

AMENDED IN SENATE APRIL 14, 2015
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~~ *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 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. 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 the commissions to assess the effects of potential greenhouse gases emission performance standards for nonpeaking generation and peaking generation and would prohibit the commissions from establishing their respective greenhouse gases emission performance standards unless the commissions make certain determinations.* 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~~, 2017, establish a rate of emissions of greenhouse gases that 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~~: *time, as specified.*

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 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.

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

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

3 25544. Any carbon capture and storage project associated with
4 an application for certification is a related facility pursuant to this
5 chapter and for purposes of Section 21080.5. For purposes of this
6 section, “carbon capture and storage,” also known as carbon capture
7 and sequestration, means any method ~~authorized by the commission~~
8 ~~for preventing that prevents~~ the release of greenhouse gases into
9 the atmosphere, ~~including the injection of carbon dioxide or other~~
10 ~~greenhouse gases into geological formations so as to prevent~~
11 ~~releases into the atmosphere.~~

12 SEC. 2. The heading of Chapter 3 (commencing with Section
13 8340) of Division 4.1 of the Public Utilities Code is amended to
14 read:

15
16 CHAPTER 3. GREENHOUSE GASES EMISSION PERFORMANCE
17 STANDARD
18

19 SEC. 3. Section 8340 of the Public Utilities Code is amended
20 to read:

21 8340. For purposes of this chapter, the following terms have
22 the following meanings:

23 (a) “Baseload generation” means electricity generation from a
24 powerplant that is designed and intended to provide electricity at
25 an annualized plant capacity factor of at least 60 percent.

26 (b) “Combined-cycle natural gas” with respect to a powerplant
27 means the powerplant employs a combination of one or more gas
28 turbines and steam turbines in which electricity is produced in the
29 steam turbine from otherwise lost waste heat exiting from one or
30 more of the gas turbines.

31 (c) “Electric service provider” means an “electric service
32 provider” as defined in Section 218.3, but does not include
33 corporations or persons employing cogeneration technology or

1 producing electricity from other than a conventional power source
2 consistent with subdivision (b) of Section 218.

3 (d) “Greenhouse gases” means those gases listed in Section
4 38505 of the Health and Safety Code.

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

8 (f) “Long-term financial commitment” means either a new
9 ownership investment in baseload generation or a new or renewed
10 contract with a term of five or more years, which includes
11 procurement of baseload generation.

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

17 (h) “Plant capacity factor” means the ratio of the electricity
18 produced during a given time period, measured in kilowatthours,
19 to the electricity the unit could have produced if it had been
20 operated at its rated capacity during that period, expressed in
21 kilowatthours.

22 (i) “Powerplant” means a facility for the generation of electricity,
23 and includes one or more generating units at the same location.

24 (j) “Zero- or low-carbon generating resource” means an
25 electrical generating resource that will generate electricity while
26 producing emissions of greenhouse gases at a rate substantially
27 below the greenhouse gases emission performance standard, as
28 determined by the commission.

29 (k) This section shall become inoperative on July 1, 2017, and,
30 as of January 1, 2018, is repealed.

31 SEC. 4. Section 8340 is added to the Public Utilities Code, to
32 read:

33 8340. For purposes of this chapter, the following terms have
34 the following meanings:

35 (a) “Electric service provider” has the same meaning as defined
36 in Section 218.3, but does not include corporations or persons
37 employing cogeneration technology or producing electricity from
38 other than a conventional power source consistent with subdivision
39 (b) of Section 218.

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

3 (c) “Greenhouse gases emission performance standard” means
4 the permissible levels of emissions of greenhouse gases established
5 pursuant to Section 8341 for nonpeaking generation and peaking
6 generation.

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

10 (e) “Long-term financial commitment” means either a new
11 ownership investment in nonpeaking generation or peaking
12 generation or a new or renewed contract with a term of five or
13 more years, which includes procurement of nonpeaking generation
14 or peaking generation.

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

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

30 (h) “Peaking generation” means electricity generation from a
31 powerplant that is designed and intended to provide electricity at
32 an annualized plant capacity factor to be determined by the
33 commission and the Energy Commission, in consultation with the
34 Independent System Operator. In making this determination,
35 consideration shall be given to both current energy generation
36 needs, as well as energy generation needs as the greenhouse gases
37 emission performance standards for peaking generation are
38 implemented. “Peaking powerplant” means a powerplant that
39 provides peaking generation.

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

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

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

13 (l) This section shall become operative on January 1, 2017.

