AMENDED IN SENATE MARCH 26, 2015 AMENDED IN SENATE MARCH 12, 2015

SENATE BILL

No. 180

Introduced by Senator Jackson

February 9, 2015

An act to add Section 25544 to the Public Resources Code, and to amend the heading of Chapter 3 (commencing with Section 8340) of Division 4.1 of, and to amend, repeal, and add Sections 8340 and 8341 of, the Public Utilities Code, relating to electricity.

LEGISLATIVE COUNSEL'S DIGEST

SB 180, as amended, Jackson. Electricity: emissions of greenhouse gases.

Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations while local publicly owned electric utilities are under the direction of their governing board. Existing law prohibits any load-serving entity and any local publicly owned electric utility from entering into a long-term financial commitment for baseload generation unless that baseload generation complies with a greenhouse gases emission performance standard. Existing law requires the Public Utilities Commission, by February 1, 2007, through a rulemaking proceeding and in consultation with the State Energy Resources Conservation and Development Commission and the State Air Resources Board, to establish a greenhouse gases emission performance standard for all baseload generation of load-serving entities. Existing law requires the State Energy Resources Conservation and Development Commission, by June 30, 2007, at a duly noticed public hearing and in consultation with the Public Utilities Commission and the State Air Resources Board, to

SB 180 -2-

establish a greenhouse gases emission performance standard for all baseload generation of local publicly owned electric utilities.

This bill would, on July 1, 2017, replace the greenhouse gases emission performance standards for baseload generation with greenhouse gases emission performance standards for nonpeaking generation and peaking generation, as defined. generation. The bill would require the Public Utilities Commission, by June 30, 2017, through a rulemaking proceeding and in consultation with the State Energy Resources Conservation and Development Commission and the State Air Resources Board, to establish a greenhouse gases emission performance standard for all nonpeaking generation of load-serving entities, and a separate standard for peaking generation. The bill would require the State Energy Resources Conservation and Development Commission, by June 30, 2017, at a duly noticed public hearing and in consultation with the Public Utilities Commission and the State Air Resources Board, to establish a greenhouse gases emission performance standard for all nonpeaking generation of local publicly owned electric utilities, and a separate standard for peaking generation. The bill would require that the greenhouse gases emission performance standard for nonpeaking generation and peaking generation be established at the lowest level that the respective commissions determine to be technologically feasible without putting reliability of the electrical grid and of electric service at risk. The bill would require that the commissions update their respective greenhouse gases emission performance standards every 5 years based on new technology. The bill would require that the greenhouse gases emission performance standard for nonpeaking generation that will take effect on July 1, 2027, establish a rate of emissions of greenhouse gases that is 80% lower than the permissible rate of emissions of greenhouse gases for baseload generation in effect as of January 1, 2015. has an initial cap that is not higher than the rate of emissions of greenhouse gases for the lowest-emitting combined-cycle natural gas powerplant in operation at that time.

Existing law makes any public utility that fails to comply with any part of any order, decision, rule, direction, demand, or requirement of the commission guilty of a crime. Existing law additionally makes every corporation or person other than a public utility who fails to comply with any part of any order, decision, rule, direction, demand, or requirement of the commission guilty of a crime.

Because this bill would require action by the Public Utilities Commission to implement its requirements with respect to a load-serving _3_ SB 180

entity, and a violation of an order or decision of the Public Utilities Commission would be a crime, the bill would impose a state-mandated local program by expanding what is a crime.

The Warren-Alquist State Energy Resources Conservation and Development Act establishes the State Energy Resources Conservation and Development Commission and requires it to certify sufficient sites and related facilities that are required to provide a supply of electricity sufficient to accommodate projected demand for power statewide. The act grants the commission the exclusive authority to certify any stationary or floating electrical generating facility using any source of thermal energy, with a generating capacity of 50 megawatts or more, and any facilities appurtenant thereto.

The California Environmental Quality Act (CEQA) generally requires all state and local governmental lead agencies to prepare, or cause to be prepared by contract, and certify the completion of, an environmental impact report on any discretionary project that they propose to carry out or approve that may result in a significant effect on the environment, that is, a substantial, or potentially substantial, adverse change in the physical conditions that exist within the area that will be affected by the project. CEQA authorizes the plan or other written documentation containing environmental information of state agencies to be submitted in lieu of an otherwise required environmental impact report if the Secretary of the Natural Resources Agency has certified the regulatory program in a specified manner.

