

SENATE AMENDMENTS TO SENATE BILL 101

By COMMITTEE ON BUSINESS AND TRANSPORTATION

May 6

1 On page 1 of the printed bill, line 2, delete “469.300 and”.

2 Delete lines 4 through 25 and delete pages 2 through 10 and insert:

3 **“SECTION 1. As used in sections 1 to 6 of this 2009 Act:**

4 **“(1) ‘Additional interest’ means:**

5 **“(a) The acquisition, by the holder of an interest in a generating facility located in**
6 **Oregon, of a separate interest in that generating facility that is producing energy and is in**
7 **service for tax purposes, commercially operable or in rates on July 1, 2010; and**

8 **“(b) The renewal of an existing contract of five or more years that includes the acqui-**
9 **sition of baseload electricity for an additional term of five or more years where the expected**
10 **greenhouse gas emissions profile of the contract renewal is substantially similar to that of**
11 **the previous contract.**

12 **“(2) ‘Annual plant capacity factor’ means the ratio of the electricity produced by a gen-**
13 **erating facility during one year, measured in kilowatt-hours, to the electricity the generating**
14 **facility could have produced if it had been operated at its rated capacity throughout the same**
15 **year, expressed in kilowatt-hours.**

16 **“(3)(a) ‘Baseload electricity’ means electricity produced by a generating facility that is**
17 **designed and intended, at the time a site certificate is issued to the owner of the facility, to**
18 **provide electricity on a continuous basis at an annual plant capacity factor of at least 60**
19 **percent.**

20 **“(b) ‘Baseload electricity’ does not include electricity from:**

21 **“(A) A qualifying facility under the federal Public Utility Regulatory Policies Act of 1978,**
22 **16 U.S.C. 2601 to 2645; or**

23 **“(B) A generating source that uses natural gas or petroleum distillates as a fuel source**
24 **and that is primarily used to serve either peak demand or to integrate energy from a**
25 **renewable energy source described in ORS 469A.025.**

26 **“(4) ‘Construction’ has the meaning given that term in ORS 469.300.**

27 **“(5) ‘Consumer-owned utility’ has the meaning given that term in ORS 757.600.**

28 **“(6) ‘Electric company’ has the meaning given that term in ORS 757.600.**

29 **“(7) ‘Electricity service supplier’ has the meaning given that term in ORS 757.600.**

30 **“(8) ‘Generating facility’ includes one or more jointly operated electricity generators that**
31 **use the same fuel type, have the same in-service date and operate at the same location as**
32 **described in ORS 469.300.**

33 **“(9) ‘Governing board’ means the legislative authority of a consumer-owned utility.**

34 **“(10)(a) ‘Long-term financial commitment’ means an investment in or upgrade of a gen-**
35 **erating facility that produces baseload electricity, or a contract with a term of more than**

1 five years that includes acquisition of baseload electricity.

2 “(b) ‘Long-term financial commitment’ does not include:

3 “(A) Routine or necessary maintenance;

4 “(B) Installation of emission control equipment;

5 “(C) Installation, replacement or modification of equipment that improves the heat rate
6 of the facility or reduces a generating facility’s pounds of greenhouse gases per megawatt-
7 hour of electricity;

8 “(D) Installation, replacement or modification of equipment where the primary purpose
9 is to maintain reliable generation output capability and not to extend the life of the gener-
10 ating facility, and that does not increase the heat input or fuel usage as specified in existing
11 generation air quality permits, but that may result in incidental increases in generation ca-
12 pacity;

13 “(E) Repairs necessitated by sudden and unexpected equipment failure; or

14 “(F) An acquisition of an additional interest.

15 “(11) ‘Output-based methodology’ means a greenhouse gas emissions standard that is
16 expressed in pounds of greenhouse gases emitted per megawatt-hour, factoring in the useful
17 thermal energy employed for purposes other than the generation of electricity.

18 “(12) ‘Site certificate’ has the meaning given that term in ORS 469.300.

19 “(13) ‘Upgrade’ means any modification made for the primary purpose of increasing the
20 electric generation capacity of a baseload facility.

