annual average hours that it will operate the power augmentation
37 technologies. Based on such written design and operational information, pursuant to OAR 345-
38 024-0590(1), the Council may approve, upon a request by the site certificate holder, modified
39 parameters for testing the power augmentation technologies on a new and clean basis in a manner
40 that accommodates technical limitations of the equipment. The Council's approval of modified
41 testing parameters for power augmentation technologies shall not require a site certificate
42 amendment. [Amendment No. 4]

1 (142) Within the first 12 months of commercial operation, the site certificate holder shall
2 conduct a test at full power (Year One Test) of the actual heat rate at higher heating value (Year
3 One Heat Rate) and nominal generating capacity (Year One Capacity) for the facility operating
4 with power augmentation technologies, without degradation, assuming no steam is supplied for
5 cogeneration, with the results adjusted for the average annual site conditions for temperature,
6 barometric pressure and relative humidity and use of alternative fuels, and using a rate of
7 117 pounds of carbon dioxide per million Btu of natural gas fuel. The full power test shall be
8 100 hours' duration unless the Council has approved a different duration pursuant to Condition
9 141. Within two months of completing the Year One Test for the facility operating with power
10 augmentation technologies, the site certificate holder shall provide to the Council a report of the
11 results of the test. [Amendment No. 4]
12

13 **Retirement and Financial Assurance, OAR 345-022-0050** [Amendment No. 5]
14

15 (143) The certificate holder shall retire the facility if the certificate holder permanently ceases
16 construction or operation of the facility. The certificate holder shall retire the facility according to
17 a final retirement plan approved the by Council, as described in OAR 345-027-0110, and
18 prepared pursuant to Condition (144). [Amendment No. 5]
19

20 (144) Two years before closure of the energy facility, the certificate holder shall submit to the
21 Department a proposed final retirement plan for the facility and site, pursuant to OAR 345-027-
22 0100, including:
23

- 24 (a) A plan for retirement that provides for completion of retirement within two years
25 after permanent cessation of operation of the energy facility and that protects the
26 public health and safety and the environment;
- 27
- 28 (b) A description of actions the certificate holder proposes to take to restore the site to
29 a useful, non-hazardous condition; and
30
- 31 (c) A detailed cost estimate, a comparison of that estimate with the dollar amount
32 secured by a bond or letter of credit and any amount contained in a retirement
33 fund, and a plan for assuring the availability of adequate funds for completion of
34 retirement. [Amendment No. 5]
35

36 (145) The certificate holder shall prevent the development of any conditions on the site that
37 would preclude restoration of the site to a useful, non-hazardous condition to the extent that
38 prevention of such site conditions is within the control of the certificate holder. [Amendment No. 5]
39

40 (146) Within 30 days after Council approval of the certificate holder's Fifth Request to Amend
41 Site Certificate, the certificate holder shall submit a bond or letter of credit in the amount of
42 \$3,929,574 (in 2005 dollars) naming the State of Oregon, acting by and through the Council, as
43 beneficiary or payee.
44

- 1 (a) The form of the bond or letter of credit and identity of the issuer shall be subject
2 to approval by the Council.
3
- 4 (b) The certificate holder shall maintain the bond or letter of credit in effect at all
5 times until the facility has been retired.
6
- 7 (c) The calculation of 2005 dollars shall be made using the U.S. Gross Domestic
8 Product Implicit Price Deflator, Chain-Weight, as published in the Oregon
9 Department of Administrative Services' "Oregon Economic and Revenue
10 Forecast," or by any successor agency ("Index"). If at any time the Index is no
11 longer published, the Council shall select a comparable calculation of 2005
12 dollars.
13
- 14 (d) The amount of the bond or letter of credit account shall increase by the percentage
15 increase in the Index.
16
- 17 (e) The certificate holder shall not revoke or reduce the bond or letter of credit before
18 retirement of the facility without approval by the Council. [Amendment No. 5]
19

20 (147) The certificate holder shall describe in the annual report submitted to the Council,
21 pursuant to OAR 345-026-0080, the status of the retirement fund or other instrument to ensure it
22 has adequate funds to restore the site. [Amendment No. 5]
23