This bill would provide that any carbon capture and storage project associated with an application for certification is a related facility for purposes of the certification of a thermal powerplant by the State Energy Resources Conservation and Development Commission and for purposes of the secretary's authority with respect to a certified regulatory program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

SB 180 —4—

The people of the State of California do enact as follows:

SECTION 1. Section 25544 is added to the Public Resources Code, to read:

25544. Any carbon capture and storage project associated with an application for certification is a related facility pursuant to this chapter and for purposes of Section 21080.5. For purposes of this section, "carbon capture and storage," also known as carbon capture and sequestration, means any method authorized by the commission for preventing the release of greenhouse gases into the atmosphere, including the injection of carbon dioxide or other greenhouse gases into geological formations so as to prevent releases into the atmosphere.

SEC. 2. The heading of Chapter 3 (commencing with Section 8340) of Division 4.1 of the Public Utilities Code is amended to read:

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Chapter 3. Greenhouse Gases Emission Performance Standard

- SEC. 3. Section 8340 of the Public Utilities Code is amended to read:
- 21 8340. For purposes of this chapter, the following terms have the following meanings:
 - (a) "Baseload generation" means electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 60 percent.
 - (b) "Combined-cycle natural gas" with respect to a powerplant means the powerplant employs a combination of one or more gas turbines and steam turbines in which electricity is produced in the steam turbine from otherwise lost waste heat exiting from one or more of the gas turbines.
 - (c) "Electric service provider" means an "electric service provider" as defined in Section 218.3, but does not include corporations or persons employing cogeneration technology or producing electricity from other than a conventional power source consistent with subdivision (b) of Section 218.
- 36 (d) "Greenhouse gases" means those gases listed in Section37 38505 of the Health and Safety Code.

5 SB 180

(e) "Load-serving entity" means every electrical corporation, electric service provider, or community choice aggregator serving end-use customers in the state.

- (f) "Long-term financial commitment" means either a new ownership investment in baseload generation or a new or renewed contract with a term of five or more years, which includes procurement of baseload generation.
- (g) "Output-based methodology" means a greenhouse gases emission performance standard that is expressed in pounds of greenhouse gases emitted per megawatthour and factoring in the useful thermal energy employed for purposes other than the generation of electricity.
- (h) "Plant capacity factor" means the ratio of the electricity produced during a given time period, measured in kilowatthours, to the electricity the unit could have produced if it had been operated at its rated capacity during that period, expressed in kilowatthours.
- (i) "Powerplant" means a facility for the generation of electricity, and includes one or more generating units at the same location.
- (j) "Zero- or low-carbon generating resource" means an electrical generating resource that will generate electricity while producing emissions of greenhouse gases at a rate substantially below the greenhouse gases emission performance standard, as determined by the commission.
- (k) This section shall become inoperative on July 1, 2017, and, as of January 1, 2018, is repealed.
- SEC. 4. Section 8340 is added to the Public Utilities Code, to read:
- 8340. For purposes of this chapter, the following terms have the following meanings:
- (a) "Electric service provider" has the same meaning as defined in Section 218.3, but does not include corporations or persons employing cogeneration technology or producing electricity from other than a conventional power source consistent with subdivision (b) of Section 218.
- (b) "Exempt generation" means electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of less than 2 percent.

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SB 180 —6—

1 (b) "Greenhouse gases" means those gases listed in Section 2 38505 of the Health and Safety Code.

(d)

(c) "Greenhouse gases emission performance standard" means the permissible levels of emissions of greenhouse gases established pursuant to Section 8341 for nonpeaking generation and peaking generation.

(e)

(d) "Load-serving entity" means every electrical corporation, electric service provider, or community choice aggregator serving end-use customers in the state.

12 (f)

(e) "Long-term financial commitment" means either a new ownership investment in nonpeaking generation or peaking generation or a new or renewed contract with a term of five or more years, which includes procurement of nonpeaking generation or peaking generation.

(g)

(f) "Nonpeaking generation" means electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 15 percent. to be determined by the commission and the Energy Commission, in consultation with the Independent System Operator. In making this determination, consideration shall be given to both current energy generation needs, as well as energy generation needs as the greenhouse gases emission performance standards for nonpeaking generation are implemented. "Nonpeaking powerplant" means a powerplant that provides nonpeaking generation.

(h)

(g) "Output-based methodology" means a greenhouse gases emission performance standard that is expressed in pounds of greenhouse gases emitted per megawatthour and factoring in the useful thermal energy employed for purposes other than the generation of electricity.

