

Introduced by Senator JacksonFebruary 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 introduced, 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 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 performance emission standards for baseload generation with greenhouse gases performance emission standards for primary generation and secondary generation, as defined. 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 primary generation of load-serving entities, and a separate standard for secondary 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 primary generation of local publicly owned electric utilities, and a separate standard for secondary generation. The bill would require that the greenhouse gases emission performance standard for primary generation and secondary generation be established at the lowest level that the 2 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 initial greenhouse gases emission performance standard for primary generation 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. The bill would require that the commissions update their respective greenhouse gases emission performance standards every 5 years based on new technology.

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 State Energy Resources Conservation and Development 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 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. The “lead agency” for a project is the public agency that has the principal responsibility for carrying out or approving the project that may have a significant effect on the environment.

This bill would designate the State Energy Resources Conservation and Development Commission to be the lead agency with respect to any carbon capture and storage project associated with an application for certification.

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. The commission shall be the lead agency, as defined
- 4 in Section 21067, for any carbon capture and storage project
- 5 associated with an application for certification pursuant to this
- 6 chapter. For purposes of this section, “carbon capture and storage,”
- 7 also known as carbon capture and sequestration, means the

1 injection of carbon dioxide or other greenhouse gases into
2 geological formations so as to prevent releases into the atmosphere.

3 SEC. 2. The heading of Chapter 3 (commencing with Section
4 8340) of Division 4.1 of the Public Utilities Code is amended to
5 read:

6
7 CHAPTER 3. GREENHOUSE GASES EMISSION PERFORMANCE
8 ~~STANDARD FOR BASELOAD ELECTRICAL GENERATING RESOURCES~~
9

10 SEC. 3. Section 8340 of the Public Utilities Code is amended
11 to read:

12 8340. For purposes of this chapter, the following terms have
13 the following meanings:

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

17 (b) “Combined-cycle natural gas” with respect to a powerplant
18 means the powerplant employs a combination of one or more gas
19 turbines and steam turbines in which electricity is produced in the
20 steam turbine from otherwise lost waste heat exiting from one or
21 more of the gas turbines.

22 (c) “Electric service provider” means an “electric service
23 provider” as defined in Section 218.3, but does not include
24 corporations or persons employing cogeneration technology or
25 producing electricity from other than a conventional power source
26 consistent with subdivision (b) of Section 218.

27 (d) “Greenhouse gases” means those gases listed in Section
28 38505 of the Health and Safety Code.

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

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

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

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

8 (j) “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 (k) *This section shall become inoperative on July 1, 2017, and,*
14 *as of January 1, 2018, is repealed.*

15 SEC. 4. Section 8340 is added to the Public Utilities Code, to
16 read:

17 8340. For purposes of this chapter, the following terms have
18 the following meanings:

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

24 (b) “Exempt generation” means electricity generation from a
25 powerplant that is designed and intended to provide electricity at
26 an annualized plant capacity factor of less than 2 percent.

27 (c) “Greenhouse gases” means those gases listed in Section
28 38505 of the Health and Safety Code.

29 (d) “Greenhouse gases performance emissions standard” means
30 the permissible levels of emissions of greenhouse gases established
31 pursuant to Section 8341 for primary generation and secondary
32 generation.

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

36 (f) “Long-term financial commitment” means either a new
37 ownership investment in primary generation or secondary
38 generation or a new or renewed contract with a term of five or
39 more years, which includes procurement of primary generation or
40 secondary generation.

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

6 (h) “Plant capacity factor” means the ratio of the electricity
7 produced during a given time period, measured in kilowatthours,
8 to the electricity the unit could have produced if it had been
9 operated at its rated capacity during that period, expressed in
10 kilowatthours.

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

13 (j) “Primary generation” means electricity generation from a
14 powerplant that is designed and intended to provide electricity at
15 an annualized plant capacity factor of at least 15 percent.

16 (k) “Secondary generation” means electricity generation from
17 a powerplant that is designed and intended to provide electricity
18 at an annualized plant capacity factor of less than 15 percent and
19 at least 2 percent.

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

25 (m) This section shall become operative on January 1, 2017.

26 SEC. 5. Section 8341 of the Public Utilities Code is amended
27 to read:

28 8341. (a) No load-serving entity or local publicly owned
29 electric utility may enter into a long-term financial commitment
30 unless any baseload generation supplied under the long-term
31 financial commitment complies with the greenhouse gases emission
32 performance standard established by the commission, pursuant to
33 subdivision (d), for a load-serving entity, or by the Energy
34 Commission, pursuant to subdivision (e), for a local publicly owned
35 electric utility.