21 “SECTION 2. (1) Unless modified by rule by the Public Utility Commission as provided in
22 this section, the greenhouse gas emissions standard that applies to electric companies and
23 electricity service suppliers is 1,100 pounds of greenhouse gases per megawatt-hour for a
24 generating facility.

25 “(2) Unless modified pursuant to subsection (4) of this section, the greenhouse gas
26 emissions standard applies only to carbon dioxide emissions.

27 “(3) For purposes of applying the emissions standard to cogeneration facilities, the com-
28 mission shall establish an output-based methodology to ensure that the calculation of emis-
29 sions of greenhouse gases for cogeneration facilities recognizes the total usable energy
30 output of the process and includes all greenhouse gases emitted by the facility in the pro-
31 duction of both electrical and thermal energy.

32 “(4) The commission shall review the greenhouse gas emissions standard established un-
33 der this section no more than once every three years. After public notice and hearing, and
34 consultation with the State Department of Energy, the commission may:

35 “(a) Modify the emissions standard to include other greenhouse gases as defined in ORS
36 468A.210, with the other greenhouse gases expressed as their carbon dioxide equivalent; and

37 “(b) Modify the emissions standard based upon current information on the rate of
38 greenhouse gas emissions from a commercially available combined-cycle natural gas gener-
39 ating facility that:

40 “(A) Employs a combination of one or more gas turbines and one or more steam turbines
41 and produces electricity in the steam turbines from waste heat produced by the gas turbines;

42 “(B) Has a heat rate at high elevation within the boundaries of the Western Electricity
43 Coordinating Council; and

44 “(C) Has a heat rate at ambient temperatures when operating during the hottest day of
45 the year.

1 “(5) In modifying the greenhouse gas emissions standard, the commission shall:

2 “(a) Use an output-based methodology to ensure that the calculation of greenhouse gas
3 emissions through cogeneration recognizes the total usable energy output of the process and
4 includes all greenhouse gases emitted by the generating facility in the production of both
5 electrical and thermal energy; and

6 “(b) Consider the effects of the emissions standard on system reliability and overall costs
7 to electricity consumers.

8 “(6) If upon a review conducted pursuant to subsection (4) of this section, the commis-
9 sion determines that a mandatory greenhouse gas emissions limit has been established pur-
10 suant to state or federal law, the commission shall issue a report to the appropriate
11 legislative committees of the Legislative Assembly stating which portions, if any, of the
12 greenhouse gas emissions standard are no longer necessary as a matter of state law.

13 “(7) Modifications to the emissions standard made pursuant to this section do not apply
14 to long-term financial commitments entered into prior to the time of such modification. A
15 long-term financial commitment begins upon execution of a contract for the acquisition of
16 baseload electricity or upon construction of a generating facility.

17 “SECTION 3. (1) Unless modified by rule by the State Department of Energy as provided
18 in this section, the greenhouse gas emissions standard that applies to consumer-owned util-
19 ities is 1,100 pounds of greenhouse gases per megawatt-hour for a generating facility.

20 “(2) Unless modified pursuant to subsection (4) of this section, the greenhouse gas
21 emissions standard includes only carbon dioxide emissions.

22 “(3) For purposes of applying the emissions standard to cogeneration facilities, the de-
23 partment shall establish an output-based methodology to ensure that the calculation of
24 emissions of greenhouse gases for cogeneration facilities recognizes the total usable energy
25 output of the process and includes all greenhouse gases emitted by the facility in the pro-
26 duction of both electrical and thermal energy.

27 “(4) The department shall review the greenhouse gas emissions standard established un-
28 der this section no more than once every three years. After public notice and hearing, and
29 consultation with the Public Utilities Commission, the department may:

30 “(a) Modify the emissions standard to include other greenhouse gases as defined in ORS
31 468A.210, with the other greenhouse gases expressed as their carbon dioxide equivalent; and

32 “(b) Modify the emissions standard based upon current information on the rate of
33 greenhouse gas emissions from a commercially available combined-cycle natural gas gener-
34 ating facility that:

35 “(A) Employs a combination of one or more gas turbines and one or more steam turbines
36 and produces electricity in the steam turbines from waste heat produced by the gas turbines;

37 “(B) Has a heat rate at high elevation within the boundaries of the Western Electricity
38 Coordinating Council; and

39 “(C) Has a heat rate at ambient temperatures when operating during the hottest day of
40 the year.

