

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45

SECOND AMENDED
THERMAL POWER PLANT
SITE CERTIFICATE
FOR THE
COYOTE SPRINGS COGENERATION PROJECT

(Incorporating Amendments #1 Through #7)

This site certificate for the Coyote Springs Cogeneration Project (CSCP) is issued and executed in the manner provided by ORS Chapter 469, as amended by 1993 Public Laws ch. 569 (SB 1016), by and between the State of Oregon (State) acting by and through its Energy Facility Siting Council (EFSC), Portland General Electric Company (PGE), an Oregon corporation, and Coyote Springs 2, LLC (CS2), a Delaware limited liability company. [rev. Amendment 6]

I. SITE CERTIFICATION

- A. To the extent authorized by State law and subject to those warranties and conditions set forth herein, the State approves and authorizes for construction, operation and retirement by PGE and CS2 of a natural gas-fired combustion turbine energy facility, with oil firing back-up for phase one (as defined in OAR 345-01-010(33), Nov. 1995), together with related or supporting facilities in Boardman, Oregon, in the manner described in PGE's 1993 application for site certificate. "Facility," as used in this site certificate, consists of the energy facility and the related or supporting facilities described in PGE's 1993 application for site certificate, except where otherwise stated or where the context clearly indicates otherwise. "Phase one" refers to the combustion turbine generator unit owned by PGE and constructed by PGE in 1995. "Phase two" refers to the combustion turbine generator unit owned by CS2, to be constructed by the deadline stated in Condition V.A.2(1). The findings of facts, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in EFSC's final order, which by this reference is incorporated herein. Subject to the conditions herein, this site certificate binds the State and all counties, cities and political subdivisions in this State as to the approval of the site and the construction, operation and retirement of the facility, as to matters that are included in and governed by this site certificate. [rev. Amendments 2, 6]
- B. Each affected state agency, county, city and political subdivision with authority to issue a permit, license or other approval with respect to matters included in or governed by this site certificate shall, upon submission by PGE or CS2 of the proper application and payment of the proper fees, issue such permit, license or other approval without hearing or other proceeding, subject only to conditions set forth in the site certificate. Each agency that issues a permit, license or other approval to PGE

1 or CS2 shall continue to exercise enforcement authority over such permit, license or
2 other approval. [rev. Amendment 6]
3

4 For a permit, license or other approval included in or governed by the site certificate,
5 PGE, with respect to phase one, and CS2, with respect to phase two, shall comply
6 with applicable state and federal laws adopted in the future to the extent that such
7 compliance is required under the respective state agency statutes and rules. [rev.
8 Amendment 6]
9

10 C. The State, PGE and CS2 shall abide by local ordinances and state law and the rules of
11 EFSC in effect on the date the site certificate is executed. In addition, upon a clear
12 showing of a significant threat to the public health, safety or the environment that
13 requires application of later-adopted laws or rules, EFSC may require compliance
14 with such later-adopted laws or rules. [rev. Amendment 6]
15

16 D. PGE shall be solely responsible for compliance with conditions or portions of
17 conditions addressed to PGE or phase one specifically. CS2 shall be solely
18 responsible for compliance with conditions or portions of conditions addressed to
19 CS2 or phase two specifically. PGE and CS2 shall be jointly responsible for all
20 aspects of the site and facility that are common to both phase one and phase two or
21 that the site certificate does not identify as specific to phase one or phase two. All
22 conditions that the site certificate does not identify as applicable to PGE or CS2
23 specifically, or that involve an aspect of the site or facility that are common to both
24 phase one and phase two, shall apply to PGE and CS2 jointly. In the event of any
25 violations of such non-phase-specific conditions or portions of conditions by either
26 party, EFSC may direct any appropriate inquiries to either party, but if EFSC is able
27 to identify one of the parties as the party responsible for committing the violation,
28 EFSC shall address its initial demand for remedial action to that party. [Amendment 6]
29

30 II. DESCRIPTION OF THE FACILITY

31 A. Description of the Site

32 1. Power Plant Site

33
34 The proposed CSCP plant site consists of approximately 20 acres within the Port of
35 Morrow Industrial Park. The Port of Morrow Industrial Park occupies 5,700 acres of
36 land east of the City of Boardman and along the Columbia River.
37
38

39
40 The plant site is located approximately 1,500 feet due south of the Columbia River
41 and is immediately south of the bank and berm created by the Union Pacific
42 Railroad's east-west mainline. The site's western boundary is Ullman Boulevard. Its
43 southern boundary is along an existing gravel roadway and utility corridor. The site is
44 about 450 feet west of Messner Pond and a small pond created by an ongoing
45 dredging operation lies along the eastern edge of the plant site. The exact location of

1 the plant site is shown by figures C-C2 and C-C3 of the application for site certificate,
2 which are made part of and incorporated into this site certificate by reference.
3

4 2. Transmission Line Corridor

5
6 The transmission line serving the plant will be approximately 1.5 miles long. The
7 line will occupy land owned by the Port of Morrow and the City of Boardman. The
8 transmission line will run from the south end of the plant site eastward along the
9 existing roadway and utility corridor. For a short distance at its eastern extremity, the
10 line will cross fields that are or have been under cultivation. The exact location of the
11 transmission line corridor is shown in figure C-C2 of the application for site
12 certificate.
13

14 B. Description of Facilities

15 1. Power Plant

16
17
18 The proposed CSCP facilities will consist of several structures: a turbine generator
19 building; heat recovery steam generator (boiler) structures; two 210 feet high exhaust
20 stacks; a water treatment and auxiliary equipment building; auxiliary boilers; an
21 administrative and control building; water treatment chemical tanks; and electrical
22 transformation and substation facility structures.
23

24 The CSCP power generation facilities will consist of two natural gas-fired, combined
25 combustion turbine cycle units. Primary power for each phase will be supplied by
26 either a General Electric 7FA gas turbine generator rated at approximately 170 to 190
27 MW or a similar model gas turbine. For each phase, the high temperature exhaust
28 from the gas turbine generator will be ducted to a heat recovery steam generator or
29 boiler to generate steam. This steam will be used to drive a steam turbine generator
30 with an electrical generation capacity of approximately 80 to 100 MW. Steam used in
31 power generation will be cooled and condensed back to water by a condenser or heat
32 exchanger using the cooling tower method. Phase two will include a natural gas-
33 fired duct burner with a generating capacity of approximately 20 MW. [rev.
34 Amendment 6]
35

36 Electrical transformation and substation facilities will be constructed adjacent to the
37 power plant at the south end of the site.
38

39 The proposed CSCP power plant (both units) will use up to 27,400,000 million
40 British thermal units of natural gas fuel per year. The power plant shall be supplied
41 by a natural gas pipeline that will run approximately 15 miles between the site and
42 Lone, Oregon. The supply pipeline will interconnect with an interstate natural gas
43 transmission line and will be owned and operated by another company. The supply
44 pipeline will be permitted through the Federal Energy Regulatory Commission and is

1 not considered to be a related facility under the jurisdiction and siting review
2 authority of the Energy Facility Siting Council.

3
4 2. Electrical Transmission Line

5 Project related facilities will include a double circuit looped 500 kilovolt
6 transmission line. The 1.5 mile line will connect the power plant with the Bonneville
7 Power Administration transmission system.
8

9 In the event of a conflict between the descriptions of the facility in this site certificate, EFSC's
10 final order, the Oregon Department of Energy's (ODOE)¹ final staff report on PGE's application
11 for site certificate, or PGE's application for site certificate, the following priority of construction
12 shall apply to determine which document controls: first, PGE's application for site certificate;
13 second, this site certificate; third, EFSC's final order; and fourth, ODOE's final staff report.
14

15 III. WARRANTIES

16
17 ORS 469.401(3) requires that:

18
19 "The site certificate shall contain the warranties of the applicant as to the ability of the
20 applicant to comply with standards of financial ability and to construct and operate
21 the energy facility, the applicant's provisions for protection of the public health and
22 safety and for time of completion of construction."
23

24 The following warranties are necessary to meet the above statutory requirements and to ensure
25 and facilitate compliance with and enforcement of EFSC standards and the policy directives of
26 ORS chapter 469:
27

28 (1) PGE, with respect to phase one, and CS2, with respect to phase two, represent and
29 warrant that they have the present capabilities and resources to construct, operate and retire
30 phase one and phase two of the CSCP, including the ability to finance and pay for the
31 CSCP, substantially as described in the site certificate and in the order approving the site
32 certificate, as they may be amended from time to time, and with the terms and conditions of
33 the site certificate. [rev. Amendments 1, 6]
34

35 (2) PGE and CS2 represent and warrant that they can and will comply with all applicable
36 state, federal and local laws, regulations and ordinances and with all applicable conditions
37 of the site certificate. [rev. Amendment 6]
38

39 (3) PGE, with respect to phase one, and CS2, with respect to phase two, represent and
40 warrant that they will undertake and complete construction of phase one and phase two of
41 the CSCP according to the conditions of the construction commencement and completion
42 dates at V.A.2. [rev. Amendment 6]

¹ In 1995, the Oregon Legislature changed the Oregon Department of Energy to the Oregon Office of Energy (OOE).

