AMENDMENT NUMBER THREE
TO THE
THERMAL POWER PLANT SITE CERTIFICATE
FOR THE
COYOTE SPRINGS COGENERATION PROJECT
August 28, 1998

This Amendment Number Three to the Thermal Power Plant Site Certificate for the Coyote Springs Cogeneration Project (CSCP) is issued and executed pursuant to the Order in the Matter of the Thermal Power Plant Site Certificate for the Coyote Springs Cogeneration Project Request for Amendment Number Three between the State of Oregon (State), acting by and through the Energy Facility Siting Council (EFSC), and Portland General Electric Company (PGE), an Oregon corporation.

This amendment removes the site certificate condition that requires the site certificate holder demonstrate compliance with the need for facility standard before extending the deadline for completion of construction of phase two and substitutes conditions relating to the carbon dioxide emissions standard, pursuant to ORS 469.409 and ORS 469.503(2).

II.B.1. paragraph 2:

The CSCP power generation facilities will consist of two natural gas-fired, combined combustion turbine cycle units. Primary power for each unit will be
supplied by either a General Electric 7FA gas turbine generator rated at 172.7 MW or a similar model gas turbine. For each unit, the high temperature exhaust from the gas turbine generator will be ducted to a heat recovery steam generator or boiler to generate steam. This steam will be used to drive a steam turbine generator with an electrical generation capacity of 79.3 MW. Steam used in power generation will be cooled and condensed back to water by a condenser or heat exchanger using the cooling tower method.

IV.

(5)(a) Prior to construction, the site certificate holder shall submit certification that at least 80 percent of the capacity from the proposed CSCP shall be used by an energy supplier in the Pacific Northwest Region as defined in 16 U.S.C. 839a(14). The capacity and energy of the CSCP shall be used by the site certificate holder for the benefit of its customers in its Oregon service territory. Except as required for financing purposes, the site certificate holder shall not sell or lease the facility and shall not contract for firm energy or firm capacity for the output of the facility for a term exceeding five years.

(b) In the event the site certificate holder does not complete construction of phase two within five years from the execution of the site certificate, prior to EFSC granting the site certificate holder an extension of the construction completion date for phase two, the site certificate holder shall demonstrate compliance with ORS 469.503(2) in lieu of compliance with Condition IV(5)(a).

V.A.2

(4) If the site certificate holder requests an extension of the construction completion deadline for phase two and the site certificate holder does not meet the requirements of Condition V.A.2(3) above, the site certificate holder shall demonstrate that the facility meets the requirements of ORS 469.5023(2) in order for EFSC to approve extending the deadline.

(5) In no event will EFSC grant an extension of the construction completion deadline for phase two of more than two years from the five year deadline specified in applicant’s warranty. The construction completion deadline for phase two, as specified in applicant’s warranty, or as may later be extended, will not be tolled for reason of appeal of the EFSC’s order.
V.A.3. Carbon Dioxide Emissions Standard for Phase Two: ORS 469.503(2)

(1) Prior to commencement of construction of phase two on an extended construction completion schedule pursuant to Condition V.A.2(4), the site certificate holder shall submit to the State of Oregon through the Council a bond, letter of credit or escrow account executed by the site certificate holder in the amount of the monetary path payment requirement (in 1998 dollars) as determined by the calculations set forth in Condition V.A.3.(4) and based on the estimated heat rate and capacity certified pursuant to Condition V.A.3.(5) below and as adjusted in accordance with the terms of this site certificate pursuant to Condition V.A.3(4)(d). For the purposes of this site certificate, the "monetary path payment requirement" means the offset funds determined pursuant to ORS 469.503(2)(c) and the selection and contracting funds determined pursuant to ORS 469.503(2)(d)(A)(ii) that the site certificate holder must disburse to the Oregon Climate Trust, as the qualified organization, pursuant to ORS 469.403(2)(d)(A). The calculation of 1998 dollars shall be made using the index set forth below in sub-section (c).

(a) In the event that the Council approves a new site certificate holder, the Council shall approve the bond, letter of credit or escrow account from the new site certificate holder(s) unless the Council finds that the proposed bond, letter of credit or escrow account does not provide comparable security to the bond, letter of credit or escrow account of the current site certificate holder. Such approval of a new bond, letter of credit or escrow account will not require a site certificate amendment. The bond, letter of credit or escrow account shall remain in effect until such time as the site certificate holder has disbursed the full amount of the monetary path payment requirement to the Oregon Climate Trust as provided in ORS 469.503(2)(d)(A).

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

(c) The calculation of 1998 dollars shall be made using the US Gross Domestic Product Deflator for Total Non-Residential Fixed Investment, as published by the US Department of Commerce, Bureau of Economic Analysis, or any successor agency ("the index"). The amount of the bond, letter of credit or escrow account shall increase annually by the percentage

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increase in the index and shall be pro-rated within the year to the date of
disbursement to the Oregon Climate Trust. If at any time the index is no
longer published, the Council shall select a comparable calculation of
1998 dollars. The bond, letter of credit or escrow account shall not be
subject to revocation prior to disbursement of the full monetary path
payment requirement, including any adjusted monetary path payment
requirement. The terms of the bond, letter of credit or escrow account and
identity of the issuer shall be subject to approval by the Council, which
approval shall not be unreasonably withheld.