14 SEC. 5. Section 8341 of the Public Utilities Code is amended
15 to read:

16 8341. (a) No load-serving entity or local publicly owned
17 electric utility may enter into a long-term financial commitment
18 unless any baseload generation supplied under the long-term
19 financial commitment complies with the greenhouse gases emission
20 performance standard established by the commission, pursuant to
21 subdivision (d), for a load-serving entity, or by the Energy
22 Commission, pursuant to subdivision (e), for a local publicly owned
23 electric utility.

24 (b) (1) The commission shall not approve a long-term financial
25 commitment by an electrical corporation unless any baseload
26 generation supplied under the long-term financial commitment
27 complies with the greenhouse gases emission performance standard
28 established by the commission pursuant to subdivision (d).

29 (2) The commission may, in order to enforce this section, review
30 any long-term financial commitment proposed to be entered into
31 by an electric service provider or a community choice aggregator.

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

38 (4) In determining whether a long-term financial commitment
39 is for baseload generation, the commission shall consider the design
40 of the powerplant and the intended use of the powerplant, as

1 determined by the commission based upon the electricity purchase
2 contract, any certification received from the Energy Commission,
3 any other permit or certificate necessary for the operation of the
4 powerplant, including a certificate of public convenience and
5 necessity, any procurement approval decision for the load-serving
6 entity, and any other matter the commission determines is relevant
7 under the circumstances.

8 (5) Costs incurred by an electrical corporation to comply with
9 this section, including those costs incurred for electricity purchase
10 agreements that are approved by the commission that comply with
11 the greenhouse gases emission performance standard, are to be
12 treated as procurement costs incurred pursuant to an approved
13 procurement plan and the commission shall ensure timely cost
14 recovery of those costs pursuant to paragraph (3) of subdivision
15 (d) of Section 454.5.

16 (6) A long-term financial commitment entered into through a
17 contract approved by the commission, for electricity generated by
18 a zero- or low-carbon generating resource that is contracted for,
19 on behalf of consumers of this state on a cost-of-service basis,
20 shall be recoverable in rates, in a manner determined by the
21 commission consistent with Section 380. The commission may,
22 after a hearing, approve an increase from one-half to 1 percent in
23 the return on investment by the third party entering into the contract
24 with an electrical corporation with respect to investment in zero-
25 or low-carbon generation resources authorized pursuant to this
26 subdivision.

27 (c) (1) The Energy Commission shall adopt regulations for the
28 enforcement of this chapter with respect to a local publicly owned
29 electric utility.

30 (2) The Energy Commission may, in order to ensure compliance
31 with the greenhouse gases emission performance standard by local
32 publicly owned electric utilities, apply the procedures adopted by
33 the commission to verify the emissions of greenhouse gases from
34 baseload generation pursuant to subdivision (b).

35 (3) In determining whether a long-term financial commitment
36 is for baseload generation, the Energy Commission shall consider
37 the design of the powerplant and the intended use of the
38 powerplant, as determined by the Energy Commission based upon
39 the electricity purchase contract, any certification received from
40 the Energy Commission, any other permit for the operation of the

1 powerplant, any procurement approval decision for the load-serving
2 entity, and any other matter the Energy Commission determines
3 is relevant under the circumstances.

4 (d) (1) On or before February 1, 2007, the commission, through
5 a rulemaking proceeding, and in consultation with the Energy
6 Commission and the State Air Resources Board, shall establish a
7 greenhouse gases emission performance standard for all baseload
8 generation of load-serving entities, at a rate of emissions of
9 greenhouse gases that is no higher than the rate of emissions of
10 greenhouse gases for combined-cycle natural gas baseload
11 generation. Enforcement of the greenhouse gases emission
12 performance standard shall begin immediately upon the
13 establishment of the standard. All combined-cycle natural gas
14 powerplants that are in operation, or that have an Energy
15 Commission final permit decision to operate as of June 30, 2007,
16 shall be deemed to be in compliance with the greenhouse gases
17 emission performance standard.

18 (2) In determining the rate of emissions of greenhouse gases
19 for baseload generation, the commission shall include the net
20 emissions resulting from the production of electricity by the
21 baseload generation.

22 (3) The commission shall establish an output-based methodology
23 to ensure that the calculation of emissions of greenhouse gases for
24 cogeneration recognizes the total usable energy output of the
25 process, and includes all greenhouse gases emitted by the facility
26 in the production of both electrical and thermal energy.