41 “(5) In modifying the greenhouse gas emissions standard, the department shall:

42 “(a) Use an output-based methodology to ensure that the calculation of greenhouse gas
43 emissions through cogeneration recognizes the total usable energy output of the process and
44 includes all greenhouse gases emitted by the generating facility in the production of both
45 electrical and thermal energy; and

1 “(b) Consider the effects of the emissions standard on system reliability and overall costs
2 to electricity consumers.

3 “(6) If upon a review conducted pursuant to subsection (4) of this section, the department
4 determines that a mandatory greenhouse gas emissions limit has been established pursuant
5 to state or federal law, the department shall issue a report to the appropriate legislative
6 committees of the Legislative Assembly stating which portions, if any, of the greenhouse gas
7 emissions standard are no longer necessary as a matter of state law.

8 “SECTION 4. (1)(a) An electric company or electricity service supplier may not enter into
9 a long-term financial commitment unless the baseload electricity acquired under the com-
10 mitment is produced by a generating facility that complies with a greenhouse gas emissions
11 standard established under section 2 of this 2009 Act.

12 “(b) A generating facility complies with the greenhouse gas emissions standard estab-
13 lished under section 2 of this 2009 Act if the rate of emissions of the facility does not exceed
14 the emissions standard.

15 “(c) In determining whether a generating facility complies with the emissions standard,
16 the total emissions associated with producing baseload electricity at the generating facility
17 are included in determining the rate of emissions of greenhouse gases. The total emissions
18 associated with producing electricity at the generating facility do not include emissions as-
19 sociated with transportation, fuel extraction or other life-cycle emissions associated with
20 obtaining the fuel for the facility.

21 “(2) Notwithstanding subsection (1) of this section, the emissions standard does not apply
22 to greenhouse gas emissions produced by a generating facility owned by an electric company
23 or electricity service supplier or contracted through a long-term financial commitment if the
24 emissions:

25 “(a) Come from a facility powered exclusively by renewable energy sources described in
26 ORS 469A.025;

27 “(b) Come from a cogeneration facility in this state that is fueled by natural gas, syn-
28 thetic gas, distillate fuels, waste gas or a combination of these fuels, and that is producing
29 energy, in service for tax purposes, commercially operable, or in rates as of July 1, 2010, until
30 the facility is subject to a new long-term financial commitment; or

31 “(c) Come from a generating facility that has in place a plan, as determined by the Public
32 Utility Commission, to be a low-carbon emissions resource, pursuant to sufficient technical
33 documentation, within seven years of commencing plant operations.

34 “(3) Notwithstanding section 2 of this 2009 Act and subsection (1) of this section, the
35 commission may exempt a long-term financial commitment by an electric company or an
36 electricity service supplier from the greenhouse gas emissions standard if the commission
37 finds that the commitment is a necessary and prudent response to:

38 “(a) Unanticipated electricity system reliability needs; or

39 “(b) Catastrophic events or threat of significant financial harm that may arise from un-
40 foreseen circumstances.

41 “(4) Notwithstanding subsection (1) of this section, an electric company may enter into
42 a long-term financial commitment that does not meet the emissions standard established
43 under section 2 of this 2009 Act if the electric company does not seek recovery of the costs
44 in retail sales in this state.

45 “(5) The commission by rule shall establish:

1 “(a) Standards for identifying contracts for electricity for which the emissions cannot
2 readily be determined with any specificity; and

3 “(b) Emissions to be attributed to such contracts for purposes of determining compliance
4 with the emissions standard established under section 2 of this 2009 Act.

5 “**SECTION 5.** (1)(a) A governing board of a consumer-owned utility may not enter into a
6 long-term financial commitment unless the baseload electricity acquired under the commit-
7 ment is produced by a generating facility that complies with a greenhouse gas emissions
8 standard established under section 3 of this 2009 Act.

9 “(b) A generating facility complies with the greenhouse gas emissions standard estab-
10 lished under section 3 of this 2009 Act if the rate of emissions of the facility does not exceed
11 the emissions standard.