36 (b) (1) The commission shall not approve a long-term financial
37 commitment by an electrical corporation unless any baseload
38 generation supplied under the long-term financial commitment
39 complies with the greenhouse gases emission performance standard
40 established by the commission pursuant to subdivision (d).

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

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

10 (4) In determining whether a long-term financial commitment
11 is for baseload generation, the commission shall consider the design
12 of the powerplant and the intended use of the powerplant, as
13 determined by the commission based upon the electricity purchase
14 contract, any certification received from the Energy Commission,
15 any other permit or certificate necessary for the operation of the
16 powerplant, including a certificate of public convenience and
17 necessity, any procurement approval decision for the load-serving
18 entity, and any other matter the commission determines is relevant
19 under the circumstances.

20 (5) Costs incurred by an electrical corporation to comply with
21 this section, including those costs incurred for electricity purchase
22 agreements that are approved by the commission that comply with
23 the greenhouse gases emission performance standard, are to be
24 treated as procurement costs incurred pursuant to an approved
25 procurement plan and the commission shall ensure timely cost
26 recovery of those costs pursuant to paragraph (3) of subdivision
27 (d) of Section 454.5.

28 (6) A long-term financial commitment entered into through a
29 contract approved by the commission, for electricity generated by
30 a zero- or low-carbon generating resource that is contracted for,
31 on behalf of consumers of this state on a cost-of-service basis,
32 shall be recoverable in rates, in a manner determined by the
33 commission consistent with Section 380. The commission may,
34 after a hearing, approve an increase from one-half to 1 percent in
35 the return on investment by the third party entering into the contract
36 with an electrical corporation with respect to investment in zero-
37 or low-carbon generation resources authorized pursuant to this
38 subdivision.

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

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

9 (3) In determining whether a long-term financial commitment
10 is for baseload generation, the Energy Commission shall consider
11 the design of the powerplant and the intended use of the
12 powerplant, as determined by the Energy Commission based upon
13 the electricity purchase contract, any certification received from
14 the Energy Commission, any other permit for the operation of the
15 powerplant, any procurement approval decision for the load-serving
16 entity, and any other matter the Energy Commission determines
17 is relevant under the circumstances.

18 (d) (1) On or before February 1, 2007, the commission, through
19 a rulemaking proceeding, and in consultation with the Energy
20 Commission and the State Air Resources Board, shall establish a
21 greenhouse gases emission performance standard for all baseload
22 generation of load-serving entities, at a rate of emissions of
23 greenhouse gases that is no higher than the rate of emissions of
24 greenhouse gases for combined-cycle natural gas baseload
25 generation. Enforcement of the greenhouse gases emission
26 performance standard shall begin immediately upon the
27 establishment of the standard. All combined-cycle natural gas
28 powerplants that are in operation, or that have an Energy
29 Commission final permit decision to operate as of June 30, 2007,
30 shall be deemed to be in compliance with the greenhouse gases
31 emission performance standard.

32 (2) In determining the rate of emissions of greenhouse gases
33 for baseload generation, the commission shall include the net
34 emissions resulting from the production of electricity by the
35 baseload generation.

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

1 (4) In calculating the emissions of greenhouse gases by facilities
2 generating electricity from biomass, biogas, or landfill gas energy,
3 the commission shall consider net emissions from the process of
4 growing, processing, and generating the electricity from the fuel
5 source.

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

11 (6) In adopting and implementing the greenhouse gases emission
12 performance standard, the commission, in consultation with the
13 Independent System Operator shall consider the effects of the
14 standard on system reliability and overall costs to electricity
15 customers.

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

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

24 (9) An electrical corporation that provides electric service to
25 75,000 or fewer retail end-use customers in California may file
26 with the commission a proposal for alternative compliance with
27 this section, which the commission may accept upon a showing
28 by the electrical corporation of both of the following:

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

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

36 (e) (1) On or before June 30, 2007, the Energy Commission,
37 at a duly noticed public hearing and in consultation with the
38 commission and the State Air Resources Board, shall establish a
39 greenhouse gases emission performance standard for all baseload
40 generation of local publicly owned electric utilities at a rate of

1 emissions of greenhouse gases that is no higher than the rate of
2 emissions of greenhouse gases for combined-cycle natural gas
3 baseload generation. The greenhouse gases emission performance
4 standard established by the Energy Commission for local publicly
5 owned electric utilities shall be consistent with the standard adopted
6 by the commission for load-serving entities. Enforcement of the
7 greenhouse gases emission performance standard shall begin
8 immediately upon the establishment of the standard. All
9 combined-cycle natural gas powerplants that are in operation, or
10 that have an Energy Commission final permit decision to operate
11 as of June 30, 2007, shall be deemed to be in compliance with the
12 greenhouse gases emission performance standard.

