

ASSEMBLY BILL

No. 2514

Introduced by Assembly Member Skinner

February 19, 2010

An act to amend Section 25302 of the Public Resources Code, and to amend Sections 454.3, 9615, and 9620 of, and to add Chapter 7.7 (commencing with Section 2835) to Part 2 of Division 1 of, the Public Utilities Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 2514, as introduced, Skinner. Energy storage systems.

Under existing law, the Public Utilities Commission (CPUC) has regulatory authority over public utilities, including electrical corporations, as defined. The existing Public Utilities Act requires the CPUC to review and adopt a procurement plan for each electrical corporation in accordance with specified elements, incentive mechanisms, and objectives. The existing California Renewables Portfolio Standard Program (RPS program) requires the CPUC to implement annual procurement targets for the procurement of eligible renewable energy resources, as defined, for all retail sellers, including electrical corporations, community choice aggregators, and electric service providers, but not including local publicly owned electric utilities, to achieve the targets and goals of the program.

The existing Warren-Alquist State Energy Resources Conservation and Development Act establishes the State Energy Resources Conservation and Development Commission (Energy Commission) and requires it to undertake a continuing assessment of trends in the consumption of electricity and other forms of energy and to analyze the social, economic, and environmental consequences of those trends

and to collect from electric utilities, gas utilities, and fuel producers and wholesalers and other sources, forecasts of future supplies and consumption of all forms of energy. Existing law requires the Energy Commission, beginning November 1, 2003, and every 2 years thereafter, to adopt an integrated energy policy report which includes an assessment and forecast of system reliability and the need for resource additions, efficiency, and conservation.

Existing law requires that each local publicly owned electric utility serving end-use customers to prudently plan for and procure resources that are adequate to meet its planning reserve margin and peak demand and operating reserves, sufficient to provide reliable electric service to its customers. That law additionally requires the utility, upon request, to provide the Energy Commission with any information the Energy Commission determines is necessary to evaluate the progress made by the local publicly owned electric utility in meeting those planning requirements, and requires the Energy Commission to report the progress made by each utility to the Legislature, to be included in the integrated energy policy reports. Under existing law the governing body of a local publicly owned electric utility is responsible for implementing and enforcing a renewables portfolio standard for the utility that recognizes the intent of the Legislature to encourage renewable resources, while taking into consideration the effect of the standard on rates, reliability, and financial resources and the goal of environmental improvement.

This bill would require each electrical corporation and local publicly owned electric utility, commencing January 1, 2014, to procure new energy storage systems, as defined, that are sufficient to provide specified percentages of the utility's average peak electrical demand using stored energy that was generated during offpeak periods of electrical demand (energy storage portfolio). The bill would additionally require each electrical corporation and local publicly owned electric utility, commencing January 1, 2011, to implement a 5-year program to employ distributed thermal, mechanical, or electrochemical energy storage systems to maximize shifting of electricity use for air-conditioning and refrigeration from peak demand periods to offpeak periods. The bill would require each electrical corporation and local publicly owned electric utility to develop plans to meet the energy storage portfolio procurement requirements and to report certain information to the Energy Commission. The bill would make an electrical corporation or local publicly owned electric utility liable for civil penalties of \$5,000 to \$25,000 per day for each day in which it

failed to comply with certain requirements added by the bill. The bill would require the Energy Commission to include certain information relative to energy storage systems in the integrated energy policy report, commencing with the report to be made by November 1, 2011. The bill would make other technical, nonsubstantive revisions to existing law.

Under existing law, a violation of the Public Utilities Act or any order, decision, rule, direction, demand, or requirement of the CPUC is a crime.

Because certain of the provisions of this bill require action by the CPUC to implement, a violation of these provisions would impose a state-mandated local program by creating a new crime. Because certain of the bill's requirements are applicable to local publicly owned electric utilities, the bill would impose a state-mandated local 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 specified reasons.