1 (4) PGE, with respect to phase one, and CS2, with respect to phase two, warrant that they
2 will take those actions, necessary to ensure that any third party with whom they contract
3 during construction, operation or retirement of this facility and related or supporting
4 facilities shall abide by the terms of this site certificate. [rev. Amendment 6]
5

6 (5) PGE, with respect to phase one, and CS2, with respect to phase two, warrant that they
7 shall take all reasonable steps necessary to ensure the protection of the public health and
8 safety during the construction, operation and retirement of the CSCP and related facilities.
9 [rev. Amendment 6]
10

11 IV. MANDATORY CONDITIONS 12

13 The following mandatory conditions are either specifically required by OAR 345-27-020 or are
14 appropriate under OAR 345-27-020(4)(o) or OAR 345-027-0023 (Feb. 2000) to address project
15 and site-specific conditions and requirements. These mandatory conditions shall apply in
16 addition to, and should be read together with, the specific additional conditions provided in this
17 site certificate to ensure compliance with the siting standards of OAR Chapter 345, Divisions 22,
18 23 and 24.
19

20 (1) PGE, with respect to phase one, and CS2, with respect to phase two, shall comply with
21 all applicable laws, regulations and ordinances of state, federal and local authorities,
22 including all conditions contained in any permits, licenses and approvals issued by such
23 authorities. PGE and CS2 shall comply with the conditions of the site certificate. The duty
24 of PGE and CS2 to comply applies notwithstanding a failure or oversight in the proposed
25 order or site certificate to identify all applicable laws, regulations and ordinances. PGE and
26 CS2 shall design, construct, operate and retire phases one and two, respectively, in
27 accordance with the requirements of the Oregon Energy Facility Siting Statute, ORS
28 469.300 et seq., and EFSC rules applicable to the facility. [rev. Amendment 6]
29

30 (2) PGE, with respect to phase one, and CS2, with respect to phase two, shall design,
31 permit, construct, operate and retire the CSCP substantially as described in the site
32 certificate, as it may be amended from time to time. [rev. Amendments 1, 6]
33

34 (3) No later than 90 days following the beginning of commercial operation of each phase,
35 the owner of that phase shall submit to EFSC a written report certified by an Oregon
36 registered structural engineer documenting the following: (a) facility construction
37 consistent with the project description and operating statement of the ASC, as modified or
38 amended by the site certificate; (b) fulfillment of and compliance with all design and
39 construction-related conditions of the site certificate, including all applicable mitigation
40 measures; and (c) compliance with or statement as to the ability to comply with all
41 applicable state, federal and local permits, licenses and approvals issued for the project,
42 including, but not limited to, compliance with Oregon Building Codes Agency (BCA) ²

² In 1993, the Oregon Legislature changed the Building Codes Agency to the Building Codes Division (BCD) of the Department of Consumer and Business Services (DCBS).

1 building permits and Oregon Public Utility Commission (OPUC)—Safety Section design
2 requirements. [rev. Amendment 6]

3
4 (4) PGE, with respect to phase one, and CS2, with respect to phase two, shall submit annual
5 compliance status reports to EFSC providing a statement and documentation of their
6 respective compliance with each applicable condition of the site certificate. PGE and CS2
7 may submit a single joint compliance status report. [rev. Amendment 6]

8
9 (5) Prior to construction of phase one, PGE shall submit certification that at least 80 percent
10 of the capacity from phase one shall be used by an energy supplier in the Pacific Northwest
11 Region as defined in 16 U.S.C. 839a(14). The capacity and energy of phase one shall be
12 used by PGE for the benefit of its customers in its Oregon service territory. Except as
13 required for financing purposes, PGE shall not sell or lease phase one and shall not contract
14 for firm energy or firm capacity for the output of phase one for a term exceeding five years.
15 [rev. Amendments 3, 6]

16
17 (6) PGE shall not commence construction on any part of the facility and related or
18 supporting facilities (including clearing of rights-of-way, but excepting survey and
19 geotechnical investigations), until PGE has filed with EFSC documentation of ownership,
20 control or access to the entire plant site and the entire transmission corridor. [rev. Amendment
21 6]

22
23 (7) PGE, with respect to phase one, and CS2, with respect to phase two, shall, to the extent
24 practicable, restore vegetation and landscape portions of the site disturbed by construction
25 of their respective phases in a manner which is compatible with its surroundings; and, upon
26 completion of construction, dispose of all temporary structures not required for future use
27 and all used timber, brush, refuse, or flammable material resulting from the clearing of
28 lands or from construction of the facility. [rev. Amendment 6]

29
30 (8) PGE, with respect to phase one, and CS2, with respect to phase two, shall notify the
31 Oregon Office of Energy (OOE), Oregon Department of Geology and Mineral Industries
32 (DOGAMI) and the Oregon Department of Water Resources (DWR) in advance of further
33 geotechnical investigations and trenching on the project site to allow the opportunity for
34 agency representatives to inspect the work. [rev. Amendment 6]

35
36 (9) PGE, with respect to phase one, and CS2, with respect to phase two, shall promptly
37 notify OOE, DOGAMI and DWR if further geotechnical investigations, trenching or
38 construction activities reveal conditions that were not considered in or that differ from the
39 conditions assumed in the agreed-upon seismic hazard classification, or if shear zones,
40 artesian aquifers, deformations or clastic dikes are found near or beneath the project site.
41 EFSC may require additional and/or higher design requirements as necessary to address site
42 conditions not previously considered. [rev. Amendment 6]

43
44 (10) PGE, with respect to phase one, and CS2, with respect to phase two, shall prevent the
45 development of any conditions on the site that would preclude restoration of the site to a

1 useful, non-hazardous condition to the extent that prevention of such site conditons is with
2 the control of PGE and/or CS2. [rev. Amendments 5, 6]

3
4 (11) At least 5 years prior to retirement of each phase of CSCP, PGE, with respect to phase
5 one, and CS2, with respect to phase two, shall submit a retirement plan to EFSC subject to
6 review and approval by EFSC. The plan shall describe how the site will be restored
7 adequately to a useful condition, including options for post-retirement land use,
8 information on how impacts to fish, wildlife and the environment will be minimized during
9 the retirement process and measures to protect the public against risk or danger resulting
10 from post-retirement site conditions. The owner of each phase shall restore the site to a
11 useful condition following retirement. [rev. Amendment 6]

12
13 (12) This site certificate shall expire at the end of the useful life of both phases of the
14 energy facility. Application for termination of the site certificate shall be made in
15 accordance with the provisions of OAR 345-27-110. [rev. Amendment 6]

16
17 (13) The conditions in this site certificate may not be changed during the term of the site
18 certificate except as provided in OAR Chapter 345, Division 27.

19
20 (14) If a visitor information facility is provided at the site, information regarding
21 conservation of energy and the means by which it may be accomplished shall be included
22 with any energy facility information provided.

23
24 (15) Before beginning construction of phase two of the facility, CS2 or Avista Corporation,
25 shall submit to the State of Oregon through the Council a bond, letter of credit or fully-
26 funded escrow account naming the State of Oregon, acting by and through the Council, as
27 beneficiary or payee in the amount of \$2,500,000 (in 1993 dollars). The calculation of 1993
28 dollars shall be made using the index set forth below in sub-section (b). [Amendment 5; rev.
29 Amendment 6; rev. Amendment 7]

30
31 (a) The terms of the bond, letter of credit or fully-funded escrow account and identity
32 of the issuer shall be subject to approval by the Council, which approval shall not be
33 unreasonably withheld. The bond, letter of credit or fully-funded escrow account
34 shall not be subject to revocation or reduction prior to the time CS2 or Avista
35 Corporation, has established the financial mechanism or instrument described in
36 Mandatory Condition IV(16) and has fully funded the obligation. [Amendment 5; rev.
37 Amendment 6; rev. Amendment 7]

38
39 (b) The calculation of 1993 dollars shall be made using the US Gross Domestic
40 Product Implicit Price Deflator, as published by the US Department of Commerce,
41 Bureau of Economic Analysis, or any successor agency ("the index"). The amount of
42 the bond, letter of credit or fully-funded escrow account shall increase annually by the
43 percentage increase in the index and shall be pro-rated within the year to the date of
44 retirement. If at any time the index is no longer published, the Council shall select a
45 comparable calculation of 1993 dollars. [Amendment 5]

1 (16) Before beginning operation of phase two of the facility, CS2 or Avista Corporation,
2 shall establish a bond, letter of credit or fully-funded escrow account, satisfactory to the
3 Council, assuring the availability of adequate funds throughout the life of phase two of the
4 facility to retire phase two of the facility and restore the site to a useful, non-hazardous
5 condition as described in OAR 345-022-0130 (Feb. 2000). CS2 shall retire the facility
6 according to an approved final retirement plan, as described in OAR 345-027-0110 (Feb.
7 2000). [Amendment 5; rev. Amendment 6; rev. Amendment 7]
8

9 (17) CS2 shall design, engineer and construct phase two to avoid dangers to human
10 safety presented by seismic hazards affecting the site that are expected to result
11 from all maximum probable seismic events. As used in this rule "seismic hazard"
12 includes ground shaking, landslide, liquefaction, lateral spreading, tsunami
13 inundation, fault displacement, and subsidence. [Amendment 5; rev. Amendment 6]
14