(i)

(h) "Peaking generation" means electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor—of less than 15 percent and at least 2 percent. to be determined by the commission and the Energy Commission, in consultation with the Independent System

__7__ SB 180

Operator. In making this determination, consideration shall be given to both current energy generation needs, as well as energy generation needs as the greenhouse gases emission performance standards for peaking generation are implemented. "Peaking powerplant" means a powerplant that provides peaking generation.

(i) "Plant capacity factor" means the ratio of the electricity produced during a given time period, measured in kilowatthours, to the electricity the unit could have produced if it had been operated at its rated capacity during that period, expressed in kilowatthours.

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(*j*) "Powerplant" means a facility for the generation of electricity, and includes one or more generating units at the same location.

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(k) "Zero- or low-carbon generating resource" means an electrical generating resource that will generate electricity while producing emissions of greenhouse gases at a rate substantially below the greenhouse gases emission performance standard, as determined by the commission.

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- (*l*) This section shall become operative on January 1, 2017. SEC. 5. Section 8341 of the Public Utilities Code is amended
- 8341. (a) No load-serving entity or local publicly owned electric utility may enter into a long-term financial commitment unless any baseload generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission, pursuant to subdivision (d), for a load-serving entity, or by the Energy Commission, pursuant to subdivision (e), for a local publicly owned electric utility.
- (b) (1) The commission shall not approve a long-term financial commitment by an electrical corporation unless any baseload generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission pursuant to subdivision (d).
- (2) The commission may, in order to enforce this section, review any long-term financial commitment proposed to be entered into by an electric service provider or a community choice aggregator.

SB 180 —8—

(3) The commission shall adopt rules to enforce the requirements of this section, for load-serving entities. The commission shall adopt procedures, for all load-serving entities, to verify the emissions of greenhouse gases from any baseload generation supplied under a contract subject to the greenhouse gases emission performance standard to ensure compliance with the standard.

- (4) In determining whether a long-term financial commitment is for baseload generation, the commission shall consider the design of the powerplant and the intended use of the powerplant, as determined by the commission based upon the electricity purchase contract, any certification received from the Energy Commission, any other permit or certificate necessary for the operation of the powerplant, including a certificate of public convenience and necessity, any procurement approval decision for the load-serving entity, and any other matter the commission determines is relevant under the circumstances.
- (5) Costs incurred by an electrical corporation to comply with this section, including those costs incurred for electricity purchase agreements that are approved by the commission that comply with the greenhouse gases emission performance standard, are to be treated as procurement costs incurred pursuant to an approved procurement plan and the commission shall ensure timely cost recovery of those costs pursuant to paragraph (3) of subdivision (d) of Section 454.5.
- (6) A long-term financial commitment entered into through a contract approved by the commission, for electricity generated by a zero- or low-carbon generating resource that is contracted for, on behalf of consumers of this state on a cost-of-service basis, shall be recoverable in rates, in a manner determined by the commission consistent with Section 380. The commission may, after a hearing, approve an increase from one-half to 1 percent in the return on investment by the third party entering into the contract with an electrical corporation with respect to investment in zero-or low-carbon generation resources authorized pursuant to this subdivision.
- (c) (1) The Energy Commission shall adopt regulations for the enforcement of this chapter with respect to a local publicly owned electric utility.
- (2) The Energy Commission may, in order to ensure compliance with the greenhouse gases emission performance standard by local

9 SB 180

publicly owned electric utilities, apply the procedures adopted by the commission to verify the emissions of greenhouse gases from baseload generation pursuant to subdivision (b).

- (3) In determining whether a long-term financial commitment is for baseload generation, the Energy Commission shall consider the design of the powerplant and the intended use of the powerplant, as determined by the Energy Commission based upon the electricity purchase contract, any certification received from the Energy Commission, any other permit for the operation of the powerplant, any procurement approval decision for the load-serving entity, and any other matter the Energy Commission determines is relevant under the circumstances.
- (d) (1) On or before February 1, 2007, the commission, through a rulemaking proceeding, and in consultation with the Energy Commission and the State Air Resources Board, shall establish a greenhouse gases emission performance standard for all baseload generation of load-serving entities, at a rate of emissions of greenhouse gases that is no higher than the rate of emissions of greenhouse gases for combined-cycle natural gas baseload generation. Enforcement of the greenhouse gases emission performance standard shall begin immediately upon the establishment of the standard. All combined-cycle natural gas powerplants that are in operation, or that have an Energy Commission final permit decision to operate as of June 30, 2007, shall be deemed to be in compliance with the greenhouse gases emission performance standard.
- (2) In determining the rate of emissions of greenhouse gases for baseload generation, the commission shall include the net emissions resulting from the production of electricity by the baseload generation.
- (3) The commission shall establish an output-based methodology to ensure that the calculation of emissions of greenhouse gases for cogeneration recognizes the total usable energy output of the process, and includes all greenhouse gases emitted by the facility in the production of both electrical and thermal energy.
- (4) In calculating the emissions of greenhouse gases by facilities generating electricity from biomass, biogas, or landfill gas energy, the commission shall consider net emissions from the process of growing, processing, and generating the electricity from the fuel source.