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

17 (3) In determining the rate of emissions of greenhouse gases
18 for baseload generation, the Energy Commission shall include the
19 net emissions resulting from the production of electricity by the
20 baseload generation.

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

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

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

36 (7) In adopting and implementing the greenhouse gases emission
37 performance standard, the Energy Commission, in consultation
38 with the Independent System Operator, shall consider the effects
39 of the standard on system reliability and overall costs to electricity
40 customers.

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

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

9 (f) The Energy Commission, in a duly noticed public hearing
10 and in consultation with the commission and the State Air
11 Resources Board, shall reevaluate and continue, modify, or replace
12 the greenhouse gases emission performance standard when an
13 enforceable greenhouse gases emissions limit is established and
14 in operation, that is applicable to local publicly owned electric
15 utilities.

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

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

24 SEC. 6. Section 8341 is added to the Public Utilities Code, to
25 read:

26 8341. (a) (1) Beginning July 1, 2017, no load-serving entity
27 or local publicly owned electric utility may enter into a new
28 long-term financial commitment unless any primary generation
29 supplied under the long-term financial commitment complies with
30 the greenhouse gases emission performance standard established
31 by the commission, pursuant to subdivision (d), for a load-serving
32 entity, or by the Energy Commission, pursuant to subdivision (f),
33 for a local publicly owned electric utility.

34 (2) Beginning July 1, 2017, no load-serving entity or local
35 publicly owned electric utility may enter into a new long-term
36 financial commitment unless any secondary generation supplied
37 under the long-term financial commitment complies with the
38 greenhouse gases emission performance standard established by
39 the commission, pursuant to subdivision (e), for a load-serving

1 entity, or by the Energy Commission, pursuant to subdivision (g),
2 for a local publicly owned electric utility.
3 (3) Neither the commission or the Energy Commission shall
4 establish a greenhouse gases emission performance standard for
5 exempt generation.
6 (b) (1) (A) The commission shall not approve a long-term
7 financial commitment by an electrical corporation unless the
8 primary generation supplied under the long-term financial
9 commitment complies with the greenhouse gases emission
10 performance standard established by the commission pursuant to
11 subdivision (d).
12 (B) The commission shall not approve a long-term financial
13 commitment by an electrical corporation unless the secondary
14 generation supplied under the long-term financial commitment
15 complies with the greenhouse gases emission performance standard
16 established by the commission pursuant to subdivision (e).
17 (2) The commission may, in order to enforce this section, review
18 any long-term financial commitment proposed to be entered into
19 by an electric service provider or a community choice aggregator.
20 (3) The commission shall adopt rules to enforce the requirements
21 of this section, for load-serving entities. The commission shall
22 adopt procedures, for all load-serving entities, to verify the
23 emissions of greenhouse gases from any primary generation or
24 secondary generation supplied under a contract subject to the
25 greenhouse gases emission performance standard to ensure
26 compliance with the standard.
27 (4) In determining whether a long-term financial commitment
28 is for primary generation or secondary generation, the commission
29 shall consider the design of the powerplant and the intended use
30 of the powerplant, as determined by the commission based upon
31 the electricity purchase contract, any certification received from
32 the Energy Commission, any other permit or certificate necessary
33 for the operation of the powerplant, including a certificate of public
34 convenience and necessity, any procurement approval decision
35 for the load-serving entity, and any other matter the commission
36 determines is relevant under the circumstances.
37 (5) Costs incurred by an electrical corporation to comply with
38 this section, including those costs incurred for electricity purchase
39 agreements that are approved by the commission that comply with
40 the respective greenhouse gases emission performance standards,

1 are to be treated as procurement costs incurred pursuant to an
2 approved procurement plan and the commission shall ensure timely
3 cost recovery of those costs pursuant to paragraph (3) of
4 subdivision (d) of Section 454.5.