15 (18) Before beginning construction of phase two, CS2 shall submit to the Office of
16 Energy a legal description of the site. The Office shall append the legal description
17 to the site certificate. [Amendment 5; rev. Amendment 6]
18

19 V. CONDITIONS ISSUED PURSUANT TO EFSC STANDARDS³
20

21 A. Need for the Facility

22 1. Exemption: OAR 345-23-010

23 PGE, with respect to phase one, and CS2, with respect to phase two, shall, as
24 part of the post-construction completion compliance status certification reports
25 required by Mandatory Condition 3, provide capacity and heat rate performance
26 test reports to document the ability of phase one and phase two to meet the
27 output and fuel efficiency measures as represented in the ASC. [rev. Amendment
28 6]
29

30 2. Construction commencement and completion dates

31
32 (1) PGE shall begin construction of phase one within one year after the site
33 certificate is executed. This one-year time period shall be tolled during
34 any appeal that is taken of the Energy Facility Siting Council (EFSC)
35 Order. Notwithstanding the tolling of the one-year time period for
36 commencement of construction, PGE shall complete construction of phase
37 one by September 16, 1998. CS2 shall complete construction of phase
38 two by September 16, 2003. Completion of construction of phase two
39 means the date of commercial operation of phase two. [rev. Amendments 4, 5,
40 6]

³Although conditions in this part V of the site certificate are listed under headings citing specific standards, the condition may relate to other standards as discussed in EFSC's final order. Any application of these conditions should take into account discussions under the various other standards.

- 1 (2) Within one year of execution of the site certificate PGE must affirm, by
2 written notice to EFSC its intent to construct phase two. This notice to
3 EFSC shall include copies of correspondence to a vendor requesting
4 commencement of bona fide negotiations to purchase the gas turbine.
5 This one-year time period shall be tolled during any appeal taken of
6 EFSC's Order. Such affirmation is required in order for Applicant to
7 maintain a valid site certificate as to phase two. [rev. Amendment 6]
8
- 9 (3) If CS2 requests an extension of the construction completion deadline for
10 phase two, CS2 shall demonstrate that phase two meets the requirements
11 of OAR 345-024-0550 (Feb. 2000) in order for EFSC to approve
12 extending the deadline. [rev. Amendments 3, 6]
13
- 14 (4) The construction completion deadline for phase two will not be tolled for
15 reason of appeal of the EFSC's Order. [rev. Amendments 3, 4, 5]
16
- 17 3. Carbon Dioxide Emissions Standard for Phase Two: OAR 345-024-0550
18 through 0720 (Feb. 2000). [Amendment 3, inclusive]
19
- 20 (1) Prior to commencement of construction of phase two, CS2 shall submit to
21 the State of Oregon through the Council a bond, letter of credit or fully-
22 funded escrow account ("escrow account") in the amount of the monetary
23 path payment requirement (in 1998 dollars) as determined by the
24 calculations set forth in Condition V.A.3(4) and based on the estimated
25 heat rate and capacity certified pursuant to Condition V.A.3(5) below and
26 as adjusted in accordance with the terms of this site certificate pursuant to
27 Condition V.A.3(4)(b). For the purposes of this site certificate, the
28 "monetary path payment requirement" means the offset funds determined
29 pursuant to OAR 345-024-0550 and -0560 and the selection and
30 contracting funds determined pursuant to OAR 345-024-0710 that CS2
31 must disburse to the Oregon Climate Trust, as the qualified organization,
32 pursuant to OAR 345-024-0710. The offset fund rate for the monetary
33 path payment requirements shall be \$0.57 per ton of carbon dioxide (in
34 1998 dollars). The calculation of 1998 dollars shall be made using the
35 index set forth below in sub-section (c). [rev. Amendments 5, 6]
36
- 37 (a) In the event that the Council approves a new site certificate holder of
38 phase two, the Council shall approve the bond, letter of credit or escrow
39 account from the new site certificate holder(s) unless the Council finds
40 that the proposed bond, letter of credit or escrow account does not provide
41 comparable security to the bond, letter of credit or escrow account of the
42 current site certificate holder. Such approval of a new bond, letter of
43 credit or escrow account will not require a site certificate amendment. The
44 bond, letter of credit or escrow account shall remain in effect until such
45 time as the site certificate holder has disbursed the full amount of the

1 monetary path payment requirement to the Oregon Climate Trust as
2 provided in OAR 345-024-0710. [rev. Amendments 5, 6]
3

4 (b) If CS2 has provided a bond, letter of credit or escrow account prior to
5 commencing construction and if calculations pursuant to Condition
6 V.A.3(6) demonstrate that CS2 must increase its monetary path payments,
7 CS2 shall increase the bond, letter of credit or escrow account sufficiently
8 to meet the adjusted monetary path payment requirement within the time
9 required by Condition V.A.3(4)(b). CS2 may reduce the amount of the
10 bond, letter of credit or escrow account commensurate with payments it
11 makes to the Oregon Climate Trust. [rev. Amendments 5, 6]
12

13 (c) The calculation of 1998 dollars shall be made using the US Gross
14 Domestic Product Implicit Price Deflator, as published by the US
15 Department of Commerce, Bureau of Economic Analysis, or any
16 successor agency ("the index"). The amount of the bond, letter of credit or
17 escrow account shall increase annually by the percentage increase in the
18 index and shall be pro-rated within the year to the date of disbursement to
19 the Oregon Climate Trust. If at any time the index is no longer published,
20 the Council shall select a comparable calculation of 1998 dollars. The
21 bond, letter of credit or escrow account shall not be subject to revocation
22 prior to disbursement of the full monetary path payment requirement,
23 including any adjusted monetary path payment requirement. The terms of
24 the bond, letter of credit or escrow account and identity of the issuer shall
25 be subject to approval by the Council, which approval shall not be
26 unreasonably withheld. [rev. Amendment 5]
27

28 (d) If CS2 establishes an escrow account for the monetary path payment
29 requirement, the portion of any interest accruing in the escrow account up
30 to the time of disbursement to the Oregon Climate Trust that is equivalent
31 to the 1998 dollar index adjustment (described in sub-section (c)) shall be
32 for the benefit of the Oregon Climate Trust and shall be disbursed to the
33 Oregon Climate Trust for use as specified in OAR 345-024-0710. Any
34 remaining interest that exceeds the 1998 dollar index adjustment at the
35 time of disbursement of funds to the Oregon Climate Trust shall be
36 disbursed CS2 on its request. [rev. Amendments 5, 6]
37

38 (2) CS2 shall disburse to the Oregon Climate Trust offset funds and
39 contracting and selection funds as requested by the Oregon Climate Trust
40 up to the monetary path payment requirement as determined by the
41 calculations set forth in Condition V.A.3(4) and based on the estimated
42 heat rate and capacity certified pursuant to Condition V.A.3(5) below (in
43 1998 dollars) and as adjusted in accordance with the terms of this site
44 certificate pursuant to Condition V.A.3(4)(b). Disbursements shall be

1 made in response to requests from the Oregon Climate Trust in accordance
2 with the requirements of OAR345-024-0710. [rev. Amendments 5, 6]
3

4 (3) Notwithstanding anything in this amended site certificate to the contrary,
5 CS2 shall have no obligation with regard to offsets, the offset funds and
6 the selection and contracting funds other than to make available to the
7 Oregon Climate Trust the total amount required under this site certificate,
8 nor shall any nonperformance, negligence or misconduct on the part of the
9 Oregon Climate Trust be a basis for revocation of this site certificate or
10 any other enforcement action by the Council with respect to CS2. [rev.
11 Amendment 6]
12

13 (4) CS2 shall submit all monetary path payment requirement calculations to
14 the Office of Energy for verification. All calculations shall be made
15 assuming that no steam is supplied for cogeneration. CS2 shall use the
16 contracted design parameters for capacity and heat rate for phase two that
17 it reports pursuant to Condition V.A.3(5) to calculate the estimated
18 monetary path payment requirement. CS2 shall use the Year One Capacity
19 and Year One Heat Rate that it reports for phase two pursuant to Condition
20 V.A.3(6) to calculate whether it owes additional monetary path payments.
21 [rev. Amendments 5, 6]
22

23 (a) The net carbon dioxide emissions rate for phase two as a base load gas
24 plant shall not exceed 0.675 pounds of carbon dioxide per kilowatt hour of
25 net electric power output, with carbon dioxide emissions and net electric
26 power output measured on a new and clean basis. [rev. Amendment 5]
27

28 (b) When CS2 submits the Year One Test report required in Condition
29 V.A.3(6), it shall increase its bond, letter of credit or escrow account for
30 the monetary path payment requirement if the calculation using reported
31 data shows that the adjusted monetary path payment requirement exceeds
32 the monetary path payment requirement for which CS2 had provided a
33 bond, letter of credit or escrow account prior to commencing construction,
34 pursuant to Condition V.A.3(1). [rev. Amendment 6]
35

36 (A) CS2 shall make the appropriate calculations and increase its
37 bond, letter of credit or escrow account, if necessary, within 30 days
38 of filing its Year One Test report with the Council. [rev. Amendment 6]
39