27 (4) In calculating the emissions of greenhouse gases by facilities
28 generating electricity from biomass, biogas, or landfill gas energy,
29 the commission shall consider net emissions from the process of
30 growing, processing, and generating the electricity from the fuel
31 source.

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

37 (6) In adopting and implementing the greenhouse gases emission
38 performance standard, the commission, in consultation with the
39 Independent System Operator shall consider the effects of the

1 standard on system reliability and overall costs to electricity
2 customers.

3 (7) In developing and implementing the greenhouse gases
4 emission performance standard, the commission shall address
5 long-term purchases of electricity from unspecified sources in a
6 manner consistent with this chapter.

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

11 (9) An electrical corporation that provides electric service to
12 75,000 or fewer retail end-use customers in California may file
13 with the commission a proposal for alternative compliance with
14 this section, which the commission may accept upon a showing
15 by the electrical corporation of both of the following:

16 (A) A majority of the electrical corporation's retail end-use
17 customers for electric service are located outside of California.

18 (B) The emissions of greenhouse gases to generate electricity
19 for the retail end-use customers of the electrical corporation are
20 subject to a review by the utility regulatory commission of at least
21 one other state in which the electrical corporation provides
22 regulated retail electric service.

23 (e) (1) On or before June 30, 2007, the Energy Commission,
24 at a duly noticed public hearing and in consultation with the
25 commission and the State Air Resources Board, shall establish a
26 greenhouse gases emission performance standard for all baseload
27 generation of local publicly owned electric utilities at a rate of
28 emissions of greenhouse gases that is no higher than the rate of
29 emissions of greenhouse gases for combined-cycle natural gas
30 baseload generation. The greenhouse gases emission performance
31 standard established by the Energy Commission for local publicly
32 owned electric utilities shall be consistent with the standard adopted
33 by the commission for load-serving entities. Enforcement of the
34 greenhouse gases emission performance standard shall begin
35 immediately upon the establishment of the standard. All
36 combined-cycle natural gas powerplants that are in operation, or
37 that have an Energy Commission final permit decision to operate
38 as of June 30, 2007, shall be deemed to be in compliance with the
39 greenhouse gases emission performance standard.

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

5 (3) In determining the rate of emissions of greenhouse gases
6 for baseload generation, the Energy Commission shall include the
7 net emissions resulting from the production of electricity by the
8 baseload generation.

9 (4) The Energy Commission shall establish an output-based
10 methodology to ensure that the calculation of emissions of
11 greenhouse gases for cogeneration recognizes the total usable
12 energy output of the process, and includes all greenhouse gases
13 emitted by the facility in the production of both electrical and
14 thermal energy.

15 (5) In calculating the emissions of greenhouse gases by facilities
16 generating electricity from biomass, biogas, or landfill gas energy,
17 the Energy Commission shall consider net emissions from the
18 process of growing, processing, and generating the electricity from
19 the fuel source.

20 (6) Carbon dioxide that is captured from the emissions of a
21 powerplant and that is permanently disposed of in geological
22 formations in compliance with applicable laws and regulations,
23 shall not be counted as emissions from the powerplant.

24 (7) In adopting and implementing the greenhouse gases emission
25 performance standard, the Energy Commission, in consultation
26 with the Independent System Operator, shall consider the effects
27 of the standard on system reliability and overall costs to electricity
28 customers.

29 (8) In developing and implementing the greenhouse gases
30 emission performance standard, the Energy Commission shall
31 address long-term purchases of electricity from unspecified sources
32 in a manner consistent with this chapter.

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

37 (f) The Energy Commission, in a duly noticed public hearing
38 and in consultation with the commission and the State Air
39 Resources Board, shall reevaluate and continue, modify, or replace
40 the greenhouse gases emission performance standard when an

1 enforceable greenhouse gases emissions limit is established and
2 in operation, that is applicable to local publicly owned electric
3 utilities.

4 (g) The commission, through a rulemaking proceeding and in
5 consultation with the Energy Commission and the State Air
6 Resources Board, shall reevaluate and continue, modify, or replace
7 the greenhouse gases emission performance standard when an
8 enforceable greenhouse gases emissions limit is established and
9 in operation, that is applicable to load-serving entities.

10 (h) This section shall become inoperative on July 1, 2017, and,
11 as of January 1, 2018, is repealed.