SB 180 — 10 —

(5) Carbon dioxide that is injected in geological formations, so as to prevent releases into the atmosphere, in compliance with applicable laws and regulations shall not be counted as emissions of the powerplant in determining compliance with the greenhouse gases emissions performance standard.

- (6) In adopting and implementing the greenhouse gases emission performance standard, the commission, in consultation with the Independent System Operator shall consider the effects of the standard on system reliability and overall costs to electricity customers.
- (7) In developing and implementing the greenhouse gases emission performance standard, the commission shall address long-term purchases of electricity from unspecified sources in a manner consistent with this chapter.
- (8) In developing and implementing the greenhouse gases emission performance standard, the commission shall consider and act in a manner consistent with any rules adopted pursuant to Section 824a-3 of Title 16 of the United States Code.
- (9) An electrical corporation that provides electric service to 75,000 or fewer retail end-use customers in California may file with the commission a proposal for alternative compliance with this section, which the commission may accept upon a showing by the electrical corporation of both of the following:
- (A) A majority of the electrical corporation's retail end-use customers for electric service are located outside of California.
- (B) The emissions of greenhouse gases to generate electricity for the retail end-use customers of the electrical corporation are subject to a review by the utility regulatory commission of at least one other state in which the electrical corporation provides regulated retail electric service.
- (e) (1) On or before June 30, 2007, the Energy Commission, at a duly noticed public hearing and in consultation with the commission and the State Air Resources Board, shall establish a greenhouse gases emission performance standard for all baseload generation of local publicly owned electric utilities at a rate of emissions of greenhouse gases that is no higher than the rate of emissions of greenhouse gases for combined-cycle natural gas baseload generation. The greenhouse gases emission performance standard established by the Energy Commission for local publicly owned electric utilities shall be consistent with the standard adopted

-11- SB 180

by the commission for load-serving entities. Enforcement of the greenhouse gases emission performance standard shall begin immediately upon the establishment of the standard. All combined-cycle natural gas powerplants that are in operation, or that have an Energy Commission final permit decision to operate as of June 30, 2007, shall be deemed to be in compliance with the greenhouse gases emission performance standard.

- (2) The greenhouse gases emission performance standard shall be adopted by regulation pursuant to the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code).
- (3) In determining the rate of emissions of greenhouse gases for baseload generation, the Energy Commission shall include the net emissions resulting from the production of electricity by the baseload generation.
- (4) The Energy Commission shall establish an output-based methodology to ensure that the calculation of emissions of greenhouse gases for cogeneration recognizes the total usable energy output of the process, and includes all greenhouse gases emitted by the facility in the production of both electrical and thermal energy.
- (5) In calculating the emissions of greenhouse gases by facilities generating electricity from biomass, biogas, or landfill gas energy, the Energy Commission shall consider net emissions from the process of growing, processing, and generating the electricity from the fuel source.
- (6) Carbon dioxide that is captured from the emissions of a powerplant and that is permanently disposed of in geological formations in compliance with applicable laws and regulations, shall not be counted as emissions from the powerplant.
- (7) In adopting and implementing the greenhouse gases emission performance standard, the Energy Commission, in consultation with the Independent System Operator, shall consider the effects of the standard on system reliability and overall costs to electricity customers.
- (8) In developing and implementing the greenhouse gases emission performance standard, the Energy Commission shall address long-term purchases of electricity from unspecified sources in a manner consistent with this chapter.

SB 180 —12—

(9) In developing and implementing the greenhouse gases emission performance standard, the Energy Commission shall consider and act in a manner consistent with any rules adopted pursuant to Section 824a-3 of Title 16 of the United States Code.