40 (B) In no case shall CS2 diminish the bond, letter of credit or
41 escrow account it provided prior to commencing construction or
42 receive a refund from the qualified organization based on the
43 calculations made using the Year One Capacity and the Year One
44 Heat Rate. [rev. Amendment 6]
45

- 1 (5) Prior to commencement of construction of phase two, CS2 shall notify the
2 Council in writing of its final selection of a gas turbine vendor and shall
3 submit written design information to the Council sufficient to verify phase
4 two's designed new and clean heat rate and its nominal electric generating
5 capacity at average annual site conditions. The report shall also include an
6 affidavit or other evidence that CS2 or a vendor has guaranteed the heat
7 rate. [rev. Amendments 5, 6]
8
- 9 (6) Within two months of completion of the first year of commercial operation
10 of phase two, CS2 shall provide to the Council a test report (Year One
11 Test) of the actual heat rate (Year One Heat Rate) and nominal generating
12 capacity (Year One Capacity) for phase two, without degradation,
13 assuming no steam is supplied for cogeneration, as determined by a
14 100-hour test at full power completed during the first 12 months of
15 commercial operation, with the results adjusted for the average annual site
16 condition for temperature, barometric pressure and relative humidity and
17 use of alternative fuels, and using a rate of 117 pounds of carbon dioxide
18 per million Btu of natural gas fuel pursuant to OAR 345-001-0010(34),
19 Feb. 2000. [rev. Amendments 5, 6]
20
- 21 (7) The combustion turbine for phase two shall be fueled solely with natural
22 gas or with synthetic gas with a carbon content per million Btu no greater
23 than natural gas.
24
- 25 (8) If CS2 operates phase two as a cogeneration facility, CS2 shall not use
26 steam from phase two to replace steam generated by a biomass fuel at an
27 off-site industrial facility. [rev. Amendment 6]
28

29 4. Carbon Dioxide Emissions Standard for Phase Two with Power Augmentation
30 or Enhancement Technologies: OAR 345-024-0550 through -0720 (Feb. 2000).
31 [Amendment 5 and 6, inclusive]
32

33 This condition shall apply to phase two if CS2 identifies power enhancement or
34 augmentation technologies that increase the capacity and heat rate of phase two
35 above the capacity and heat rate that it can achieve as a base load gas plant on a
36 new and clean basis, as reported pursuant to Condition V.A.3(5). All provisions
37 of this condition shall be in addition to the requirements of Condition V.A.3. If
38 the heat rate and capacity of the base load gas plant that CS2 reports pursuant to
39 Condition V.A.3(5) include the design and the base load operation of power
40 augmentation or enhancement technologies in excess of 6,600 hours annually on
41 average, this condition shall not apply. The monetary path payment
42 requirements pursuant to Condition V.A.4 shall be supplemental to the
43 monetary path payment requirements pursuant to Condition V.A.3.
44

1 (1) Prior to commencement of construction of phase two, CS2 shall submit to
2 the State of Oregon through the Council a bond, letter of credit or fully-
3 funded escrow account ("escrow account") in the amount of the monetary
4 path payment requirement (in 2000 dollars) as determined by the
5 calculations set forth in Condition V.A.4(4) and based on the estimated
6 heat rate and capacity certified pursuant to Condition V.A.4(5) below and
7 as adjusted in accordance with the terms of this site certificate pursuant to
8 Condition V.A.4(4)(b). When required concurrently, CS2 shall combine
9 any letter(s) of credit required by Condition V.A.4 with the letter(s) of
10 credit required by Condition V.A.3. For the purposes of this site
11 certificate, the "monetary path payment requirement" means the offset
12 funds determined pursuant to OAR 345-024-0590 and 0600 and the
13 selection and contracting funds determined pursuant to OAR 345-024-
14 0710, as modified by Condition V.A.4(4)(b)(D), that CS2 must disburse to
15 the Oregon Climate Trust, as the qualified organization, pursuant to OAR
16 345-024-0710. The offset fund rate for all monetary path payment
17 requirements under Condition V.A.4 shall be \$0.57 per ton of carbon
18 dioxide (in 2000 dollars). The calculation of 2000 dollars shall be made
19 using the index set forth below in sub-section (c).

20
21 (a) In the event that the Council approves a new site certificate holder of
22 phase two, the Council shall approve the bond, letter of credit or escrow
23 account from the new site certificate holder(s) unless the Council finds
24 that the proposed bond, letter of credit or escrow account does not provide
25 comparable security to the bond, letter of credit or escrow account of the
26 current site certificate holder. Such approval of a new bond, letter of
27 credit or escrow account will not require a site certificate amendment. The
28 bond, letter of credit or escrow account shall remain in effect until such
29 time as CS2 has disbursed the full amount of the monetary path payment
30 requirement to the Oregon Climate Trust as provided in OAR 345-024-
31 0710.

32
33 (b) If CS2 has provided a bond, letter of credit or escrow account prior to
34 commencing construction and if calculations pursuant to Conditions
35 V.A.4(4)(b) and V.A.4(6) demonstrate that CS2 must increase its
36 monetary path payments, CS2 shall increase the bond, letter of credit or
37 escrow account sufficiently to meet the adjusted monetary path payment
38 requirement within the time required by Condition V.A.4(4)(b). CS2 may
39 reduce the amount of the bond, letter of credit or escrow account
40 commensurate with payments it makes to the Oregon Climate Trust.

41
42 (c) The calculation of 2000 dollars shall be made using the US Gross
43 Domestic Product Implicit Price Deflator, as published by the US
44 Department of Commerce, Bureau of Economic Analysis, or any
45 successor agency ("the index"). The amount of the bond, letter of credit or

1 escrow account shall increase annually by the percentage increase in the
2 index and shall be pro-rated within the year to the date of disbursement to
3 the Oregon Climate Trust. If at any time the index is no longer published,
4 the Council shall select a comparable calculation of 2000 dollars. The
5 bond, letter of credit or escrow account shall not be subject to revocation
6 prior to disbursement of the full monetary path payment requirement,
7 including any adjusted monetary path payment requirement. The terms of
8 the bond, letter of credit or escrow account and identity of the issuer shall
9 be subject to approval by the Council, which approval shall not be
10 unreasonably withheld.
11

12 (d) If CS2 establishes an escrow account for the monetary path payment
13 requirement, the portion of any interest accruing in the escrow account up
14 to the time of disbursement to the Oregon Climate Trust that is equivalent
15 to the 2000 dollar index adjustment (described in sub-section (c)) shall be
16 for the benefit of the Oregon Climate Trust and shall be disbursed to the
17 Oregon Climate Trust for use as specified in OAR 345-024-0710. Any
18 remaining interest that exceeds the 2000 dollar index adjustment at the
19 time of disbursement of funds to the Oregon Climate Trust shall be
20 disbursed to CS2 on its request.
21

22 (2) CS2 shall disburse to the Oregon Climate Trust offset funds and
23 contracting and selection funds as requested by the Oregon Climate Trust
24 up to the monetary path payment requirement as determined by the
25 calculations set forth in Condition V.A.4(4) and based on the estimated
26 heat rate, capacity, and limitations on the annual average hours of
27 operation with power augmentation or enhancement technologies certified
28 pursuant to Condition V.A.4(5) below (in 2000 dollars) and as adjusted in
29 accordance with the terms of this site certificate pursuant to Condition
30 V.A.4(4)(b). Disbursements shall be made in response to requests from
31 the Oregon Climate Trust in accordance with the requirements of OAR
32 345-024-0710.
33

34 (3) Notwithstanding anything in this amended site certificate to the contrary,
35 CS2 shall have no obligation with regard to offsets, the offset funds and
36 the selection and contracting funds other than to make available to the
37 Oregon Climate Trust the total amount required under this site certificate,
38 nor shall any nonperformance, negligence or misconduct on the part of the
39 Oregon Climate Trust be a basis for revocation of this site certificate or
40 any other enforcement action by the Council with respect to CS2.
41

42 (4) CS2 shall submit all monetary path payment requirement calculations to
43 the Oregon Office of Energy for verification. All calculations shall be
44 made assuming that no steam is supplied for cogeneration. CS2 shall use
45 the contracted design parameters for capacity and heat rate for phase two

1 that it reports pursuant to Condition V.A.4(5) to calculate the estimated
2 monetary path payment requirement. CS2 shall use the Year One
3 Capacity and Year One Heat Rate that it reports for phase two pursuant to
4 Condition V.A.4(6) to calculate whether it owes additional monetary path
5 payments following the Year One Test and in subsequent five year
6 periods, pursuant to sub-sections (b)(C) and (b)(D).
7

8 (a) The net carbon dioxide emissions rate for incremental emissions for
9 phase two operating with power augmentation or enhancement
10 technologies shall not exceed 0.70 pounds of carbon dioxide per kilowatt
11 hour of net electric power output, with carbon dioxide emissions and net
12 electric power output measured on a new and clean basis, as modified by
13 Condition V.A.4(5).
14

15 (b) When CS2 submits the Year One Test report required in Condition
16 V.A.4(6), it shall increase its bond, letter of credit or escrow account for
17 the monetary path payment requirement if the calculation using reported
18 data shows that the adjusted monetary path payment requirement exceeds
19 the monetary path payment requirement for which CS2 had provided a
20 bond, letter of credit or escrow account prior to commencing construction,
21 pursuant to Condition V.A.4(1).
22