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 25302 of the Public Resources Code is
2 amended to read:
3 25302. (a) Beginning November 1, 2003, and every two years
4 thereafter, the commission shall adopt an integrated energy policy
5 report. This integrated report shall contain an overview of major
6 energy trends and issues facing the state, including, but not limited
7 to, supply, demand, pricing, reliability, efficiency, and impacts on
8 public health and safety, the economy, resources, and the
9 environment. Energy markets and systems shall be grouped and
10 assessed in three subsidiary volumes:
11 (1) Electricity and natural gas markets.
12 (2) Transportation fuels, technologies, and infrastructure.
13 (3) Public interest energy strategies.
14 (b) The commission shall compile the integrated energy policy
15 report prepared pursuant to subdivision (a) by consolidating the
16 analyses and findings of the subsidiary volumes in paragraphs (1),
17 (2), and (3) of subdivision (a). The integrated energy policy report

1 shall present policy recommendations based on an indepth and
2 integrated analysis of the most current and pressing energy issues
3 facing the state. The analyses supporting this integrated energy
4 policy report shall explicitly address interfuel and intermarket
5 effects to provide a more informed evaluation of potential tradeoffs
6 when developing energy policy across different markets and
7 systems.

8 (c) The integrated energy policy report shall include an
9 assessment and forecast of system reliability and the need for
10 resource additions, efficiency, and conservation that considers all
11 aspects of energy industries and markets that are essential for the
12 state economy, general welfare, public health and safety, energy
13 diversity, and protection of the environment. This assessment shall
14 be based on determinations made pursuant to this chapter.

15 (d) Beginning November 1, 2004, and every two years thereafter,
16 the commission shall prepare an energy policy review to update
17 analyses from the integrated energy policy report prepared pursuant
18 to subdivisions (a), (b), and (c), or to raise energy issues that have
19 emerged since the release of the integrated energy policy report.
20 The commission may also periodically prepare and release
21 technical analyses and assessments of energy issues and concerns
22 to provide timely and relevant information for the Governor, the
23 Legislature, market participants, and the public.

24 (e) (1) *For purposes of this subdivision, “energy storage*
25 *system” has the same meaning as in Section 2835.1 of the Public*
26 *Utilities Code.*

27 (2) *Beginning November 1, 2011, and every two years thereafter,*
28 *the energy policy review prepared by the commission, pursuant*
29 *to subdivision (d), to update the integrated energy policy report,*
30 *shall do all of the following:*

31 (A) *Identify, evaluate, and recommend the best technologies*
32 *and locations in the state for energy storage systems to achieve*
33 *the purposes set forth in subdivision (a) of Section 2837.*

34 (B) *Evaluate the potential capacity and benefits of energy*
35 *storage systems to the electrical transmission and distribution*
36 *grid.*

37 (C) *Identify and recommend locations where the interconnection*
38 *costs for energy storage systems located on the transmission and*
39 *distribution grid would be minimized.*

40 (e)

1 (f) In preparation of the report, the commission shall consult
2 with the following entities: the Public Utilities Commission, the
3 Office of Ratepayer Advocates, the State Air Resources Board,
4 the Electricity Oversight Board, the Independent System Operator,
5 the Department of Water Resources, the California Consumer
6 Power and Conservation Financing Authority, the Department of
7 Transportation, and the Department of Motor Vehicles, and any
8 federal, state, and local agencies it deems necessary in preparation
9 of the integrated energy policy report. To assure collaborative
10 development of state energy policies, these agencies shall make a
11 good faith effort to provide data, assessment, and proposed
12 recommendations for review by the commission.