12 “(c) In determining whether a generating facility complies with the emissions standard,
13 the total emissions associated with producing baseload electricity at the generating facility
14 shall be included in determining the rate of emissions of greenhouse gases. The total emis-
15 sions associated with producing electricity at the generating facility do not include emissions
16 associated with transportation, fuel extraction or other life-cycle emissions associated with
17 obtaining the fuel for the facility.

18 “(2) Notwithstanding subsection (1) of this section, the emissions standard does not apply
19 to greenhouse gas emissions produced by a generating facility owned by a consumer-owned
20 utility or contracted through a long-term financial commitment if the emissions:

21 “(a) Come from a facility powered exclusively by renewable energy sources described in
22 ORS 469A.025;

23 “(b) Come from a cogeneration facility in this state that is fueled by natural gas, syn-
24 thetic gas, distillate fuels, waste gas or a combination of these fuels, and that is producing
25 energy, in service for tax purposes, commercially operable, or in rates as of July 1, 2010, until
26 the facility is subject to a new long-term financial commitment; or

27 “(c) Come from a generating facility that has in place a plan to be a low-carbon emission
28 resource, as determined by the State Department of Energy, pursuant to sufficient technical
29 documentation, within seven years of commencing plant operations.

30 “(3) The governing board may provide an exemption for an individual generating facility
31 from the emissions performance standard to address:

32 “(a) Unanticipated electricity system reliability needs;

33 “(b) Catastrophic events or threat of significant financial harm that may arise from un-
34 foreseen circumstances; or

35 “(c) Long-term financial commitments between members of a joint operating entity re-
36 cognized under federal law or the joint operating entity’s predecessor organization, or with
37 the joint operating entity for a baseload resource that the consumer-owned utility had an
38 ownership interest in prior to July 1, 2010.

39 “(4) A governing board shall report to the consumer-owned utility’s customers or mem-
40 bers and to the State Department of Energy information on any case-by-case exemption from
41 the emissions performance standard granted by the governing board.

42 “(5) For purposes of sections 1 to 6 of this 2009 Act, a long-term financial commitment
43 for a consumer-owned utility does not include agreements to purchase electricity from the
44 Bonneville Power Administration.

45 “(6) The department by rule shall establish:

1 “(a) Standards for identifying contracts for electricity for which the emissions cannot
2 readily be determined with any specificity; and

3 “(b) Emissions to be attributed to such contracts for purposes of determining compliance
4 with the emissions standard established under section 3 of this 2009 Act.

5 “**SECTION 6.** (1)(a) The Public Utility Commission may not acknowledge in an integrated
6 resource plan, or allow in customer rates, the costs of a long-term financial commitment by
7 an electric company or by an electricity service supplier unless the baseload electricity pro-
8 posed to be acquired under the commitment is produced by a generating facility that com-
9 plies with the greenhouse gas emissions standard established under section 2 of this 2009 Act.

10 “(b) The commission shall revoke the certification under ORS 757.649 of an electricity
11 service supplier entering into a long-term financial commitment to serve customers in this
12 state if baseload electricity acquired under the commitment is produced by a generating fa-
13 cility that does not comply with the greenhouse gas emissions performance standard estab-
14 lished under section 2 of this 2009 Act.

15 “(2) Pursuant to ORS 756.040, the commission shall adopt rules for the implementation
16 of this section.

17 “(3) Within 90 days of application by an electric company or electricity service supplier,
18 the commission shall determine whether the electric company’s or electricity service sup-
19 plier’s proposal to enter into a long-term financial commitment complies with the
20 greenhouse gas emissions standard established under section 2 of this 2009 Act. The com-
21 mission may not decide in a proceeding under this subsection issues involving the actual
22 costs to construct and operate the selected resource, cost recovery or other issues reserved
23 by the commission for decision in a general rate case or other proceeding for recovery of the
24 resource or contract costs.

25 “**SECTION 7.** ORS 469.320 is amended to read:

26 “469.320. (1) Except as provided in subsections (2) and (5) of this section, no facility shall be
27 constructed or expanded unless a site certificate has been issued for the site thereof in the manner
28 provided in ORS 469.300 to 469.563, 469.590 to 469.619, 469.930 and 469.992. No facility shall be
29 constructed or operated except in conformity with the requirements of ORS 469.300 to 469.563,
30 469.590 to 469.619, 469.930 and 469.992.