23 (A) CS2 shall make the appropriate calculations and increase its
24 bond, letter of credit or escrow account, if necessary, within 30 days
25 of filing its Year One Test report with the Council.
26

27 (B) In no case shall CS2 diminish the bond, letter of credit or
28 escrow account it provided prior to commencing construction or
29 receive a refund from the qualified organization based on the
30 calculations made using the Year One Capacity and the Year One
31 Heat Rate or payments required by calculations pursuant to sub-
32 sections (C) and (D).
33

34 (C) Each five years after commencing commercial operation of the
35 facility ("five-year reporting period"), CS2 shall report to the Office
36 the annual average hours the facility operated with power
37 augmentation or enhancement technologies during that five-year
38 reporting period, pursuant to OAR 345-024-0590(6).
39

40 (D) If the Office of Energy determines that phase two exceeds the
41 projected incremental net total carbon dioxide emissions calculated
42 pursuant to Condition V.A.4(4), prorated for five years, during any
43 five-year reporting period described in sub-section (C), CS2 shall
44 offset excess emissions for the specific reporting period according to
45 subsection (i) and shall offset the estimated future excess emissions

1 according to subsection (ii) pursuant to OAR 345-024-0600(4). CS2
2 shall offset excess emissions using the monetary path as described in
3 OAR 345-024-0710, except that contracting and selecting funds shall
4 equal twenty (20) percent of the value of any offset funds up to the
5 first \$250,000 (in 2000 dollars) and 4.286 percent of the value of any
6 offset funds in excess of \$250,000 (in 2000 dollars). CS2 shall make
7 the funds available to the Oregon Climate Trust within 60 days of its
8 notification by the Office of the amount it owes.
9

10 (i) In determining the excess carbon dioxide emissions that
11 CS2 must offset for a five-year period, the Office shall apply
12 OAR 345-024-0600(4)(a). CS2 shall pay for the excess
13 emissions at \$0.57 per ton of CO2 emissions (in 2000 dollars).
14 The Office shall notify CS2 of the amount of payment required,
15 using the monetary path, to offset excess emissions;
16

17 (ii) The Office shall calculate estimated future excess
18 emissions and notify CS2 of the amount of payment required,
19 using the monetary path, to offset them. To estimate excess
20 emissions for the remaining period of the deemed 30-year life
21 of the facility, the Office shall use the parameters specified in
22 OAR 345-024-0600(4)(b). CS2 shall pay for the estimated
23 excess emissions at \$ 0.57 per ton of carbon dioxide emissions
24 (in 2000 dollars).
25

26 (5) Prior to commencement of construction of phase two, CS2 shall notify the
27 Council in writing of its final selection of a gas turbine vendor and shall
28 submit written design information to the Council sufficient to verify phase
29 two's designed new and clean heat rate and its nominal electric generating
30 capacity at average annual site conditions when operating with power
31 augmentation or enhancement technologies at full power. CS2 shall also
32 specify the limit of the annual average hours it will operate the power
33 augmentation or enhancement technologies. Based on such written design
34 and operational information, pursuant to OAR 345-024-0590(1), the
35 Council may approve, upon a request by CS2, modified parameters for
36 testing the power augmentation or enhancement equipment on a new and
37 clean basis in a manner that accommodates technical limitations of the
38 equipment. The Council's approval of modified testing parameters for
39 power augmentation or enhancement equipment shall not require a site
40 certificate amendment. The report shall also include an affidavit or other
41 evidence that CS2 or vendor has guaranteed the heat rate for operation
42 with power augmentation or enhancement.
43

44 (6) Within two months of completion of the first year of commercial operation
45 of phase two, CS2 shall provide to the Council a test report (Year One

1 Test) of the actual heat rate (Year One Heat Rate) and nominal generating
2 capacity (Year One Capacity) for phase two operating with power
3 augmentation or enhancement technologies, without degradation,
4 assuming no steam is supplied for cogeneration, as determined by a test at
5 full power completed during the first 12 months of commercial operation,
6 with the results adjusted for the average annual site condition for
7 temperature, barometric pressure and relative humidity and use of
8 alternative fuels, and using a rate of 117 pounds of carbon dioxide per
9 million Btu of natural gas fuel. The full power test shall be 100 hours
10 duration unless the Council has approved a different duration pursuant to
11 Condition V.A.4(5).
12

13 B. Standards Relating to the Applicant
14

15 Organizational, Managerial and Technical Expertise Standard: OAR 345-22-010
16

17 1. PGE and CS2 Qualifications and Capabilities:
18

19 PGE, with respect to phase one, and CS2, with respect to phase two, shall
20 contractually require the EPC contractor and all independent contractors and
21 subcontractors involved in the construction and operation of the proposed
22 facilities to comply with all applicable laws and regulations and with the terms
23 and conditions of the site certificate. [rev. Amendment 6]
24

25 2. Third-Party Services and Permits
26

27 (i) Water supply
28

29 (1) The facility's water use shall not exceed the flow rates and maximum
30 quantities specified in the ASC for the proposed CSCP nor shall the
31 withdrawal rates exceed the limits imposed by the water right
32 permits for the sources supplying the water. [rev. Amendment 6]
33

34 (2) PGE, with respect to phase one, and CS2, with respect to phase two,
35 shall install and operate a continuous, recording flow meter on the
36 facility's process water intake line and maintain records of total
37 process water use on a monthly and annual basis. [rev. Amendment 6]
38

39 (ii) Process wastewater disposal
40

41 (1) Within six months of the date the site certificate is executed, PGE
42 shall demonstrate that the Port of Morrow has received DEQ
43 approval to dispose of the CSCP's process wastewater, or commit to
44 install an on-site, zero-discharge water treatment system. [rev.
45 Amendment 6]

1 (2) If PGE or CS2 use the Port of Morrow's industrial wastewater
2 disposal system, they shall not discharge into the Port's system at
3 flow rates and quantities or in excess of water quality limitations or
4 discharge any materials that would violate any applicable laws and
5 regulations or the conditions of the Port of Morrow's WPCF permit.
6 [rev. Amendment 6]
7

8 (iii) Sanitary wastewater disposal
9

10 PGE, with respect to phase one, and CS2, with respect to phase two, shall
11 not discharge any materials into the City of Boardman sewage treatment
12 system that would violate any applicable laws and regulations or the
13 conditions of the City of Boardman's WPCF permit. [rev. Amendment 6]
14

15 3. CS2 Corporate Authority
16

17 Prior to commencing construction of phase two and for the duration of this site
18 certificate, Avista Corporation, shall hold all necessary authority to direct,
19 compel and obligate CS2 to implement all actions required to meet CS2's
20 obligations under this site certificate. If Avista Corporation enters into a co-
21 ownership agreement of CS2 with other parties, CS2 shall identify to the
22 Council the co-owners and file with the Council a summary of a contractual
23 agreement among the co-owners demonstrating that Avista Corporation retains
24 all necessary authority to direct, compel and obligate CS2 to implement all
25 actions required to meet CS2's obligations under this site certificate. In its
26 annual report submitted to the Council, CS2 shall describe any withdrawal of a
27 co-owner of CS2 other than Avista Corporation. [Amendment 6; rev. Amendment 7]
28

29 4. Construction and Operation Contracts
30

31 (1) CS2 shall retain a fully-qualified engineering, procurement and
32 construction (EPC) contractor to design and construct phase two. Prior to
33 construction of phase two, CS2 shall identify for the Council the EPC
34 contractor chosen to design and construct phase two. CS2 shall report to
35 the Council any change in the EPC contractor. [Amendment 6]
36

37 (2) CS2 shall retain a fully-qualified firm to operate phase two. Prior to
38 commercial operation of phase two, CS2 shall identify for the Council the
39 firm chosen to operate phase two. CS2 shall report to the Council any
40 change in the firm that operates phase two. [Amendment 6]

1 C. Standards Relating to the Site and Structure

2
3 1. Structural Standard: OAR 345-22-020

4
5 a. Seismic hazards

6
7 (1) PGE, with respect to phase one, and CS2, with respect to phase two,
8 shall design and construct phase one and phase two in accordance
9 with and in compliance with the laws and regulations administered
10 by BCA. [rev. Amendment 6]

11
12 (2) Before submitting building permit applications to BCA, PGE, with
13 respect to phase one, and CS2, with respect to phase two, shall re-
14 evaluate peak ground acceleration for the site based on applying an
15 amplification factor determined from its site-specific studies. The
16 permit applicant shall report the results of its reevaluation to OOE,
17 DOGAMI and BCA. The permit applicant shall design and
18 construct the facility to address any estimate of peak ground
19 acceleration exceeding that covered by seismic zone 2B. [rev.
20 Amendment 6]

21
22 b. Adverse soil impacts

23
24 During construction, PGE, with respect to phase one, and CS2, with
25 respect to phase two, and their subcontractors shall make reasonable
26 efforts to keep soil disturbances to a minimum. [rev. Amendment 6]