- (f) The Energy Commission, in a duly noticed public hearing and in consultation with the commission and the State Air Resources Board, shall reevaluate and continue, modify, or replace the greenhouse gases emission performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to local publicly owned electric utilities.
- (g) The commission, through a rulemaking proceeding and in consultation with the Energy Commission and the State Air Resources Board, shall reevaluate and continue, modify, or replace the greenhouse gases emission performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to load-serving entities.
- (h) This section shall become inoperative on July 1, 2017, and, as of January 1, 2018, is repealed.
- SEC. 6. Section 8341 is added to the Public Utilities Code, to read:
- 8341. (a) (1) Beginning July 1, 2017, no load-serving entity or local publicly owned electric utility may enter into a new long-term financial commitment unless any nonpeaking generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission, pursuant to subdivision (d), for a load-serving entity, or by the Energy Commission, pursuant to subdivision (f), for a local publicly owned electric utility.
- (2) Beginning July 1, 2017, no load-serving entity or local publicly owned electric utility may enter into a new long-term financial commitment unless any peaking generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission, pursuant to subdivision (e), for a load-serving entity, or by the Energy Commission, pursuant to subdivision (g), for a local publicly owned electric utility.
- (3) Neither the commission nor the Energy Commission shall establish a greenhouse gases emission performance standard for exempt generation.

-13- SB 180

(3) Once a powerplant has all necessary permits or certificates to operate and has been deemed to comply with the applicable greenhouse gases emission performance standard, the permitted or certificated greenhouse gases emission performance standard is the only greenhouse gases emission performance standard that shall govern the powerplant's energy generation.

- (b) (1) (A) The commission shall not approve a long-term financial commitment by an electrical corporation unless the nonpeaking generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission pursuant to subdivision (d).
- (B) The commission shall not approve a long-term financial commitment by an electrical corporation unless the peaking generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission pursuant to subdivision (e).
- (2) The commission may, in order to enforce this section, review any long-term financial commitment proposed to be entered into by an electric service provider or a community choice aggregator.
- (3) The commission shall adopt rules to enforce the requirements of this section, for load-serving entities. The commission shall adopt procedures, for all load-serving entities, to verify the emissions of greenhouse gases from any nonpeaking generation or peaking generation supplied under a contract subject to the greenhouse gases emission performance standard to ensure compliance with the standard.
- (4) In determining whether a long-term financial commitment is for nonpeaking generation or peaking generation, the commission shall consider the design of the powerplant and the intended use of the powerplant, as determined by the commission based upon the electricity purchase contract, any certification received from the Energy Commission, any other permit or certificate necessary for the operation of the powerplant, including a certificate of public convenience and necessity, any procurement approval decision for the load-serving entity, and any other matter the commission determines is relevant under the circumstances.
- (5) Costs incurred by an electrical corporation to comply with this section, including those costs incurred for electricity purchase agreements that are approved by the commission that comply with

SB 180 —14—

the respective greenhouse gases emission performance standards, are to be treated as procurement costs incurred pursuant to an approved procurement plan and the commission shall ensure timely cost recovery of those costs pursuant to paragraph (3) of subdivision (d) of Section 454.5.

- (6) A long-term financial commitment entered into through a contract approved by the commission, for electricity generated by a zero- or low-carbon generating resource that is contracted for, on behalf of consumers of this state on a cost-of-service basis, shall be recoverable in rates, in a manner determined by the commission consistent with Section 380. The commission may, after a hearing, approve an increase from one-half to 1 percent in the return on investment by the third party entering into the contract with an electrical corporation with respect to investment in zero-or low-carbon generation resources authorized pursuant to this paragraph.
- (c) (1) The Energy Commission shall adopt regulations for the enforcement of this chapter with respect to a local publicly owned electric utility.
- (2) The Energy Commission may, in order to ensure compliance with the greenhouse gases emission performance standard by local publicly owned electric utilities, apply the procedures adopted by the commission to verify the emissions of greenhouse gases from nonpeaking generation and peaking generation pursuant to subdivision (b).
- (3) In determining whether a long-term financial commitment is for nonpeaking generation or peaking generation, the Energy Commission shall consider the design of the powerplant and the intended use of the powerplant, as determined by the Energy Commission based upon the electricity purchase contract, any certification received from the Energy Commission, any other permit for the operation of the powerplant, any procurement approval decision for the load-serving entity, and any other matter the Energy Commission determines is relevant under the circumstances.
- (d) (1) On or before June 30, 2017, the commission, through a rulemaking proceeding, and in consultation with the Energy Commission and the State Air Resources Board, shall establish a greenhouse gases emission performance standard for all nonpeaking generation of load-serving entities. The greenhouse gases emission