5 (6) A long-term financial commitment entered into through a
6 contract approved by the commission, for electricity generated by
7 a zero- or low-carbon generating resource that is contracted for,
8 on behalf of consumers of this state on a cost-of-service basis,
9 shall be recoverable in rates, in a manner determined by the
10 commission consistent with Section 380. The commission may,
11 after a hearing, approve an increase from one-half to 1 percent in
12 the return on investment by the third party entering into the contract
13 with an electrical corporation with respect to investment in zero-
14 or low-carbon generation resources authorized pursuant to this
15 paragraph.

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

19 (2) The Energy Commission may, in order to ensure compliance
20 with the greenhouse gases emission performance standard by local
21 publicly owned electric utilities, apply the procedures adopted by
22 the commission to verify the emissions of greenhouse gases from
23 primary generation and secondary generation pursuant to
24 subdivision (b).

25 (3) In determining whether a long-term financial commitment
26 is for primary generation or secondary generation, the Energy
27 Commission shall consider the design of the powerplant and the
28 intended use of the powerplant, as determined by the Energy
29 Commission based upon the electricity purchase contract, any
30 certification received from the Energy Commission, any other
31 permit for the operation of the powerplant, any procurement
32 approval decision for the load-serving entity, and any other matter
33 the Energy Commission determines is relevant under the
34 circumstances.

35 (d) (1) On or before June 30, 2017, the commission, through a
36 rulemaking proceeding, and in consultation with the Energy
37 Commission and the State Air Resources Board, shall establish a
38 greenhouse gases emission performance standard for all primary
39 generation of load-serving entities. The greenhouse gases emission
40 performance standard for primary generation shall be established

1 at the lowest level that the commission determines to be
2 technologically feasible without putting reliability of the electrical
3 grid and of electric service at risk. The initial greenhouse gases
4 emission performance standard for primary generation shall
5 establish a rate of emissions of greenhouse gases that is 80 percent
6 lower than the permissible rate of emissions of greenhouse gases
7 for baseload generation in effect as of January 1, 2015. The
8 commission, in consultation with the Energy Commission and the
9 State Air Resources Board, shall update the greenhouse gases
10 emission performance standard for primary generation every five
11 years based on new technology. Enforcement of the greenhouse
12 gases emission performance standard for primary generation shall
13 begin on July 1, 2017.

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

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

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

28 (5) Greenhouse gases that are injected in geological formations,
29 so as to prevent releases into the atmosphere, commonly termed
30 carbon capture and storage or carbon capture and sequestration,
31 in compliance with applicable laws and regulations, shall not be
32 counted as emissions of the powerplant in determining compliance
33 with the greenhouse gases emissions performance standard for
34 primary generation.

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

1 (7) In developing and implementing the greenhouse gases
2 emission performance standard for primary 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 primary 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 secondary
26 generation of load-serving entities. The greenhouse gases emission
27 performance standard for secondary 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. The commission, in consultation
31 with the Energy Commission and the State Air Resources Board,
32 shall update the greenhouse gases emission performance standard
33 for secondary generation every five years based on new technology.
34 Enforcement of the greenhouse gases emission performance
35 standard for secondary generation shall begin on July 1, 2017.

36 (2) In determining the rate of emissions of greenhouse gases
37 for secondary generation, the commission shall include the net
38 emissions resulting from the production of electricity by the
39 secondary 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 consider net emissions from the process of
9 growing, processing, and generating the electricity from the fuel
10 source.

11 (5) Greenhouse gases that are injected in geological formations,
12 so as to prevent releases into the atmosphere, commonly termed
13 carbon capture and storage or carbon capture and sequestration,
14 in compliance with applicable laws and regulations, shall not be
15 counted as emissions of the powerplant in determining compliance
16 with the greenhouse gases emissions performance standard for
17 secondary generation.

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

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

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

32 (9) An electrical corporation that provides electric service to
33 75,000 or fewer retail end-use customers in California may file
34 with the commission a proposal for alternative compliance with
35 this subdivision, which the commission may accept upon a showing
36 by the electrical corporation of both of the following:

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

39 (B) The emissions of greenhouse gases to generate electricity
40 for the retail end-use customers of the electrical corporation are

1 subject to a review by the utility regulatory commission of at least
2 one other state in which the electrical corporation provides
3 regulated retail electric service.