27
28 2. Land Use Standard

29
30 PGE and CS2 shall comply with the conditions in the variance for the CSCP
31 transmission line granted to applicant by Morrow County on October 25, 1993.
32 [rev. Amendment 6]

33
34 D. Standards Relating to the Impacts of Construction, Operation and Retirement

35
36 1. Fish and Wildlife Standard: OAR 345-22-060

37
38 (1) PGE, with respect to phase one, and CS2, with respect to phase two, shall
39 implement the vegetation, fish and wildlife mitigation measures as
40 contained in the ASC (Exhibits N, P and R), and the following mitigation
41 conditions of ODFW: [rev. Amendment 6]

42
43 a. PGE shall design and construct the electrical transmission towers and
44 lines in a manner appropriate for the protection of raptors. [rev. Amendment
45 6]

1 b. PGE, with respect to phase one, and CS2, with respect to phase two,
2 shall reseed areas of disturbed soil using the seed composition and
3 planting procedure described in the ASC, Exhibit N. PGE, with respect to
4 phase one, and CS2, with respect to phase two, shall reseed areas where
5 Russian olive trees or tall vegetation is removed using a mix of woody
6 shrubs and perennial grasses to be jointly determined by ODFW and PGE
7 or CS2. [rev. Amendment 6]
8

9 c. PGE shall plant trees between the west side of Messner Pond and the
10 facility site, as described in the ASC, to enhance wildlife habitat around
11 Messner Pond and to provide a visual and auditory buffer between the
12 facility site and Messner Pond. PGE and CS2 shall maintain trees in
13 healthy condition and replace trees that die or become unhealthy. [rev.
14 Amendment 6]
15

16 d. The following activities shall be prohibited within 100 feet of the
17 wetland associated with Messner Pond: storage of hazardous materials,
18 chemicals, fuels and lubricating oils; refueling of construction equipment;
19 and performing concrete coating activities.
20

21 e. PGE, with respect to phase one, and CS2, with respect to phase two,
22 shall insure that notification is provided to the ODFW representative in
23 charge of the Heppner District Office at least one week prior to the start of
24 construction for the power plant and transmission lines. [rev. Amendment 6]
25

26 f. PGE, with respect to phase one, and CS2, with respect to phase two,
27 shall leave a 50 foot buffer between the edge of construction and the high
28 water line of the wetland area associated with Messner Pond. [rev.
29 Amendment 6]
30

31 g. PGE shall erect a temporary fence and signs to protect the bank swallow
32 nesting colony from disturbance during construction. [rev. Amendment 6]
33

34 (2) PGE, with respect to phase one, and CS2, with respect to phase two, shall,
35 as part of the post-construction completion compliance status certification
36 report required by Mandatory Condition No. 3, provide documentation of
37 the following: a) cooling tower drift rate, including manufacturer
38 specifications and guaranty, and actual field testing of the CSCP cooling
39 tower drift rate; and b) water analysis of the cooling tower circulation
40 water representative of identified actual source water and cycles of
41 concentration. [rev. Amendment 6]
42

43 (3) PGE, with respect to phase one, and CS2, with respect to phase two, shall
44 install, operate and maintain a continuous monitoring system to measure

1 and record the total dissolved solids (TDS) concentration of the cooling
2 tower/condenser circulating water. [rev. Amendment 6]
3

4 (4) The cooling tower drift factor for phase one and phase two shall not
5 exceed 0.002 percent of the circulation rate. PGE, with respect to phase
6 one, and CS2, with respect to phase two, shall not allow the total dissolved
7 solids concentration in the cooling tower/condenser system to exceed
8 2,084 parts per million. [rev. Amendment 6]
9

10 (5) PGE and CS2 shall fully comply with the terms and conditions of the
11 December 10, 1993 Ecological Monitoring Program, as revised on January
12 5, 1994, and shall take such actions as deemed appropriate by OOE, in
13 consultation with ODFW, to fully mitigate adverse impacts to the Messner
14 Pond area, including but not limited to reducing the cycles of
15 concentration in the cooling tower system. [rev. Amendment 6]
16

17 2. Scenic and Aesthetic Standard: OAR 345-22-080
18

19 PGE, with respect to phase one, and CS2, with respect to phase two, shall
20 implement and fulfill the mitigation proposals as contained in the ASC,
21 including site perimeter landscaping with appropriate vegetation; painting
22 building structures and the exhaust stacks in neutral shades; minimizing exterior
23 lighting and directing lights into the facility site; and establishing landscape
24 screening along the perimeter of the proposed power plant site. [rev. Amendment
25 6]
26

27 3. Historic, Cultural, and Archaeological Standard: OAR 345-22-090
28

29 (1) If the area in which artifacts were found is to be disturbed by construction
30 or operation, PGE and/or CS2 shall obtain the recommendation of SHPO
31 as to any clearance requirements for the affected area and shall comply
32 with all applicable regulations and laws relating to historic, cultural, and
33 archaeological resources. [rev. Amendment 6]
34

35 (2) If historic, cultural or archaeological resources are found during project
36 construction or construction-related activities, PGE, with respect to phase
37 one, and CS2, with respect to phase two, shall stop all work in the vicinity
38 of the find and consult with the SHPO. The applicant shall not restart work
39 in the area of the find until SHPO has concurred that the applicant has
40 identified actions to minimize or avoid further impact. [rev. Amendment 6]
41

42 (3) PGE and CS2 shall comply with all applicable state laws regarding Indian
43 graves, removal of historic materials and archaeological objects and sites.
44 [rev. Amendment 6]
45

1 4. Socio-Economic Impact Standard: OAR 345-22-110
2

3 a. Solid waste
4

5 PGE and CS2 shall, at a minimum, test their sludge waste and maintain
6 records as required by DEQ and the landfill operator pursuant to
7 applicable permits and licenses, including testing under the Toxicity
8 Characteristic Leaching Procedure (TCLP), or equivalent per 40 CFR part
9 262.11, Hazardous Waste Determination. [rev. Amendment 6]
10

11 b. Emergency services
12

13 PGE and CS2 shall reimburse the Boardman Fire Department for
14 reasonable costs for new training and equipment which is specifically
15 needed, as determined by the State Fire Marshall, to respond to an
16 emergency at the CSCP. [rev. Amendment 6]
17

18 c. Roadways
19

20 PGE and CS2 shall mitigate all fogging and icing impacts caused by
21 CSPC to off-site roadways that create hazardous traffic conditions.
22 Mitigation measures, if needed, shall be undertaken and implemented in
23 consultation with the Port of Morrow and other responsible local agencies,
24 and may include, but are not limited to: hazard warning signs, lighting and
25 sanding. [rev. Amendment 6]
26

27 5. Waste Minimization Standard: OAR 345-22-120
28

29 a. Solid wastes
30

31 PGE, with respect to phase one, and CS2, with respect to phase two, shall
32 minimize and recycle solid wastes generated during construction and
33 operation whenever practical, including: [rev. Amendment 6]
34

35 a) packing materials, wood, piping and steel scrap during construction;
36

37 b) spent ion exchange resins used for demineralizing water during plant
38 operation;
39

40 c) waste from the facility's office, including paper products, aluminum
41 cans, glass and plastics.

1
2 b. Industrial wastewater
3

4 If commencement of construction of either phase of the proposed CSCP is
5 delayed beyond two years from the date the site certificate is executed,
6 PGE, with respect to phase one, and CS2, with respect to phase two, shall
7 submit, prior to commencement of construction of that phase, a revised
8 cooling system evaluation that addresses the then available technologies,
9 their costs, savings and benefits. [rev. Amendment 6]
10

11 6. Retirement Standard: OAR 345-22-130
12

13 Upon retirement of the facility, PGE, with respect to phase one, and CS2 with
14 respect to phase two, shall restore their respective portions of the CSCP site to a
15 useful condition. [rev. Amendment 6]
16

17 E. Noise
18

- 19 (1) PGE, with respect to phase one, and CS2, with respect to phase two, shall
20 comply with the noise standards and limits contained in OAR 340-35-035
21 (1)(b)(B). [rev. Amendment 6]
22
- 23 (2) PGE, with respect to phase one, and CS2, with respect to phase two, shall, by
24 facility design and the installation of silencers and/or other devices, limit noise
25 emissions from the facility's pressure-relief safety valves such that sound levels
26 attributable to their use do not exceed the limits contained in OAR 340-35-035
27 (1)(b)(B). [rev. Amendment 6]
28
- 29 (3) PGE, with respect to phase one, and CS2, with respect to phase two, shall retain
30 a registered acoustical consultant to conduct noise monitoring to determine
31 compliance with conditions (1) and (2) above and provide a report of that
32 monitoring to OOE within 120 days after beginning commercial operation of
33 the proposed facility. [rev. Amendment 6]
34

35 F. Public health and safety
36

37 To the extent possible, consistent with BPA's specifications, PGE shall design and
38 construct the transmission line in accordance with the requirements of OAR 345-24-
39 090: [rev. Amendment 6]
40

- 41 (a) The transmission line shall be designed so that alternating current
42 electrical fields shall not exceed 9 kv per meter above the ground surface
43 in areas accessible to the public;
44