13 ~~(f)~~

14 (g) The commission shall provide the report to the Public
15 Utilities Commission, the Office of Ratepayer Advocates, the State
16 Air Resources Board, the Electricity Oversight Board, the
17 Independent System Operator, the Department of Water Resources,
18 the California Consumer Power and Conservation Financing
19 Authority, and the Department of Transportation. For the purpose
20 of ensuring consistency in the underlying information that forms
21 the foundation of energy policies and decisions affecting the state,
22 those entities shall carry out their energy-related duties and
23 responsibilities based upon the information and analyses contained
24 in the report. If an entity listed in this subdivision objects to
25 information contained in the report, and has a reasonable basis for
26 that objection, the entity shall not be required to consider that
27 information in carrying out its energy-related duties.

28 ~~(g)~~

29 (h) The commission shall make the report accessible to state,
30 local, and federal entities and to the general public.

31 SEC. 2. Section 454.3 of the Public Utilities Code is amended
32 to read:

33 454.3. The commission may, after a hearing, approve an
34 increase of from one-half of 1 percent to 1 percent in the rate of
35 return otherwise allowed an electrical corporation on its electric
36 plant for investment by the corporation in facilities meeting one
37 of the following requirements:

38 (a) The facility is designed to generate electricity from a
39 renewable resource, including, but not limited to, solar energy,
40 geothermal steam, wind, and hydroelectric power at new or existing

1 dams; the facility is subject to Resources Agency review of its
 2 environmental impacts and determination that the facility is
 3 environmentally acceptable; its capital costs, when added to its
 4 costs of operation and maintenance, result in a cost of electricity
 5 generated over the useful life of the facility less than that of
 6 electricity generated by existing facilities utilizing nuclear power
 7 or fossil fuel; and the facility is used and useful.

8 (b) The facility is capable of meeting the then applicable
 9 environmental pollution standards; its capital costs, when added
 10 to its costs of operation and maintenance, result in a cost of
 11 electricity generated over the useful life of the facility less than
 12 that of electricity generated by existing facilities utilizing nuclear
 13 power or fossil fuel; and the facility is used and useful.

14 (c) The facility is experimental and is, in the determination of
 15 the commission, reasonably designed to improve or perfect
 16 technology for the generation of electricity from renewable
 17 resources or to more efficiently utilize other resources in a manner
 18 which will decrease environmental pollution from and lower the
 19 costs of the electricity generated.

20 (d) *The facility is an “energy storage system,” as defined in*
 21 *Section 2835.1, and serves at least one of the purposes identified*
 22 *in subdivision (a) of Section 2837.*

23 SEC. 3. Chapter 7.7 (commencing with Section 2835) is added
 24 to Part 2 of Division 1 of the Public Utilities Code, to read:

25
 26 CHAPTER 7.7. ENERGY STORAGE SYSTEMS

27
 28 2835. The Legislature finds and declares all of the following:

29 (a) Greatly expanded energy storage systems are necessary to
 30 enable electrical corporations and local publicly owned electric
 31 utilities to integrate increased amounts of renewable energy
 32 resources into the electrical transmission and distribution grid in
 33 a manner that minimizes emissions of greenhouse gases and
 34 reduces costs to ratepayers.

35 (b) Additional energy storage systems are necessary to make
 36 full and efficient use of the significant additional amounts of
 37 variable, intermittent, and offpeak electrical generation from wind
 38 and solar energy that will be entering the California power mix on
 39 an accelerated basis.

1 (c) Expanded use of energy storage systems can reduce costs
2 to ratepayers by avoiding or deferring the need for new fossil-fuel
3 powered peaking powerplants and avoiding or deferring
4 distribution and transmission system upgrades and expansion of
5 the grid.

6 (d) Expanded use of energy storage systems will reduce the use
7 of electricity generated from fossil-fuels to meet peak-load
8 requirements on days with high electricity demand and can avoid
9 or reduce the use of electricity that was generated by high
10 carbon-emitting electrical-generating facilities during those high
11 electricity demand periods. This will have substantial cobenefits
12 from reduced emissions of criteria pollutants.