12 SEC. 6. Section 8341 is added to the Public Utilities Code, to
13 read:

14 8341. (a) (1) Beginning July 1, 2017, no load-serving entity
15 or local publicly owned electric utility may enter into a new
16 long-term financial commitment unless any nonpeaking generation
17 supplied under the long-term financial commitment complies with
18 the greenhouse gases emission performance standard established
19 by the commission, pursuant to subdivision (d), for a load-serving
20 entity, or by the Energy Commission, pursuant to subdivision (f),
21 for a local publicly owned electric utility.

22 (2) Beginning July 1, 2017, no load-serving entity or local
23 publicly owned electric utility may enter into a new long-term
24 financial commitment unless any peaking generation supplied
25 under the long-term financial commitment complies with the
26 greenhouse gases emission performance standard established by
27 the commission, pursuant to subdivision (e), for a load-serving
28 entity, or by the Energy Commission, pursuant to subdivision (g),
29 for a local publicly owned electric utility.

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

36 (b) (1) (A) The commission shall not approve a long-term
37 financial commitment by an electrical corporation unless the
38 nonpeaking generation supplied under the long-term financial
39 commitment complies with the greenhouse gases emission

1 performance standard established by the commission pursuant to
2 subdivision (d).

3 (B) The commission shall not approve a long-term financial
4 commitment by an electrical corporation unless the peaking
5 generation supplied under the long-term financial commitment
6 complies with the greenhouse gases emission performance standard
7 established by the commission pursuant to subdivision (e).

8 (2) The commission may, in order to enforce this section, review
9 any long-term financial commitment proposed to be entered into
10 by an electric service provider or a community choice aggregator.

11 (3) The commission shall adopt rules to enforce the requirements
12 of this section, for load-serving entities. The commission shall
13 adopt procedures, for all load-serving entities, to verify the
14 emissions of greenhouse gases from any nonpeaking generation
15 or peaking generation supplied under a contract subject to the
16 greenhouse gases emission performance standard to ensure
17 compliance with the standard.

18 (4) In determining whether a long-term financial commitment
19 is for nonpeaking generation or peaking generation, the commission
20 shall consider the design of the powerplant and the intended use
21 of the powerplant, as determined by the commission based upon
22 the electricity purchase contract, any certification received from
23 the Energy Commission, any other permit or certificate necessary
24 for the operation of the powerplant, including a certificate of public
25 convenience and necessity, any procurement approval decision
26 for the load-serving entity, and any other matter the commission
27 determines is relevant under the circumstances.

28 (5) Costs incurred by an electrical corporation to comply with
29 this section, including those costs incurred for electricity purchase
30 agreements that are approved by the commission that comply with
31 the respective greenhouse gases emission performance standards,
32 are to be treated as procurement costs incurred pursuant to an
33 approved procurement plan and the commission shall ensure timely
34 cost recovery of those costs pursuant to paragraph (3) of
35 subdivision (d) of Section 454.5.

36 (6) A long-term financial commitment entered into through a
37 contract approved by the commission, for electricity generated by
38 a zero- or low-carbon generating resource that is contracted for,
39 on behalf of consumers of this state on a cost-of-service basis,
40 shall be recoverable in rates, in a manner determined by the

1 commission consistent with Section 380. The commission may,
2 after a hearing, approve an increase from one-half to 1 percent in
3 the return on investment by the third party entering into the contract
4 with an electrical corporation with respect to investment in zero-
5 or low-carbon generation resources authorized pursuant to this
6 paragraph.

7 (c) (1) The Energy Commission shall adopt regulations for the
8 enforcement of this chapter with respect to a local publicly owned
9 electric utility.

10 (2) The Energy Commission may, in order to ensure compliance
11 with the greenhouse gases emission performance standard by local
12 publicly owned electric utilities, apply the procedures adopted by
13 the commission to verify the emissions of greenhouse gases from
14 nonpeaking generation and peaking generation pursuant to
15 subdivision (b).

16 (3) In determining whether a long-term financial commitment
17 is for nonpeaking generation or peaking generation, the Energy
18 Commission shall consider the design of the powerplant and the
19 intended use of the powerplant, as determined by the Energy
20 Commission based upon the electricity purchase contract, any
21 certification received from the Energy Commission, any other
22 permit for the operation of the powerplant, any procurement
23 approval decision for the load-serving entity, and any other matter
24 the Energy Commission determines is relevant under the
25 circumstances.