1 (b) The transmission line shall be designed so that induced currents
2 resulting from the transmission line and related facilities will be as
3 low as reasonably achievable. PGE and CS2 agree to a program
4 which shall provide reasonable assurance that all fences, gates, cattle
5 guards, trailers, or other objects or structures of a permanent nature
6 that could become inadvertently charged with electricity shall be
7 grounded through the life of the line; and [rev. Amendment 6]
8

9 (c) The transmission line shall be designed and constructed, and
10 operated in a manner consistent with the 1993 edition of National
11 Electrical Safety Code (American National Standards Institute,
12 Section C2, 1993 edition).
13

14 VI. MONITORING CONDITIONS

15
16 OAR Chapter 345, Division 26 contains monitoring and reporting requirements for thermal
17 power plants with site certificates. The following monitoring and reporting requirements are
18 intended to achieve the purpose, expressed in OAR 345-26-005, "...to assure that the construction
19 and operation of thermal power plants is accomplished in a manner consistent with the protection
20 of the public health, safety and welfare, and the protection of the environment."
21

22 As provided in OAR 345-26-015(3), in the event that any of the specific monitoring or reporting
23 conditions contained in the site certificate conflict or are inconsistent with the rules and
24 requirements of OAR Chapter 345, Division 26, the site certificate conditions shall be deemed to
25 control.
26

27 (1) PGE, with respect to phase one, and CS2, with respect to phase two, shall submit to
28 EFSC a report at least quarterly from the start of construction to commercial operation of
29 phase two. The report shall include, but is not limited to: [rev. Amendment 6]
30

31 (a) an assessment of the construction schedule for each phase, including any changes
32 to major milestones that affect the critical path for construction; [rev. Amendment 6]
33

34 (b) an assessment of the then known costs and costs projections for the CSCP in
35 relation to the applicant's then current least cost plan;
36

37 (c) an assessment of the construction staffing, including status of staffing and any
38 staffing problems that may affect construction schedule;
39

40 (d) any significant work stoppage;
41

42 (e) any noncompliance with the conditions of the site certificate, including the
43 background of the causes of the noncompliance, the mitigation or correction of the
44 noncompliance and the impact of the noncompliance on the project schedule or
45 financing;

1 (f) any noncompliance with the conditions of permits issued by any other federal,
2 state or local authority, including the background of the causes of the noncompliance,
3 the mitigation or correction of the noncompliance, and the impact of the
4 noncompliance on the project schedule or financing;

5
6 (g) any noncompliance with the conditions of permits issued to third parties that are
7 known to PGE or CS2 and that are significant and relevant to the construction or
8 operation of the facility, such as Water Rights Permits or Water Pollution Control
9 Facility Permits, including the background of the causes of the noncompliance, the
10 mitigation or correction of the noncompliance, and the impact of the violation on the
11 project schedule or financing; [rev. Amendment 6]

12
13 (h) copies of all correspondence and reports related to facility construction submitted
14 to a federal, state, or local authority, except material withheld from public disclosure
15 under federal or state law. Abstracts of reports may be submitted in place of full
16 reports. However, full copies of abstracted reports must be provided at the request of
17 OOE or EFSC;

18
19 (i) any other information that EFSC requests that is considered necessary to monitor
20 and evaluate compliance by PGE or CS2 with the terms and conditions of the site
21 certificate. [rev. Amendment 6]

22
23 (2) PGE, with respect to phase one, and CS2, with respect to phase two, shall submit to
24 the EFSC an annual report from the start of commercial operation of the first unit through
25 retirement of the last operating unit. The annual report shall include, but is not limited to:
26 [rev. Amendment 6]

27
28 (a) results of performance tests, including project efficiency testing, summaries of
29 fuel use, average volume and mass of steam supplied to any cogeneration host and
30 the estimated fuel used to generate any host steam load;

31
32 (b) in the first report submitted after commencement of commercial operation, unit
33 heat rate in Btu per kilowatt hour produced, corrected to ISO conditions and
34 accounting for steam delivered to any steam host, and also facility capacity corrected
35 to 52.8° F, 55% relative humidity, standard air pressure adjusted for elevation, no
36 steam to process, natural gas fuel, and normal steam turbine exhaust pressure, net of
37 plant auxiliary loads;

38
39 (c) the power production by the facility by unit, by month, including peak capacity,
40 average capacity, gross and net kilowatt hour production, availability, reasons and
41 durations of planned and unplanned outages, plans to improve capacity and
42 availability and to correct recurring problems;

43
44 (d) an assessment of the operations staffing, including status of staffing and any
45 staffing problems that may affect facility operation;

1 (e) any noncompliance with the conditions of the site certificate, including the
2 background of the causes of the noncompliance, the mitigation or correction of the
3 noncompliance and the impact of the noncompliance on the project operation or
4 financing;

5
6 (f) any noncompliance with the conditions of permits issued by any other federal,
7 state or local authority, including the background of the causes of the noncompliance,
8 the mitigation or correction of the noncompliance, and the impact of the
9 noncompliance on the project operation or financing;

10
11 (g) any noncompliance with the conditions of permits issued to third parties that are
12 known to the applicant and that are significant and relevant for the operation of the
13 facility, such as Water Right Permits or Water Pollution Control Facility Permits,
14 including the background of the causes of the noncompliance the mitigation or
15 correction of the noncompliance, and the impact of the noncompliance on the project
16 operation or financing;

17
18 (h) copies of all correspondence related to facility operation which was submitted to
19 a federal, state, or local authority, except material withheld from public disclosure
20 under federal or state law. Abstracts of reports may be submitted in place of full
21 reports. However, full copies of abstracted reports must be provided at the request of
22 OOE or EFSC;

23
24 (i) an assessment of the project's cost of operation in relation to the applicant's then-
25 current least cost plan;

26
27 (j) any other information that EFSC requests that is considered necessary to monitor
28 and evaluate the applicant's compliance with the terms and conditions of the site
29 certificate.

30
31 (3) Information To Be Reported Promptly

32
33 (a) PGE, with respect to phase one, and CS2, with respect to phase two, shall report to
34 OOE within 72 hours of receiving knowledge of noncompliance with the conditions
35 of the site certificate arising from the acts or omissions of PGE, CS2, their
36 contractors, subcontractors or agents; [rev. Amendment 6]

37
38 (b) PGE, with respect to phase one, and CS2, with respect to phase two, shall report
39 to OOE within 24 hours of receiving knowledge of any condition arising from the
40 construction and operation of the facility that endangers public health and safety. [rev.
41 Amendment 6]

1 VII. AMENDMENT OF SITE CERTIFICATION AGREEMENT

2
3 PGE, CS2 and EFSC recognize that, because of the length of time that may pass between the
4 date on which this Agreement is executed and the date on which construction will commence,
5 and that will pass between the time construction is commenced and the energy facility is retired,
6 it may be necessary to amend this Agreement.

7
8 Amendments shall be made in accordance with OAR Chapter 345, Division 27 or EFSC rules
9 applicable and in effect at the time the amendment is sought.⁴

10
11 VIII. SUCCESSORS AND ASSIGNS

12
13 No site certificate, or any portion thereof, may be transferred, assigned, or disposed of in any
14 other manner, directly or indirectly, except in compliance with OAR 345-27-100 or EFSC rules
15 applicable and in effect at the time such action is proposed.

16
17 IX. SEVERABILITY AND CONSTRUCTION

18
19 If any provision of this agreement and site certificate is declared by a court to be illegal or in
20 conflict with any law, the validity of the remaining terms and conditions shall not be affected,
21 and the rights and obligations of the parties shall be construed and enforced as if the agreement
22 and site certificate did not contain the particular provision held to be invalid.

23
24 In the event of a conflict between the warranties and conditions contained in this site certificate
25 and EFSC's final order, the warranties and conditions contained in this site certificate shall
26 control.

⁴The Order Approving Amendment No. 1, on page 12, included the following:

“Notwithstanding the latter statement in Section VII, OAR 345-27-011 states that the Council's current rules in Division 27 do not apply to facilities for which a site certificate was executed before November 30, 1994, unless the site certificate is amended to include the applicability of the rules in this division. This amendment would apply the current rules at OAR 345-27-050 through OAR 345-27-080, and OAR 345-27-095 to this site certificate.

“PGE's request is consistent with the terms of the site certificate. It would be consistent with the other recommended amendments for the Council to amend the site certificate to incorporate specifically the applicability of OAR 345-27-050 through OAR 345-27-080 and OAR 345-27-095 to clarify that the Council will process subsequent requests for amendments or petitions by PGE under the Council's most current procedural rules.

“OE concludes that the application of these current rules would not create a threat to public health and safety or to the environment. OE supports this amendment. The Council agrees and finds that this amendment is appropriate.”