13 (e) Use of energy storage systems to provide the ancillary
14 services otherwise provided by fossil-fueled generating facilities
15 will reduce emissions of carbon dioxide and criteria pollutants.

16 (f) There are significant barriers to obtaining the benefits of
17 energy storage systems including inadequate evaluation of the use
18 of energy storage to integrate renewable energy resources into the
19 transmission and distribution grid through long-term electricity
20 resource planning, lack of recognition of technological and
21 marketplace advancements, and inadequate statutory and regulatory
22 support.

23 2835.1. For purposes of this chapter, the following terms have
24 the following meanings:

25 (a) “Energy storage portfolio” means those requirements for an
26 electrical corporation or local publicly owned electric utility to
27 procure new energy storage systems established pursuant to Section
28 3836.

29 (b) (1) “Energy storage system” means commercially available
30 technology that is capable of absorbing energy, storing it for a
31 period of time, and thereafter dispatching the energy. An “energy
32 storage system” may have any of the characteristics in paragraph
33 (2), is required to accomplish one of the purposes in paragraph
34 (3), and is required to meet at least one of the characteristics in
35 paragraph (4).

36 (2) An “energy storage system” may have any of the following
37 characteristics:

38 (A) Be either centralized or distributed.

39 (B) Be either owned by an electrical corporation or local publicly
40 owned electric utility, a customer of an electrical corporation or

1 local publicly owned electric utility, or a third party, or is jointly
2 owned by two or more of the above.

3 (3) An “energy storage system” shall either reduce emissions
4 of greenhouse gases, reduce demand for peak electrical generation,
5 or improve the reliable operation of the electrical transmission or
6 distribution grid.

7 (4) An “energy storage system” shall, without substantial
8 reliance on fossil fuels, do one of the following:

9 (A) Use electromechanical, electrochemical, or electrothermal
10 processes to store energy for delivery as electricity to the
11 transmission or distribution grid at a later time.

12 (B) Store thermal energy either for use to generate electricity
13 at a later time, or for direct use for heating or cooling at a later
14 time in a manner that avoids the need to use electricity at that time.

15 (c) “New” means, in reference to an energy storage system, a
16 system that is installed and first becomes operational after January
17 1, 2011.

18 (d) “Offpeak” means, in reference to electrical demand, a period
19 that is not within a peak demand period.

20 (e) “Peak demand period” means a period of high daily, weekly,
21 or seasonal demand for electricity. The peak demand period for a
22 particular utility will vary by season and climactic conditions, and
23 may vary by areas within the utility’s service territory depending
24 upon possible transmission constraints. The peak demand period
25 for an electrical corporation shall be determined, or approved, by
26 the commission and shall be determined, or approved, for a local
27 publicly owned electric utility, by its governing body. Nothing in
28 this definition limits the authority of the commission or of a
29 governing body to designate and provide differing treatment to
30 superpeak demand periods and shoulder demand periods if those
31 designations and differentiations are consistent with the purposes
32 of this chapter.

33 2835.2. (a) The commission may vary the requirements of this
34 chapter for an electrical corporation with 75,000 or fewer customer
35 connections, as the circumstances warrant.

36 (b) The requirements of this chapter apply to a local publicly
37 owned electric utility with more than 75,000 customer connections.
38 For a local publicly owned electric utility with 75,000 or fewer
39 customer connections, the governing body of the utility may vary
40 the requirements of this chapter, as the circumstances warrant.

1 (c) Each electrical cooperative shall adopt a policy for
2 employing energy storage systems for the utility.

3 2836. Each electrical corporation and local publicly owned
4 electric utility shall procure, through ownership or a contractual
5 right to purchase electricity from a customer or third party, new
6 energy storage systems that are sufficient to provide the following
7 percentages of electrical demand:

8 (a) (1) On or before January 1, 2014, and continuing through
9 December 31, 2019, the utility shall procure new energy storage
10 systems that are sufficient to provide at least 2.25 percent of the
11 utility's average peak electrical demand over the previous five
12 years, using stored energy that was generated during offpeak
13 periods of electrical demand.