26 (d) (1) On or before June 30, 2017, the commission, through a
27 rulemaking proceeding, and in consultation with the Energy
28 Commission and the State Air Resources Board, shall establish a
29 greenhouse gases emission performance standard for all nonpeaking
30 generation of load-serving entities. The greenhouse gases emission
31 performance standard for nonpeaking generation shall be
32 established at the lowest level that the commission determines to
33 be technologically feasible without putting reliability of the
34 electrical grid and of electric service at risk. Enforcement of the
35 greenhouse gases emission performance standard for nonpeaking
36 generation shall begin on July 1, 2017. The commission, in
37 consultation with the Energy Commission and the State Air
38 Resources Board, shall update the greenhouse gases emission
39 performance standard for nonpeaking generation every five years
40 based on new technology. The greenhouse gases emission

1 performance standard for nonpeaking generation that will take
2 effect on July 1, ~~2027~~, 2017, shall establish a rate of emissions of
3 greenhouse gases that has an initial cap that is not higher than the
4 rate of emissions of greenhouse gases for the lowest-emitting
5 combined-cycle natural gas powerplant in operation at that ~~time~~.
6 *time, taking into consideration siting factors such as altitude,*
7 *regional climate, and operating capacity. All combined-cycle*
8 *natural gas powerplants that are in operation, or that have an*
9 *Energy Commission final permit decision to operate as of June*
10 *30, 2017, shall be deemed to be in compliance with the nonpeaking*
11 *emission performance standard.*

12 (2) In determining the rate of emissions of greenhouse gases
13 for nonpeaking generation, the commission shall include the net
14 emissions resulting from the production of electricity by the
15 nonpeaking generation.

16 (3) The commission shall establish an output-based methodology
17 to ensure that the calculation of emissions of greenhouse gases for
18 cogeneration recognizes the total usable energy output of the
19 process, and includes all greenhouse gases emitted by the facility
20 in the production of both electricity and thermal energy.

21 (4) In calculating the emissions of greenhouse gases by facilities
22 generating electricity from biomass, biogas, or landfill gas energy,
23 the commission shall reconsider and modify its prior decisions
24 implementing this section, including, but not limited to,
25 D.07-01-039, in light of the best and most recent scientific
26 information available regarding methodologies for determining
27 the greenhouse gas emissions associated with producing energy
28 from different biomass feedstocks.

29 (5) Greenhouse gases that are prevented from being released
30 into the atmosphere as a result of carbon capture and storage or
31 carbon capture and sequestration, in compliance with applicable
32 laws and regulations, shall not be counted as emissions of the
33 powerplant in determining compliance with the greenhouse gases
34 emission performance standard for nonpeaking generation.

35 (6) In adopting and implementing the greenhouse gases emission
36 performance standard for nonpeaking generation, the commission,
37 in consultation with the Independent System Operator, shall
38 consider the effects of the standard on system reliability and overall
39 costs to electricity customers.

1 (7) In developing and implementing the greenhouse gases
2 emission performance standard for nonpeaking generation, the
3 commission shall address long-term purchases of electricity from
4 unspecified sources in a manner consistent with this chapter.

5 (8) In developing and implementing the greenhouse gases
6 emission performance standard for nonpeaking generation, the
7 commission shall consider and act in a manner consistent with any
8 rules adopted pursuant to Section 824a-3 of Title 16 of the United
9 States Code.

10 (9) An electrical corporation that provides electric service to
11 75,000 or fewer retail end-use customers in California may file
12 with the commission a proposal for alternative compliance with
13 this subdivision, which the commission may accept upon a showing
14 by the electrical corporation of both of the following:

15 (A) A majority of the electrical corporation's retail end-use
16 customers for electric service are located outside of California.

17 (B) The emissions of greenhouse gases to generate electricity
18 for the retail end-use customers of the electrical corporation are
19 subject to a review by the utility regulatory commission of at least
20 one other state in which the electrical corporation provides
21 regulated retail electric service.

22 (e) (1) On or before June 30, 2017, the commission, through a
23 rulemaking proceeding, and in consultation with the Energy
24 Commission and the State Air Resources Board, shall establish a
25 greenhouse gases emission performance standard for all peaking
26 generation of load-serving entities. The greenhouse gases emission
27 performance standard for peaking generation shall be established
28 at the lowest level that the commission determines to be
29 technologically feasible without putting reliability of the electrical
30 grid and of electric service at risk. Enforcement of the greenhouse
31 gases emission performance standard for peaking generation shall
32 begin on July 1, 2017. The commission, in consultation with the
33 Energy Commission and the State Air Resources Board, shall
34 update the greenhouse gases emission performance standard for
35 peaking generation every five years based on new technology.