1 X. GOVERNING LAW AND FORUM

- 2
3 A. This agreement shall be governed by the laws of the State of Oregon.
4 B. Any litigation or arbitration arising out of this agreement shall be conducted in an
5 appropriate forum in Oregon.
6

7 XI. CONDITIONS ISSUED PURSUANT TO APPLICANT REPRESENTATIONS

8 References to page numbers and exhibits are to the Application for Site Certificate for the
9 CSCP. [Amendment 1, inclusive]
10

11 1. PGE, with respect to phase one, and CS2, with respect to phase two, shall notify the
12 Council of any modifications to the ownership of the controlling interest of their respective
13 corporations. [rev. Amendment 6]
14

15 2. PGE shall notify the Council of any change of the identity of the operator of the
16 facility.
17

18 3. NOx emissions shall be controlled to 25 ppm on natural gas. (p. B-3)
19

20 4. Each heat recovery steam generator shall be provided with an ammonia injection
21 system and selective catalytic reduction system to further reduce the NOx emissions at the
22 stack outlet. (p. B-4)
23

24 5. All chemicals listed in section 4.7 of Exhibit B shall be stored in approved storage
25 containers consistent with industry standards for the particular chemical. All chemical
26 storage systems shall have provisions for secondary containment to prevent uncontrolled
27 spills to the environment. (p. B-8)
28

29 6. PGE, with respect to phase one, and CS2, with respect to phase two, shall implement
30 fire protection and life safety design features as described at Section 4.10 of Exhibit B. (pp.
31 B-9 and B-10) [rev. Amendment 6]
32

33 7. The low NOx burners on the auxiliary boiler shall control emissions to a maximum of
34 40 ppm at the stack outlet. (p. B-12)
35

36 8. All equipment drain wastewater shall be processed in an oil/water separator designed
37 to remove oil contamination down to 10 ppm in the discharge water. Storm water collected
38 within the fuel tank area shall be ... processed through the facility oil/water separator down
39 to 10 ppm oil in the discharge water. (pp. B-11)
40

41 9. Code classifications and requirements described in Section 5.2 of Exhibit B shall
42 apply to the energy facility and to any modifications. (p. B-14)
43

44 10. Aircraft warning lights shall be installed on the heat recovery boiler stacks if required
45 by the FAA. (pp. B-22)

1
2 11. Equipment layout shall allow access for fire fighting or responses to any spills when
3 required. (p. B-29)
4

5 12. The facility shall be designed, constructed, tested and operated in accordance with the
6 codes and standards normally used for this type of facility. Where State of Oregon codes or
7 local codes specify added or more stringent requirements, these requirements shall be
8 incorporated into the facility design and construction. Codes listed in Exhibit B, Section
9 8.0 shall apply. (pp. B-30)
10

11 13. All of the equipment listed on Table B-2 may be constructed. PGE may construct the
12 fuel oil-related equipment shown on Figure B-M10. However, PGE shall not use fuel oil
13 for electric generation or steam production without prior Council approval.
14

15 14. Acid and caustic shall each be stored in individual carbon steel storage tanks. The
16 tanks shall be located above ground within a concrete containment bermed area. The
17 bermed area shall contain sump pumps allowing any leakage to be transferred to the
18 neutralization system. These tanks shall be located outdoors with appropriate weather
19 protection. Handling of these materials shall be in accordance with approved industry
20 standard practice as well as federal, state and local regulations. (p. F-4)
21

22 15. The ammonia storage system shall be designed to the requirements outlined in
23 American National Standard Institute (ANSI) K61.1, Safety Requirements for the Storage
24 and Handling of Anhydrous Ammonia. (p F-4)
25

26 16. The hydrogen storage and transfer system shall comply with the guidelines
27 established in section VIII of the American Society of Mechanical Engineers (ASME)
28 Boiler and Pressure Vessel Code and in ANSI B31.1 of the American National Standard
29 Code for Pressure Piping. Other codes that shall be followed include the National
30 Electrical Code (NEC) Article 500, NFPA 496, ANSI/AWS D1.1 The area immediately
31 around the hydrogen generators and storage system area shall be an NFPA/NEC Class I,
32 Division II, Group B Hazardous Area. (p. F-4)
33

34 17. For miscellaneous materials described in section 2.7 (p. F-6), appropriate safety
35 measures shall be taken around the storage sites. Handling and storage of these items shall
36 be strictly in accordance with approved procedures to provide safe storage of the
37 substances. (p. F-5)
38

39 18. To ensure proper safe handling of the natural gas, the entire system shall be installed
40 and operated in accordance with the NFPA 54; Natural Fuel Gas Code, Part 2; Gas Piping
41 System Design, Materials and Components, Part 3; Gas Pipe installation, Part 4; and
42 Inspection, Testing and Purging. The piping shall be designed in accordance with ANSI
43 B31.8. (p. F-6)
44

1 19. Fuel control systems on the gas turbines shall include separate fuel shutoff valves to
2 stop all fuel flow to the unit under shutdown conditions. Fuel flow shall restart when all
3 permissive firing condition have been satisfied. Each fuel shutoff valve shall have a
4 mechanical device for local manual tripping and a means for remote tripping. A vent valve
5 shall be provided on the fuel gas system to vent automatically the piping downstream of the
6 shutoff valve when the fuel shutoff valve closes. Gas shutoff valves shall be installed at the
7 utility pipeline connection point as well as at the facility. The area immediately around the
8 gas system shall be a NFPA/NEC Class I, Division II, Group D Hazardous Area.
9 Operations in the area shall be in accordance with this classification and accepted industrial
10 standards of practice and procedures. (p. F-7)

11
12 20. Management of non-fuel substances shall be conducted as described in section 3.2 of
13 the ASC. (pp. F-6 and F-7)

14
15 21. PGE, with respect to phase one, and CS2, with respect to phase two, shall handle and
16 dispose of construction waste as described in Section 4.1 of the ASC. (pp. F-7 and F-8).
17 [rev. Amendment 6]

18
19 22. Hazardous waste shall be stored no more than 90 days and transported to a licensed
20 treatment storage disposal facility. (p. F-9)

21
22 23. Waste oil shall be collected in a single underground storage tank and trucked offsite
23 to an approved recycling and disposal facility. The underground tank shall be of fiberglass
24 double wall construction to provide corrosion protection and secondary containment.
25 Leakage monitoring shall also be provided. (p. F-10)

26
27 24. PGE, with respect to phase one, and CS2, with respect to phase two, shall set back
28 heavy plant facilities a minimum of 60 feet from the edge of the irrigation pond to the east
29 of the facility site. (p. G-6) [rev. Amendment 6]

30
31 25. PGE, with respect to phase one, and CS2, with respect to phase two, shall plant fill
32 slopes with vegetation to prevent surface erosion. (p. G-7) [rev. Amendment 6]

33
34 26. PGE, with respect to phase one, and CS2, with respect to phase two, shall implement
35 mitigation measures as described in section 4.0 of the ASC. (p. G-8) [rev. Amendment 6]

36
37 27. PGE, with respect to phase one, and CS2, with respect to phase two, shall implement
38 mitigation measures to vegetation impacts described in section 6.0 of the ASC. (p. N-4)
39 [rev. Amendment 6]

40
41 28. PGE, with respect to phase one, and CS2, with respect to phase two, shall implement
42 mitigation measures described in section 5.0 of the ASC. (p. P-4) [rev. Amendment 6]

43
44 29. PGE, with respect to phase one, and CS2, with respect to phase two, shall implement
45 mitigation measures described in section 5.0. (p. R-10) [rev. Amendment 6]

1
2 30. PGE, with respect to phase one, and CS2, with respect to phase two, shall implement
3 mitigation measures described in Exhibit W, unless those are superseded by more detailed
4 measures described in the Council's final order of September 16, 1994 or in the site
5 certificate. [rev. Amendment 6]
6

7 XII. CONDITIONS ISSUED PURSUANT TO USING ALTERNATE FUEL IN A NATURAL
8 GAS-FIRED FACILITY [Amendment 2, inclusive]
9

10 1. The CSCP shall not exceed permitted emission levels, total emissions or the
11 allowable amount of distillate fuel use stated in its Air Contaminant Discharge Permit
12 (amended for distillate fuel burning). The CSCP's use of distillate fuel in its phase one
13 combustion turbine in any year shall not exceed an amount of 10 percent of the expected
14 total fuel use, on a Btu higher heating value basis. [rev. Amendment 3]
15

16 2. PGE shall not use #2 low sulfur distillate fuel oil in its phase one turbine at CSCP
17 prior to receiving an amended Air Contaminant Discharge Permit from the Department of
18 Environmental Quality authorizing it to burn distillate fuel. [rev. Amendment 3]
19

20 3. PGE shall prepare a Spill Prevention Control and Countermeasures Plan meeting
21 federal standards and fully implement it within one year of storing distillate fuel at CSCP.
22

23 4. PGE shall prepare a response plan meeting the requirements of a Federal Response
24 Plan for CSCP suitable for submission to the U.S. Environmental Protection Agency
25 Regional Administrator prior to beginning filling the second distillate oil storage tank.
26

27 IN WITNESS WHEREOF, this Site Certificate has been executed by the State of Oregon, acting
28 by and through its Energy Facility Siting Council, Portland General Electric, Coyote Springs 2,
29 LLC and Avista Corporation. [rev. Amendment 6; rev. Amendment 7]

Karen H. Green
Karen H. Green
Chair, Energy Facility Siting Council

Date: 2-22-01

Stephen M. Swann
On behalf of Portland General Electric Company

Date: 3/23/01 RS

Lloyd H. Meyer
On behalf of Coyote Springs 2, LLC

Date: 2/26/01

Scott M. ...
On behalf of Avista Corporation

Date: 2-28-01