14 (2) The energy storage system procurement requirement shall
15 be calculated on a calendar year basis. For example, for the
16 calendar year January 1, 2014, to December 31, 2014, the energy
17 storage portfolio procurement requirement shall be calculated
18 based upon the five year period commencing January 1, 2009, and
19 ending December 31, 2013. For the calendar year January 1, 2015,
20 to December 31, 2015, the energy storage portfolio procurement
21 requirement shall be calculated based upon the five-year period
22 commencing January 1, 2010, and ending December 31, 2014.

23 (b) (1) On or before January 1, 2020, and continuing through
24 December 31, 2024, the utility shall procure new energy storage
25 systems that are sufficient to provide at least 5 percent of the
26 utility's average peak electrical demand over the previous five
27 years, using stored energy that was generated during offpeak times
28 of electrical demand.

29 (2) The energy storage system procurement requirement shall
30 be calculated on a calendar year basis.

31 (c) Commencing January 1, 2012, each electrical corporation
32 and local publicly owned electric utility shall implement a five-year
33 program to employ distributed thermal, mechanical, or
34 electrochemical energy storage systems to maximize shifting of
35 electricity use for air-conditioning and refrigeration from peak
36 demand periods to offpeak periods. The program shall, at a
37 minimum, implement the actions identified in the plans required,
38 for an electrical corporation, by Section 2837.2, and for a local
39 publicly owned electric utility, by paragraph (2) of subdivision (f)
40 of Section 9615.

1 2836.2. (a) The commission shall develop a program to use
2 energy storage systems to achieve all feasible, cost-effective
3 air-conditioning and refrigeration load shifting in new and existing
4 facilities. The purposes of the program shall include reducing
5 electricity demand during peak demand periods and reducing
6 emissions of oxides of nitrogen so as to mitigate adverse ozone
7 and other air quality impacts.

8 (b) Each electrical corporation shall implement the program by
9 January 1, 2016.

10 2837. Each electrical corporation’s renewable energy
11 procurement plan, prepared and approved pursuant to Article 16
12 (commencing with Section 399.11) of Chapter 2.3 of Part 1, shall
13 do all of the following:

14 (a) Require the utility to procure new energy storage systems
15 that are sufficient to allow the electrical corporation to meet the
16 energy storage portfolio procurement requirements of Section
17 2836. Each of the attributes that an energy storage system would
18 provide shall be considered and valued when determining if a
19 proposed energy storage system is cost effective. The plan shall
20 address the acquisition and use of energy storage systems in order
21 to achieve the following purposes:

22 (1) Integrate intermittent generation from eligible renewable
23 energy resources into the reliable operation of the transmission
24 and distribution grid.

25 (2) Allow intermittent generation from eligible renewable energy
26 resources to operate at or near full capacity at offpeak times.

27 (3) Eliminate the need for new fossil-fuel powered peaking
28 generation facilities by using stored electricity to meet peak
29 demand.

30 (4) Reduce purchases of electricity generation sources with
31 higher emissions of greenhouse gases.

32 (5) Reduce transmission and distribution losses that occur when
33 there is congestion on the grid.

34 (6) Reduce the demand for electricity during peak periods and
35 achieve permanent load-shifting by using thermal storage to meet
36 air-conditioning needs.

37 (7) Avoid or defer investments in transmission and distribution
38 system upgrades.

39 (b) Consider and incorporate, where feasible, the Energy
40 Commission’s evaluation of energy storage locations, technologies,

1 and benefits as identified in the most current Integrated Energy
2 Policy Report prepared pursuant to subdivision (e) of Section
3 25302 of the Public Resources Code.