(d) If the site certificate holder establishes an escrow account for the monetary
path payment requirement, the portion of any interest accruing in the
escrow account up to the time of disbursement to the Oregon Climate
Trust that is equivalent to the 1998 dollar index adjustment (described in
sub-section (c)) shall be for the benefit of the Oregon Climate Trust and
shall be disbursed to the Oregon Climate Trust for use as specified in ORS
469.503(2)(d)(A). Any remaining interest that exceeds the 1998 dollar
adjustment at the time of disbursement of funds to the Oregon Climate
Trust shall be disbursed to the site certificate holder on its request.

(2) The site certificate holder shall disburse to the Oregon Climate Trust offset
funds and contracting and selection funds as requested by the Oregon Climate
Trust up to the monetary path payment requirement as determined by the
calculations set forth in Condition V.A.3.(4) and based on the estimated heat
rate and capacity certified pursuant to Condition V.A.3.(5) below (in 1998
dollars) and as adjusted in accordance with the terms of this site certificate
pursuant to Condition V.A.3.(4)(d). Disbursements shall be made in response
to requests from the Oregon Climate Trust in accordance with the
requirements of ORS 469.503(2)(d)(A).

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

(4) The site certificate holder shall use the following methodology to calculate the
amount of the monetary path payment requirement that it must make available
to the qualified organization pursuant to ORS 469.503(2)(d)(A). All
calculations shall be made assuming that no steam is supplied for
cogeneration. The site certificate holder shall use the contracted design
parameters for capacity and heat rate for phase two that it reports pursuant to
Condition V.A.3.(5) to calculate the estimated monetary path payment requirement. The site certificate holder shall use the Year One Capacity and Year One Heat Rate that it reports for phase two pursuant to Condition V.A.3.(6) to calculate whether it owes additional monetary path payments.

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

(A) The site certificate holder shall multiply the nominal power of phase two (kW) while operating on natural gas by 8,760 hours. It shall then multiply that product by 30 years to determine the total net plant output (kWh) of phase two. It shall multiply the total net plant output of phase two by the heat rate (Btu/kWh) while operating on natural gas and by the carbon dioxide emission factor for natural gas (0.000117 lb. CO₂/Btu) to determine the total CO₂ emissions (lb.) from operating phase two. The site certificate holder shall calculate the CO₂ emissions rate (lb. CO₂/kWh) for phase two by dividing the total CO₂ emissions by the total net plant output for phase two;

(B) The site certificate holder shall subtract the carbon dioxide standard of 0.7 lb. CO₂/kWh from the CO₂ emissions rate for phase two to determine its excess CO₂ emissions rate (lb. CO₂/kWh);

(C) The site certificate holder shall multiply the total net plant output (kWh) for phase two by phase two’s excess CO₂ emissions rate (lb. CO₂/kWh). It shall then divide that product by 2,000 pounds to determine the total tons of CO₂ emissions the site certificate holder must mitigate (tons); then,

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

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

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

(d) When the site certificate holder submits the Year One Test report required in Condition V.A.3.(6), it shall increase its bond, letter of credit or escrow

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account for the monetary path payment requirement if the calculation
using reported data shows that the adjusted monetary path payment
requirement exceeds the monetary path payment requirement for which
the site certificate holder had provided a bond, letter of credit or escrow
account prior to commencing construction, pursuant to Condition .A.3.(1).

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

(B) In no case shall the site certificate holder diminish the bond, letter of
credit or escrow account it provided prior to commencing
construction or receive a refund from the qualified organization based
on the calculations made using the Year One Capacity and the Year
One Heat Rate.

(5) Prior to commencement of construction of phase two on an extended
construction completion schedule pursuant to Condition V.A.2(4), the site
certificate holder shall notify the Council in writing of its final selection of a
gas turbine vendor and shall submit written design information to the Council
sufficient to verify phase two’s designed new and clean heat rate and its
nominal electric generating capacity at average annual site conditions. The
report shall also include an affidavit or other evidence that the site certificate
holder or a vendor has guaranteed the heat rate.

(6) Within two months of completion of the first year of commercial operation of
phase two built on an extended construction completion schedule pursuant to
Condition V.A.2(4), the site certificate holder shall provide to the Council
pursuant to ORS 469.503(2)(e)(G) a test report (Year One Test) of the actual
heat rate (Year One Heat Rate) and nominal generating capacity (Year One
Capacity) for phase two, without degradation, assuming no steam is supplied
for cogeneration, as determined by a 100-hour test at full power completed
during the first 12 months of commercial operation, with the results adjusted
for the average annual site condition for temperature, barometric pressure and
relative humidity and use of alternative fuels, and using a rate of 117 pounds
of carbon dioxide per million Btu of natural gas fuel.

(7) The combustion turbine for phase two shall be fueled solely with natural gas
or with synthetic gas with a carbon content per million Btu no greater than
natural gas.

(8) If the site certificate holder operates phase two as a cogeneration facility, the
site certificate holder shall not use steam from phase two to replace steam
generated by a biomass fuel at an off-site industrial facility.
XII.

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

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

IN WITNESS WHEREOF, Amendment Number Three to the Site Certificate has been executed by the State of Oregon, acting by and through its Energy Facility Siting Council, and Portland General Electric Company.

ENERGY FACILITY SITING COUNCIL

By: __________________________ Date: August 28, 1998
Terry Edvalson, Chair

PORTLAND GENERAL ELECTRIC COMPANY

Walter E. Pollock

By: __________________________ Date: September 2, 1998

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