36 (2) In determining the rate of emissions of greenhouse gases
37 for peaking generation, the commission shall include the net
38 emissions resulting from the production of electricity by the
39 peaking generation.

1 (3) The commission shall establish an output-based methodology
2 to ensure that the calculation of emissions of greenhouse gases for
3 cogeneration recognizes the total usable energy output of the
4 process, and includes all greenhouse gases emitted by the facility
5 in the production of both electrical and thermal energy.

6 (4) In calculating the emissions of greenhouse gases by facilities
7 generating electricity from biomass, biogas, or landfill gas energy,
8 the commission shall reconsider and modify its prior decisions
9 implementing this section, including, but not limited to,
10 D.07-01-039, in light of the best and most recent scientific
11 information available regarding methodologies for determining
12 the greenhouse gas emissions associated with producing energy
13 from different biomass feedstocks.

14 (5) Greenhouse gases that are prevented from being released
15 into the atmosphere as a result of carbon capture and storage or
16 carbon capture and sequestration, in compliance with applicable
17 laws and regulations, shall not be counted as emissions of the
18 powerplant in determining compliance with the greenhouse gases
19 emission performance standard for peaking generation.

20 (6) In adopting and implementing the greenhouse gases emission
21 performance standard for peaking generation, the commission, in
22 consultation with the Independent System Operator, shall consider
23 the effects of the standard on system reliability and overall costs
24 to electricity customers.

25 (7) In developing and implementing the greenhouse gases
26 emission performance standard for peaking generation, the
27 commission shall address long-term purchases of electricity from
28 unspecified sources in a manner consistent with this chapter.

29 (8) In developing and implementing the greenhouse gases
30 emission performance standard for peaking generation, the
31 commission shall consider and act in a manner consistent with any
32 rules adopted pursuant to Section 824a-3 of Title 16 of the United
33 States Code.

34 (9) An electrical corporation that provides electric service to
35 75,000 or fewer retail end-use customers in California may file
36 with the commission a proposal for alternative compliance with
37 this subdivision, which the commission may accept upon a showing
38 by the electrical corporation of both of the following:

39 (A) A majority of the electrical corporation's retail end-use
40 customers for electric service are located outside of California.

1 (B) The emissions of greenhouse gases to generate electricity
2 for the retail end-use customers of the electrical corporation are
3 subject to a review by the utility regulatory commission of at least
4 one other state in which the electrical corporation provides
5 regulated retail electric service.

6 (f) (1) On or before June 30, 2017, the Energy Commission, at
7 a duly noticed public hearing and in consultation with the
8 commission and the State Air Resources Board, shall establish a
9 greenhouse gases emission performance standard for all nonpeaking
10 generation of local publicly owned electric utilities. The greenhouse
11 gases emission performance standard for nonpeaking generation
12 shall be established at the lowest level that the Energy Commission
13 determines to be technologically feasible without putting reliability
14 of the electrical grid and of electric service at risk. The greenhouse
15 gases emission performance standard for nonpeaking generation
16 established by the Energy Commission for local publicly owned
17 electric utilities shall be consistent with the standard adopted by
18 the commission for load-serving entities. Enforcement of the
19 greenhouse gases emission performance standard for nonpeaking
20 generation shall begin on July 1, 2017. The Energy Commission,
21 in consultation with the commission and the State Air Resources
22 Board, shall update the greenhouse gases emission performance
23 standard for nonpeaking generation every five years based on new
24 technology. The greenhouse gases emission performance standard
25 for nonpeaking generation that will take effect on July 1, ~~2027,~~
26 *2017*, shall establish a rate of emissions of greenhouse gases that
27 has an initial cap that is not higher than the rate of emissions of
28 greenhouse gases for the lowest-emitting combined-cycle natural
29 gas powerplant in operation at that ~~time:~~ *time, taking into*
30 *consideration siting factors such as altitude, regional climate, and*
31 *operating capacity. All combined-cycle natural gas powerplants*
32 *that are in operation, or that have an Energy Commission final*
33 *permit decision to operate as of June 30, 2017, shall be deemed*
34 *to be in compliance with the nonpeaking emission performance*
35 *standard.*

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

1 (3) In determining the rate of emissions of greenhouse gases
2 for nonpeaking generation, the Energy Commission shall include
3 the net emissions resulting from the production of electricity by
4 the nonpeaking generation.