-15- SB 180

performance standard for nonpeaking generation shall be established at the lowest level that the commission determines to be technologically feasible without putting reliability of the electrical grid and of electric service at risk. Enforcement of the greenhouse gases emission performance standard for nonpeaking generation shall begin on July 1, 2017. The commission, in consultation with the Energy Commission and the State Air Resources Board, shall update the greenhouse gases emission performance standard for nonpeaking generation every five years based on new technology. The greenhouse gases emission performance standard for nonpeaking generation that will take effect on July 1, 2027, shall establish a rate of emissions of greenhouse gases that is 80 percent lower than the permissible rate of emissions of greenhouse gases for baseload generation in effect as of January 1, 2015. has an initial cap that is not higher than the rate of emissions of greenhouse gases for the lowest-emitting combined-cycle natural gas powerplant in operation at that time.

- (2) In determining the rate of emissions of greenhouse gases for nonpeaking generation, the commission shall include the net emissions resulting from the production of electricity by the nonpeaking generation.
- (3) The commission shall establish an output-based methodology to ensure that the calculation of emissions of greenhouse gases for cogeneration recognizes the total usable energy output of the process, and includes all greenhouse gases emitted by the facility in the production of both electricity and thermal energy.
- (4) In calculating the emissions of greenhouse gases by facilities generating electricity from biomass, biogas, or landfill gas energy, the commission shall-consider net emissions from the process of growing, processing, and generating the electricity from the fuel source. reconsider and modify its prior decisions implementing this section, including, but not limited to, D.07-01-039, in light of the best and most recent scientific information available regarding methodologies for determining the greenhouse gas emissions associated with producing energy from different biomass feedstocks.
- (5) Greenhouse gases that are prevented from being released into the atmosphere as a result of carbon capture and storage or carbon capture and sequestration, in compliance with applicable laws and regulations, shall not be counted as emissions of the

SB 180 -16-

powerplant in determining compliance with the greenhouse gases emission performance standard for nonpeaking generation.

- (6) In adopting and implementing the greenhouse gases emission performance standard for nonpeaking generation, the commission, in consultation with the Independent System Operator, shall consider the effects of the standard on system reliability and overall costs to electricity customers.
- (7) In developing and implementing the greenhouse gases emission performance standard for nonpeaking generation, the commission shall address long-term purchases of electricity from unspecified sources in a manner consistent with this chapter.
- (8) In developing and implementing the greenhouse gases emission performance standard for nonpeaking generation, the commission shall consider and act in a manner consistent with any rules adopted pursuant to Section 824a-3 of Title 16 of the United States Code.
- (9) An electrical corporation that provides electric service to 75,000 or fewer retail end-use customers in California may file with the commission a proposal for alternative compliance with this subdivision, which the commission may accept upon a showing by the electrical corporation of both of the following:
- (A) A majority of the electrical corporation's retail end-use customers for electric service are located outside of California.
- (B) The emissions of greenhouse gases to generate electricity for the retail end-use customers of the electrical corporation are subject to a review by the utility regulatory commission of at least one other state in which the electrical corporation provides regulated retail electric service.
- (e) (1) On or before June 30, 2017, the commission, through a rulemaking proceeding, and in consultation with the Energy Commission and the State Air Resources Board, shall establish a greenhouse gases emission performance standard for all peaking generation of load-serving entities. The greenhouse gases emission performance standard for peaking generation shall be established at the lowest level that the commission determines to be technologically feasible without putting reliability of the electrical grid and of electric service at risk. Enforcement of the greenhouse gases emission performance standard for peaking generation shall begin on July 1, 2017. The commission, in consultation with the Energy Commission and the State Air Resources Board, shall

-17- SB 180

update the greenhouse gases emission performance standard for peaking generation every five years based on new technology.

- (2) In determining the rate of emissions of greenhouse gases for peaking generation, the commission shall include the net emissions resulting from the production of electricity by the peaking generation.
- (3) The commission shall establish an output-based methodology to ensure that the calculation of emissions of greenhouse gases for cogeneration recognizes the total usable energy output of the process, and includes all greenhouse gases emitted by the facility in the production of both electrical and thermal energy.
- (4) In calculating the emissions of greenhouse gases by facilities generating electricity from biomass, biogas, or landfill gas energy, the commission shall-consider net emissions from the process of growing, processing, and generating the electricity from the fuel source. reconsider and modify its prior decisions implementing this section, including, but not limited to, D.07-01-039, in light of the best and most recent scientific information available regarding methodologies for determining the greenhouse gas emissions associated with producing energy from different biomass feedstocks.
- (5) Greenhouse gases that are prevented from being released into the atmosphere as a result of carbon capture and storage or carbon capture and sequestration, in compliance with applicable laws and regulations, shall not be counted as emissions of the powerplant in determining compliance with the greenhouse gases emission performance standard for peaking generation.
- (6) In adopting and implementing the greenhouse gases emission performance standard for peaking generation, the commission, in consultation with the Independent System Operator, shall consider the effects of the standard on system reliability and overall costs to electricity customers.
- (7) In developing and implementing the greenhouse gases emission performance standard for peaking generation, the commission shall address long-term purchases of electricity from unspecified sources in a manner consistent with this chapter.
- (8) In developing and implementing the greenhouse gases emission performance standard for peaking generation, the commission shall consider and act in a manner consistent with any