31 “(2) A site certificate is not required for:

32 “(a) An energy facility for which no site certificate has been issued that, on August 2, 1993, had
33 operable electric generating equipment for a modification that uses the same fuel type and increases
34 electric generating capacity, if:

35 “(A) The site is not enlarged; and

36 “(B) The ability of the energy facility to use fuel for electricity production under peak steady
37 state operating conditions is not more than 200 million Btu per hour greater than it was on August
38 2, 1993, or the energy facility expansion is called for in the short-term plan of action of an energy
39 resource plan that has been acknowledged by the Public Utility Commission of Oregon.

40 “(b) Construction or expansion of any interstate natural gas pipeline or associated underground
41 natural gas storage facility authorized by and subject to the continuing regulation of the Federal
42 Energy Regulatory Commission or successor agency.

43 “(c) An energy facility, except coal and nuclear power plants, if the energy facility:

44 “(A) Sequentially produces electrical energy and useful thermal energy from the same fuel
45 source; and

1 “(B) Under [normal] **average annual** operating conditions, has a [*useful thermal energy output*
2 *of no less than 33 percent of the total energy output or the*] **nominal electric generating capacity:**

3 “(i) **Of less than 50 megawatts and the fuel chargeable to power heat rate value is not**
4 **greater than 6,000 Btu per kilowatt hour[.];**

5 “(ii) **Of 50 megawatts or more and the fuel chargeable to power heat rate value is not**
6 **greater than 5,500 Btu per kilowatt hour; or**

7 “(iii) **Specified by the Energy Facility Siting Council by rule based on the council’s de-**
8 **termination relating to emissions of the energy facility.**

9 “(d) Temporary storage, at the site of a nuclear-fueled thermal power plant for which a site
10 certificate has been issued by the State of Oregon, of radioactive waste from the plant.

11 “(e) An energy facility as defined in ORS 469.300 (11)(a)(G), if the plant also produces a sec-
12 ondary fuel used on site for the production of heat or electricity, if the output of the primary fuel
13 is less than six billion Btu of heat a day.

14 “(f) An energy facility as defined in ORS 469.300 (11)(a)(G), if the facility:

15 “(A) Exclusively uses biomass, including but not limited to grain, whey, potatoes, oil seeds,
16 waste vegetable oil or cellulosic biomass, as the source of material for conversion to a liquid fuel;

17 “(B) Has received local land use approval under the applicable acknowledged comprehensive
18 plan and land use regulations of the affected local government and the facility complies with any
19 statewide planning goals or rules of the Land Conservation and Development Commission that are
20 directly applicable to the facility;

21 “(C) Requires no new electric transmission lines or gas or petroleum product pipelines that
22 would require a site certificate under subsection (1) of this section;

23 “(D) Produces synthetic fuel, at least 90 percent of which is used in an industrial or refueling
24 facility located within one mile of the facility or is transported from the facility by rail or barge;
25 and

26 “(E) Emits less than 118 pounds of carbon dioxide per million Btu from fossil fuel used for con-
27 version energy.

28 “(g) A standby generation facility, if the facility complies with all of the following:

29 “(A) The facility has received local land use approval under the applicable acknowledged com-
30 prehensive plan and land use regulations of the affected local government and the facility complies
31 with all statewide planning goals and applicable rules of the Land Conservation and Development
32 Commission;

33 “(B) The standby generators have been approved by the Department of Environmental Quality
34 as having complied with all applicable air and water quality requirements. For an applicant that
35 proposes to provide the physical facilities for the installation of standby generators, the requirement
36 of this subparagraph may be met by agreeing to require such a term in the lease contract for the
37 facility; and

38 “(C) The standby generators are electrically incapable of being interconnected to the trans-
39 mission grid. For an applicant that proposes to provide the physical facilities for the installation of
40 standby generators, the requirement of this subparagraph may be met by agreeing to require such
41 a term in the lease contract for the facility.