5 (4) The Energy Commission shall establish an output-based
6 methodology to ensure that the calculation of emissions of
7 greenhouse gases for cogeneration recognizes the total usable
8 energy output of the process, and includes all greenhouse gases
9 emitted by the facility in the production of both electricity and
10 thermal energy.

11 (5) In calculating the emissions of greenhouse gases by facilities
12 generating electricity from biomass, biogas, or landfill gas energy,
13 the Energy Commission shall act consistent with the commission's
14 reconsideration and modification of its prior decisions
15 implementing this section, including, but not limited to,
16 D.07-01-039, in light of the best and most recent scientific
17 information available regarding methodologies for determining
18 the greenhouse gas emissions associated with producing energy
19 from different biomass feedstocks.

20 (6) Greenhouse gases that are prevented from being released
21 into the atmosphere as a result of carbon capture and storage or
22 carbon capture and sequestration, in compliance with applicable
23 laws and regulations, shall not be counted as emissions of the
24 powerplant in determining compliance with the greenhouse gases
25 emission performance standard for nonpeaking generation.

26 (7) In adopting and implementing the greenhouse gases emission
27 performance standard for nonpeaking generation, the Energy
28 Commission, in consultation with the Independent System
29 Operator, shall consider the effects of the standard on system
30 reliability and overall costs to electricity customers.

31 (8) In developing and implementing the greenhouse gases
32 emission performance standard for nonpeaking generation, the
33 commission shall address long-term purchases of electricity from
34 unspecified sources in a manner consistent with this chapter.

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

1 (g) (1) On or before June 30, 2017, the Energy Commission,
2 through a rulemaking proceeding, and in consultation with the
3 commission and the State Air Resources Board, shall establish a
4 greenhouse gases emission performance standard for all peaking
5 generation of load-serving entities. The greenhouse gases emission
6 performance standard for peaking generation shall be established
7 at the lowest level that the Energy Commission determines to be
8 technologically feasible without putting reliability of the electrical
9 grid and of electric service at risk. The greenhouse gases emission
10 performance standard for peaking generation established by the
11 Energy Commission for local publicly owned electric utilities shall
12 be consistent with the standard adopted by the commission for
13 load-serving entities. Enforcement of the greenhouse gases
14 emission performance standard for peaking generation shall begin
15 on July 1, 2017. The Energy Commission, in consultation with the
16 commission and the State Air Resources Board, shall update the
17 greenhouse gases emission performance standard for peaking
18 generation every five years based on new technology.

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

24 (3) In determining the rate of emissions of greenhouse gases
25 for peaking generation, the Energy Commission shall include the
26 net emissions resulting from the production of electricity by the
27 peaking generation.

28 (4) The Energy Commission shall establish an output-based
29 methodology to ensure that the calculation of emissions of
30 greenhouse gases for cogeneration recognizes the total usable
31 energy output of the process, and includes all greenhouse gases
32 emitted by the facility in the production of both electricity and
33 thermal energy.

34 (5) In calculating the emissions of greenhouse gases by facilities
35 generating electricity from biomass, biogas, or landfill gas energy,
36 the Energy Commission shall act consistent with the commission's
37 reconsideration and modification of its prior decisions
38 implementing this section, including, but not limited to,
39 D.07-01-039, in light of the best and most recent scientific
40 information available regarding methodologies for determining

1 the greenhouse gas emissions associated with producing energy
2 from different biomass feedstocks.

3 (6) Greenhouse gases that are prevented from being released
4 into the atmosphere as a result of carbon capture and storage or
5 carbon capture and sequestration, in compliance with applicable
6 laws and regulations, shall not be counted as emissions of the
7 powerplant in determining compliance with the greenhouse gases
8 emission performance standard for peaking generation.

9 (7) In adopting and implementing the greenhouse gases emission
10 performance standard for peaking generation, the Energy
11 Commission, in consultation with the Independent System
12 Operator, shall consider the effects of the standard on system
13 reliability and overall costs to electricity customers.

14 (8) In developing and implementing the greenhouse gases
15 emission performance standard for peaking generation, the Energy
16 Commission shall address long-term purchases of electricity from
17 unspecified sources in a manner consistent with this chapter.