24 (148) Within six months after Council approval of the certificate holder's Fifth Request to
25 Amend Site Certificate, the certificate holder shall prepare and implement a materials
26 management and monitoring plan approved by the Department. The materials management and
27 monitoring plan must address the handling of potentially hazardous substances (as defined by
28 ORS 465-200), measures to prevent on- or off-site contamination and documentation of plan
29 implementation. [Amendment No. 5]
30

31 (149) Not later than ten years after Council approval of the certificate holder's Fifth Request to
32 Amend Site Certificate, and each ten years thereafter during the life of the energy facility, the
33 certificate holder shall complete an independent Phase I Environmental Site Assessment of the
34 site. Within 30 days after its completion, the certificate holder shall deliver the Phase I
35 Environmental Site Assessment report to the Department. [Amendment No. 5]
36

37 (150) In the event that any Phase I Environmental Site Assessment identifies improper handling
38 or storage of hazardous substances or improper record keeping procedures, the certificate holder
39 shall correct such deficiencies within six months after completion of the corresponding Phase I
40 Environmental Site Assessment. It shall promptly report its corrective actions to the Department.
41 The Council shall determine whether the corrective actions are sufficient. [Amendment No. 5]
42

43 (151) The certificate holder shall report to the Department any release of hazardous substances,
44 pursuant to DEQ regulations, within one working day after the discovery of such release. This

1 obligation shall be in addition to any other reporting requirements applicable to such a release.
2 [Amendment No. 5]
3

4 (152) If the certificate holder has not remedied a release consistent with applicable Oregon
5 Department of Environmental Quality standards or if the certificate holder fails to correct
6 deficiencies identified in the course of a Phase I Environmental Site Assessment within six
7 months after the date of the release or the date of completion of the Phase I Environmental Site
8 Assessment, the certificate holder shall submit within such six-month period to the Council for
9 its approval an independently prepared estimate of the additional cost of remediation or
10 correction.
11

12 (a) Upon approval of an estimate by the Council, the certificate holder shall increase
13 the amount of its bond or letter of credit by the amount of the estimate. [Amendment
14 No. 5]
15

16 (153) All funds received by the certificate holder from the salvage of equipment and buildings
17 shall be committed to the restoration of the site to the extent necessary to fund the approved site
18 restoration and remediation. [Amendment No. 5]
19

20 (154) The certificate holder shall pay the actual cost to restore the site to a useful, non-hazardous
21 condition at the time of retirement, notwithstanding the Council's approval in the site certificate
22 of an estimated amount required to restore the site. [Amendment No. 5]
23

24 (155) If the Council finds that the certificate holder has permanently ceased operation of the
25 facility without retiring the facility according to a final retirement plan approved by the Council,
26 as described in OAR 345-027-0110 and prepared pursuant to Condition (144), the Council shall
27 notify the certificate holder and request that the certificate holder submit a proposed final
28 retirement plan to the Department within a reasonable time not to exceed 90 days.
29

30 (a) If the certificate holder does not submit a proposed final retirement plan by the
31 specified date or if the Council rejects the retirement plan that the certificate
32 holder submits, the Council may direct the Department to prepare a proposed final
33 retirement plan for the Council's approval.
34

35 (b) Upon the Council's approval of the final retirement plan prepared pursuant to
36 subsection (a), the Council may draw on the bond or letter of credit described in
37 Condition (146) and shall use the funds to restore the site to a useful, non-
38 hazardous condition according to the final retirement plan, in addition to any
39 penalties the Council may impose under OAR Chapter 345, Division 29.
40

41 (c) If the amount of the bond or letter of credit is insufficient to pay the actual cost of
42 retirement, the certificate holder shall pay any additional cost necessary to restore
43 the site to a useful, non-hazardous condition.
44

1 (d) After completion of site restoration, the Council shall issue an order to terminate
2 the site certificate if the Council finds that the facility has been retired according
3 to the approved final retirement plan. [Amendment No. 5]
4