SB 180 —18—

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1 rules adopted pursuant to Section 824a-3 of Title 16 of the United2 States Code.

- (9) An electrical corporation that provides electric service to 75,000 or fewer retail end-use customers in California may file with the commission a proposal for alternative compliance with this subdivision, which the commission may accept upon a showing by the electrical corporation of both of the following:
- (A) A majority of the electrical corporation's retail end-use customers for electric service are located outside of California.
- (B) The emissions of greenhouse gases to generate electricity for the retail end-use customers of the electrical corporation are subject to a review by the utility regulatory commission of at least one other state in which the electrical corporation provides regulated retail electric service.
- (f) (1) On or before June 30, 2017, the Energy Commission, at a duly noticed public hearing and in consultation with the commission and the State Air Resources Board, shall establish a greenhouse gases emission performance standard for all nonpeaking generation of local publicly owned electric utilities. The greenhouse gases emission performance standard for nonpeaking generation shall be established at the lowest level that the Energy Commission determines to be technologically feasible without putting reliability of the electrical grid and of electric service at risk. The greenhouse gases emission performance standard for nonpeaking generation established by the Energy Commission for local publicly owned electric utilities shall be consistent with the standard adopted by the commission for load-serving entities. Enforcement of the greenhouse gases emission performance standard for nonpeaking generation shall begin on July 1, 2017. The Energy Commission, in consultation with the commission and the State Air Resources Board, shall update the greenhouse gases emission performance standard for nonpeaking generation every five years based on new technology. The greenhouse gases emission performance standard for nonpeaking generation that will take effect on July 1, 2027, shall establish a rate of emissions of greenhouse gases that is 80 percent lower than the permissible rate of emissions of greenhouse gases for baseload generation in effect as of January 1, 2015. has an initial cap that is not higher than the rate of emissions of greenhouse gases for the lowest-emitting combined-cycle natural gas powerplant in operation at that time.

-19 - SB 180

(2) The greenhouse gases emission performance standard for nonpeaking generation shall be adopted by regulation pursuant to the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code).

- (3) In determining the rate of emissions of greenhouse gases for nonpeaking generation, the Energy Commission shall include the net emissions resulting from the production of electricity by the nonpeaking generation.
- (4) The Energy Commission shall establish an output-based methodology to ensure that the calculation of emissions of greenhouse gases for cogeneration recognizes the total usable energy output of the process, and includes all greenhouse gases emitted by the facility in the production of both electricity and thermal energy.
- (5) In calculating the emissions of greenhouse gases by facilities generating electricity from biomass, biogas, or landfill gas energy, the commission Energy Commission shall consider net emissions from the process of growing, processing, and generating the electricity from the fuel source. act consistent with the commission's reconsideration and modification of its prior decisions implementing this section, including, but not limited to, D.07-01-039, in light of the best and most recent scientific information available regarding methodologies for determining the greenhouse gas emissions associated with producing energy from different biomass feedstocks.
- (6) Greenhouse gases that are prevented from being released into the atmosphere as a result of carbon capture and storage or carbon capture and sequestration, in compliance with applicable laws and regulations, shall not be counted as emissions of the powerplant in determining compliance with the greenhouse gases emission performance standard for nonpeaking generation.
- (7) In adopting and implementing the greenhouse gases emission performance standard for nonpeaking generation, the Energy Commission, in consultation with the Independent System Operator, shall consider the effects of the standard on system reliability and overall costs to electricity customers.
- (8) In developing and implementing the greenhouse gases emission performance standard for nonpeaking generation, the

SB 180 — 20 —

commission shall address long-term purchases of electricity from unspecified sources in a manner consistent with this chapter.