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

23 ~~(h) (1) It is the intent of the Legislature that the greenhouse
24 gases emission performance standard operate in a prospective
25 manner.~~

26 ~~(2) (A) A nonpeaking powerplant that has all necessary permits
27 or certificates to operate at the time it commences operation may
28 continue to operate and provide nonpeaking generation for its
29 anticipated useful life and need not comply with a greenhouse
30 gases emission performance standard adopted after it commences
31 operation.~~

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

38 ~~(3) (A) A peaking powerplant that has all necessary permits or
39 certificates to operate at the time it commences operation may
40 continue to operate and provide peaking generation for its~~

1 ~~anticipated useful life and need not comply with a greenhouse~~
2 ~~gases emission performance standard adopted after it commences~~
3 ~~operation.~~

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

10 ~~(4) (A) The commission shall determine the anticipated useful~~
11 ~~life of a nonpeaking or peaking powerplant and when that~~
12 ~~powerplant commences or commenced operation for a load-serving~~
13 ~~entity.~~

14 ~~(B) The Energy Commission shall determine the anticipated~~
15 ~~useful life of a nonpeaking or peaking powerplant and when that~~
16 ~~powerplant commences or commenced operation for a local~~
17 ~~publicly owned electric utility.~~

18 *(h) (1) (A) The commission, in consultation with the Energy*
19 *Commission and the State Air Resources Board, shall, through a*
20 *public process, assess the effects of potential greenhouse gases*
21 *emission performance standards, as described in subdivisions (d)*
22 *and (e), including the greenhouse gases emission performance*
23 *standards' effects on the reliability of the electrical grid, further*
24 *deployment of renewable generation resources, and emission of*
25 *greenhouse gases and other air pollutants.*

26 *(B) The commission shall not establish a greenhouse gases*
27 *emission performance standard for nonpeaking generation of*
28 *load-serving entities, pursuant to subdivision (d), or a greenhouse*
29 *gases emission performance standard for peaking generation of*
30 *load-serving entities, pursuant to subdivision (e), unless the*
31 *commission determines that the greenhouse gases emission*
32 *performance standard shall not harm the reliability of the electrical*
33 *grid, hamper further deployment of renewable generation*
34 *resources, or hamper the reduction of emissions of greenhouse*
35 *gases or other air pollutants.*

36 *(C) The commission shall submit to the Legislature on or before*
37 *June 30, 2016, a report that includes its findings made pursuant*
38 *to this paragraph.*

39 *(2) (A) The Energy Commission, in consultation with the*
40 *commission and the State Air Resources Board, shall, through a*

1 *public process, assess the effects of potential greenhouse gases*
2 *emission performance standards, as described in subdivisions (f)*
3 *and (g), including the greenhouse gases emission performance*
4 *standards' effects on the reliability of the electrical grid, further*
5 *deployment of renewable generation resources, and emission of*
6 *greenhouse gases and other air pollutants.*

7 *(B) The Energy Commission shall not establish a greenhouse*
8 *gases emission performance standard for nonpeaking generation*
9 *of local publicly owned electric utilities, pursuant to subdivision*
10 *(f), or a greenhouse gases emission performance standard for*
11 *peaking generation of local publicly owned electric utilities,*
12 *pursuant to subdivision (g), unless the Energy Commission*
13 *determines that the greenhouse gases emission performance*
14 *standard shall not harm the reliability of the electrical grid,*
15 *hamper further deployment of renewable generation resources,*
16 *or hamper the reduction of emissions of greenhouse gases or other*
17 *air pollutants.*

18 *(C) The Energy Commission shall submit to the Legislature on*
19 *or before June 30, 2016, a report that includes its findings made*
20 *pursuant to this paragraph.*

21 *(3) (A) The requirements for submitting reports imposed under*
22 *subparagraph (C) of paragraph (1) and subparagraph (C) of*
23 *paragraph (2) are inoperative on June 30, 2020, pursuant to*
24 *Section 10231.5 of the Government Code.*

25 *(B) A report to be submitted pursuant to subparagraph (C) of*
26 *paragraph (1) or subparagraph (C) of paragraph (2) shall be*
27 *submitted in compliance with Section 9795 of the Government*
28 *Code.*

29 *(i) This section, except subdivision (h), shall become operative*
30 *on January 1, 2017.*

31 **SEC. 7.** No reimbursement is required by this act pursuant to
32 Section 6 of Article XIII B of the California Constitution because
33 the only costs that may be incurred by a local agency or school
34 district will be incurred because this act creates a new crime or
35 infraction, eliminates a crime or infraction, or changes the penalty
36 for a crime or infraction, within the meaning of Section 17556 of
37 the Government Code, or changes the definition of a crime within

- 1 the meaning of Section 6 of Article XIII B of the California
- 2 Constitution.

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