5 (156) The certificate holder shall manage all hazardous material in accordance with local and
6 state regulatory standards. The certificate holder shall ensure that documentation is maintained
7 and hazardous materials are handled by qualified personnel. Hazardous waste will be stored on
8 site no more than 90 days, followed by transport to a licensed treatment storage disposal facility,
9 as described in ASC, Exhibit B p.15a. [Amendment No. 5]
10

11 (157) Storage and handling of flammable and combustible liquid chemicals shall be in
12 compliance with National Fire Protection Association Codes 30 and 321. Chemical storage areas
13 will have secondary containment. Storage tanks for distillate shall have secondary containment.
14 The certificate holder shall comply with Uniform Building Code Chapters 79 for Hazardous
15 Materials and 80 for Flammable Liquids. Concrete basins will be provided at each of the large
16 electrical transformers to capture any insulating oil that might spill during a transformer failure or
17 maintenance operation. (ASC, Exhibit F, p.6) Foundations and slabs for equipment containing
18 lubricating oil, insulating oil or hydraulic fluid shall be designed to contain and collect any spill.
19 Secondary containment for hazardous material storage areas shall have volume equal to 100
20 percent of the maximum chemical volume in primary containment. (ASC, Exhibit F, p. 9)
21 [Amendment No. 5]
22
23

24 **IV. AMENDMENT OF SITE CERTIFICATION AGREEMENT**

25
26 HPP and EFSC recognize that, because of the length of time that may pass between the
27 date on which this Agreement is executed and the date on which construction will commence,
28 and that will pass between the time construction is commenced and the energy facility is retired,
29 it may be necessary to amend this Agreement.
30

31 Amendments shall be made in accordance with EFSC rules applicable and in effect at the
32 time the amendment is sought.
33

34 **V. SUCCESSORS AND ASSIGNS**

35
36 No Site Certificate, or any portion thereof, may be transferred, assigned, or disposed of in
37 any other manner, directly or indirectly, except in compliance with OAR 345-27-100.
38

39 **VI. SEVERABILITY AND CONSTRUCTION**

40
41 If any provision of this agreement and certificate is declared by a court to be illegal or in
42 conflict with any law, the validity of the remaining terms and conditions shall not be affected,
43 and the rights and obligations of the parties shall be construed and enforced as if the agreement
44 and certificate did not contain the particular provision held to be invalid. In the event of a

1 conflict between the conditions contained in the Site Certificate and EFSC's Final Order, the
2 conditions contained in this Site Certificate shall control.

3
4 **VIII. GOVERNING LAW AND FORUM**

5
6 A. This agreement shall be governed by the laws of the State of Oregon.

7
8 B. Any litigation or arbitration arising out of this agreement shall be conducted in an
9 appropriate forum in Oregon.

10
11 **IN WITNESS WHEREOF**, this Site Certificate has been executed by the State of
12 Oregon, acting by and through its Energy Facility Siting Council, and Hermiston Power
13 Partnership.

14
15
16 **ENERGY FACILITY SITING COUNCIL**

17
18
19
20 By: _____ Date: September 27, 2005
21 Hans Neukomm, Chair

22
23
24
25 **CALPINE HERMISTON, INC.**

26
27
28
29 By: _____ Date: _____
30
31 (Printed) _____

32
33
34
35 | **CPN HERMISTON, INC.**

36
37
38
39 By: _____ Date: _____
40
41 (Printed) _____

42
43
44 Second Amended Exhibit A on file.

1
2 /
3 /
4 /

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2 conditions contained in this Site Certificate shall control.

3
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9 appropriate forum in Oregon.
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12 Oregon, acting by and through its Energy Facility Siting Council, and Hermiston Power
13 Partnership.
14

15
16 **ENERGY FACILITY SITING COUNCIL**

17
18
19 By: Hans Neukomm Date: September 27, 2005
20 Hans Neukomm, Chair
21
22

23
24
25 **CALPINE HERMISTON, INC.**

26
27
28 By: Mike Rogers Date: 10/12/05
29
30 (Printed) Mike Rogers
31 Vice President
32

33
34
35 **CPN HERMISTON, INC.**

36
37
38 By: Mike Rogers Date: 10/12/05
39
40 (Printed) Mike Rogers
41 Vice President
42

43
44 Second Amended Exhibit A on file.