4 (f) (1) On or before June 30, 2017, the Energy Commission, at
5 a duly noticed public hearing and in consultation with the
6 commission and the State Air Resources Board, shall establish a
7 greenhouse gases emission performance standard for all primary
8 generation of local publicly owned electric utilities. The greenhouse
9 gases emission performance standard for primary generation shall
10 be established at the lowest level that the Energy Commission
11 determines to be technologically feasible without putting reliability
12 of the electrical grid and of electric service at risk. The initial
13 greenhouse gases emission performance standard for primary
14 generation shall establish a rate of emissions of greenhouse gases
15 that is 80 percent lower than the permissible rate of emissions of
16 greenhouse gases for baseload generation in effect as of January
17 1, 2015. The Energy Commission, in consultation with the
18 commission and the State Air Resources Board, shall update the
19 greenhouse gases emission performance standard for primary
20 generation every five years based on new technology. The
21 greenhouse gases emission performance standard for primary
22 generation established by the Energy Commission for local publicly
23 owned electric utilities shall be consistent with the standard adopted
24 by the commission for load-serving entities. Enforcement of the
25 greenhouse gases emission performance standard for primary
26 generation shall begin on July 1, 2017.

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

32 (3) In determining the rate of emissions of greenhouse gases
33 for primary generation, the Energy Commission shall include the
34 net emissions resulting from the production of electricity by the
35 primary generation.

36 (4) The Energy Commission shall establish an output-based
37 methodology to ensure that the calculation of emissions of
38 greenhouse gases for cogeneration recognizes the total usable
39 energy output of the process, and includes all greenhouse gases

1 emitted by the facility in the production of both electricity and
2 thermal energy.

3 (5) In calculating the emissions of greenhouse gases by facilities
4 generating electricity from biomass, biogas, or landfill gas energy,
5 the commission shall consider net emissions from the process of
6 growing, processing, and generating the electricity from the fuel
7 source.

8 (6) Greenhouse gases that are injected in geological formations,
9 so as to prevent releases into the atmosphere, commonly termed
10 carbon capture and storage or carbon capture and sequestration,
11 in compliance with applicable laws and regulations, shall not be
12 counted as emissions of the powerplant in determining compliance
13 with the greenhouse gases emissions performance standard for
14 primary generation.

15 (7) In adopting and implementing the greenhouse gases emission
16 performance standard for primary generation, the Energy
17 Commission, in consultation with the Independent System
18 Operator, shall consider the effects of the standard on system
19 reliability and overall costs to electricity customers.

20 (8) In developing and implementing the greenhouse gases
21 emission performance standard for primary generation, the
22 commission shall address long-term purchases of electricity from
23 unspecified sources in a manner consistent with this chapter.

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

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

1 technology. The greenhouse gases emission performance standard
2 for secondary generation established by the Energy Commission
3 for local publicly owned electric utilities shall be consistent with
4 the standard adopted by the commission for load-serving entities.
5 Enforcement of the greenhouse gases emission performance
6 standard for secondary generation shall begin on July 1, 2017.

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

12 (3) In determining the rate of emissions of greenhouse gases
13 for secondary generation, the Energy Commission shall include
14 the net emissions resulting from the production of electricity by
15 the secondary generation.

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

22 (5) In calculating the emissions of greenhouse gases by facilities
23 generating electricity from biomass, biogas, or landfill gas energy,
24 the Energy Commission shall consider net emissions from the
25 process of growing, processing, and generating the electricity from
26 the fuel source.

27 (6) Greenhouse gases that are injected in geological formations,
28 so as to prevent releases into the atmosphere, commonly termed
29 carbon capture and storage or carbon capture and sequestration,
30 in compliance with applicable laws and regulations, shall not be
31 counted as emissions of the powerplant in determining compliance
32 with the greenhouse gases emissions performance standard for
33 secondary generation.

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

39 (8) In developing and implementing the greenhouse gases
40 emission performance standard for secondary generation, the

1 Energy Commission shall address long-term purchases of
2 electricity from unspecified sources in a manner consistent with
3 this chapter.

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

9 (h) This section shall become operative on January 1, 2017.

10 SEC. 7. No reimbursement is required by this act pursuant to
11 Section 6 of Article XIII B of the California Constitution because
12 the only costs that may be incurred by a local agency or school
13 district will be incurred because this act creates a new crime or
14 infraction, eliminates a crime or infraction, or changes the penalty
15 for a crime or infraction, within the meaning of Section 17556 of
16 the Government Code, or changes the definition of a crime within
17 the meaning of Section 6 of Article XIII B of the California
18 Constitution.