42 “(3) The Energy Facility Siting Council may review and, if necessary, revise the fuel chargeable
43 to power heat rate value set forth in subsection (2)(c)(B) of this section. In making its determination,
44 the council shall ensure that the fuel chargeable to power heat rate value for facilities set forth in
45 subsection (2)(c)(B) of this section remains significantly lower than the fuel chargeable to power

1 heat rate value for the best available, commercially viable thermal power plant technology at the
2 time of the revision.

3 “(4) Any person who proposes to construct or enlarge an energy facility and who claims an ex-
4 emption under subsection (2)(a), (c), (f) or (g) of this section from the requirement to obtain a site
5 certificate shall request the Energy Facility Siting Council to determine whether the proposed fa-
6 cility qualifies for the claimed exemption. The council shall make its determination within 60 days
7 after the request for exemption is filed. An appeal from the council’s determination on a request for
8 exemption shall be made under ORS 469.403, except that the scope of review by the Supreme Court
9 shall be the same as a review by a circuit court under ORS 183.484. The record on review by the
10 Supreme Court shall be the record established in the council proceeding on the exemption.

11 “(5) Notwithstanding subsection (1) of this section, a separate site certificate shall not be re-
12 quired for:

13 “(a) Transmission lines, storage facilities, pipelines or similar related or supporting facilities, if
14 such related or supporting facilities are addressed in and are subject to a site certificate for another
15 energy facility;

16 “(b) Expansion within the site or within the energy generation area of a facility for which a site
17 certificate has been issued, if the existing site certificate has been amended to authorize expansion;
18 or

19 “(c) Expansion, either within the site or outside the site, of an existing council certified surface
20 facility related to an underground gas storage reservoir, if the existing site certificate is amended
21 to authorize expansion.

22 “(6) If the substantial loss of the steam host causes a facility exempt under subsection (2)(c) of
23 this section to substantially fail to meet the exemption requirements under subsection (2)(c) of this
24 section, the electric generating facility shall cease to operate one year after the substantial loss of
25 the steam host unless an application for a site certificate has been filed in accordance with the
26 provisions of ORS 469.300 to 469.563.

27 “(7) As used in this section:

28 “(a) ‘Standby generation facility’ means an electric power generating facility, including standby
29 generators and the physical structures necessary to install and connect standby generators, that
30 provides temporary electric power in the event of a power outage and that is electrically incapable
31 of being interconnected with the transmission grid.

32 “(b) ‘Total energy output’ means the sum of useful thermal energy output and useful electrical
33 energy output.

34 “(c) ‘Useful thermal energy’ means the verifiable thermal energy used in any viable industrial
35 or commercial process, heating or cooling application.

36 “(8) Notwithstanding the definition of ‘energy facility’ in ORS 469.300 (11)(a)(J), an electric
37 power generating plant with an average electric generating capacity of less than 35 megawatts
38 produced from wind energy at a single energy facility or within a single energy generation area may
39 elect to obtain a site certificate in the manner provided in ORS 469.300 to 469.563, 469.590 to
40 469.619, 469.930 and 469.992. An election to obtain a site certificate under this subsection shall be
41 final upon submission of an application for a site certificate.

42 **“SECTION 8. The Public Utility Commission and the State Department of Energy shall**
43 **adopt rules as necessary to implement sections 1 to 6 of this 2009 Act.**

44 **“SECTION 9. (1) The Public Utility Commission shall develop estimates of the rate im-**
45 **pacts for electric companies and natural gas companies to meet the following alternative**

1 **greenhouse gas emission reduction goals for 2020:**
2 “(a) Ten percent below 1990 levels, as specified in ORS 468A.205; and
3 “(b) Fifteen percent below 2005 levels.
4 “(2) The commission shall submit a report presenting the estimates and explaining the
5 analysis used to develop the estimates to the appropriate interim committee of the Legisla-
6 tive Assembly prior to November 1 of each even-numbered year.
7 “SECTION 10. Section 9 of this 2009 Act is repealed on January 2, 2020.
8 “SECTION 11. Sections 1 to 6 of this 2009 Act and the amendments to ORS 469.320 by
9 section 7 of this 2009 Act become operative July 1, 2010.”.
10 _____