- (9) In developing and implementing the greenhouse gases emission performance standard for nonpeaking generation, the Energy Commission shall consider and act in a manner consistent with any rules adopted pursuant to Section 824a-3 of Title 16 of the United States Code.
- (g) (1) On or before June 30, 2017, the Energy Commission, through a rulemaking proceeding, and in consultation with the commission and the State Air Resources Board, shall establish a greenhouse gases emission performance standard for all peaking generation of load-serving entities. The greenhouse gases emission performance standard for peaking generation shall be established at the lowest level that the Energy Commission determines to be technologically feasible without putting reliability of the electrical grid and of electric service at risk. The greenhouse gases emission performance standard for peaking generation established by the Energy Commission for local publicly owned electric utilities shall be consistent with the standard adopted by the commission for load-serving entities. Enforcement of the greenhouse gases emission performance standard for peaking generation shall begin on July 1, 2017. The Energy Commission, in consultation with the commission and the State Air Resources Board, shall update the greenhouse gases emission performance standard for peaking generation every five years based on new technology.
- (2) The greenhouse gases emission performance standard for peaking generation shall be adopted by regulation pursuant to the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code).
- (3) In determining the rate of emissions of greenhouse gases for peaking generation, the Energy Commission shall include the net emissions resulting from the production of electricity by the peaking generation.
- (4) The Energy Commission shall establish an output-based methodology to ensure that the calculation of emissions of greenhouse gases for cogeneration recognizes the total usable energy output of the process, and includes all greenhouse gases emitted by the facility in the production of both electricity and thermal energy.

—21— SB 180

(5) In calculating the emissions of greenhouse gases by facilities generating electricity from biomass, biogas, or landfill gas energy, the Energy Commission shall—consider net emissions from the process of growing, processing, and generating the electricity from the fuel source. act consistent with the commission's reconsideration and modification of its prior decisions implementing this section, including, but not limited to, D.07-01-039, in light of the best and most recent scientific information available regarding methodologies for determining the greenhouse gas emissions associated with producing energy from different biomass feedstocks.

- (6) Greenhouse gases that are prevented from being released into the atmosphere as a result of carbon capture and storage or carbon capture and sequestration, in compliance with applicable laws and regulations, shall not be counted as emissions of the powerplant in determining compliance with the greenhouse gases emission performance standard for peaking generation.
- (7) In adopting and implementing the greenhouse gases emission performance standard for peaking generation, the Energy Commission, in consultation with the Independent System Operator, shall consider the effects of the standard on system reliability and overall costs to electricity customers.
- (8) In developing and implementing the greenhouse gases emission performance standard for peaking generation, the Energy Commission shall address long-term purchases of electricity from unspecified sources in a manner consistent with this chapter.
- (9) In developing and implementing the greenhouse gases emission performance standard for peaking generation, the Energy Commission shall consider and act in a manner consistent with any rules adopted pursuant to Section 824a-3 of Title 16 of the United States Code.
- (h) (1) It is the intent of the Legislature that the greenhouse gases emission performance standard operate in a prospective manner.
- (2) (A) A nonpeaking powerplant that has all necessary permits or certificates to operate at the time it commences operation may continue to operate and provide nonpeaking generation for its anticipated useful life and need not comply with a greenhouse gases emission performance standard adopted after it commences operation.

SB 180 — 22 —

(B) A nonpeaking powerplant that meets the applicable greenhouse gases emission performance standard at the time it commences operation may continue to operate and provide nonpeaking generation for its anticipated useful life and need not comply with a more stringent greenhouse gases emission performance standard adopted after it commences operation.

- (3) (A) A peaking powerplant that has all necessary permits or certificates to operate at the time it commences operation may continue to operate and provide peaking generation for its anticipated useful life and need not comply with a greenhouse gases emission performance standard adopted after it commences operation.
- (B) A peaking powerplant that meets the applicable greenhouse gases emission performance standard at the time it commences operation may continue to operate and provide peaking generation for its anticipated useful life and need not comply with a more stringent greenhouse gases emission performance standard adopted after it commences operation.
- (4) (A) The commission shall determine the anticipated useful life of a nonpeaking or peaking powerplant and when that powerplant commences or commenced operation for a load-serving entity.
- (B) The Energy Commission shall determine the anticipated useful life of a nonpeaking or peaking powerplant and when that powerplant commences or commenced operation for a local publicly owned electric utility.
 - (i) This section shall become operative on January 1, 2017.
- SEC. 7. No reimbursement is required by this act pursuant to Section 6 of Article XIIIB of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIIIB of the California Constitution.