4 2837.2. Each electrical corporation's procurement plan,
5 prepared and approved pursuant to Section 454.5, shall include a
6 program, to be implemented over the following five years,
7 requiring the use of distributed thermal, mechanical, or
8 electrochemical energy storage systems to maximize shifting of
9 electricity use for air-conditioning and refrigeration from peak, to
10 offpeak periods. The purposes of the program shall include
11 reducing electricity demand during peak demand periods and
12 reducing emissions of oxides of nitrogen so as to mitigate adverse
13 ozone and other air quality impacts.

14 2838. (a) Each electrical corporation and each local publicly
15 owned electric utility, by January 30, 2013, shall submit a report
16 to the Energy Commission showing its progress toward complying
17 with the energy storage portfolio. Each electrical corporation shall
18 submit a copy of the report to the commission and the commission
19 shall ensure that a copy of the report, with any confidential
20 information redacted, is available either of the commission's
21 Internet Web site or upon an Internet Web site maintained by the
22 electrical corporation that can be accessed from the commission's
23 Internet Web site.

24 (b) Each electrical corporation and each local publicly owned
25 electric utility, by January 30, 2014, shall submit to the Energy
26 Commission a report demonstrating that it has complied with the
27 energy storage portfolio procurement requirements of subdivision
28 (a) of Section 2836.

29 (c) Each electrical corporation and each local publicly owned
30 electric utility, by January 30, 2020, shall submit to the Energy
31 Commission a report demonstrating that it has complied with the
32 energy storage portfolio procurement requirements of subdivision
33 (b) of Section 2836.

34 (d) (1) The Energy Commission, within 60 days of receipt of
35 a report required by subdivision (b) or (c), shall notify an electrical
36 corporation or local publicly owned electric utility if the report
37 fails to demonstrate compliance with the energy storage portfolio
38 procurement requirements.

39 (2) An electrical corporation or local publicly owned electric
40 utility receiving a notice of deficiency pursuant to paragraph (1),

1 within 60 days of receiving the notice of deficiency, shall submit
2 an energy storage portfolio compliance plan to the Energy
3 Commission setting forth a program for compliance with the energy
4 storage portfolio within six months of the required date of
5 submittal. The compliance plan shall, at a minimum, set forth
6 standard terms and conditions of contracts of not less than 10 years'
7 duration, for procurement of energy storage systems, and provide
8 for solicitations to procure the energy storage systems necessary
9 to achieve compliance with the energy storage portfolio.

10 (3) The electrical corporation or local publicly owned electric
11 utility that submitted a compliance plan shall comply with the
12 applicable energy storage portfolio within six months from the
13 required date of submittal and shall submit proof of compliance
14 to the Energy Commission within 30 days of the expiration of the
15 six-month period.

16 (e) Each electrical corporation shall submit a copy to the
17 commission, of the reports to the Energy Commission required by
18 subdivisions (a), (b), and (c), and any compliance plan submitted
19 to the Energy Commission pursuant to paragraph (2) of subdivision
20 (d). The commission shall ensure that a copy of the report or plan,
21 with any confidential information redacted, is available either on
22 the commission's Internet Web site or upon an Internet Web site
23 maintained by the electrical corporation that can be accessed from
24 the commission's Internet Web site.

25 (f) Each electrical corporation, by January 1, 2012, shall report
26 to the Energy Commission the excess capacity levels, in kilowatts,
27 of the substations and local distribution circuits on its electrical
28 distribution system. The Energy Commission shall promptly make
29 a summary of this information available to the public on its Internet
30 Web site. Each electrical corporation shall at least annually, by
31 January 1 of each year, update the information reported to the
32 Energy Commission. The Energy Commission shall promptly
33 make a summary of updated information available to the public
34 on its Internet Web site.

35 2839. (a) An electrical corporation or local publicly owned
36 electric utility shall be liable for civil penalties of five thousand
37 dollars (\$5,000) to twenty-five thousand dollars (\$25,000) per day
38 for each day in which it does any of the following:

39 (1) Fails to submit the report required by subdivision (a), (b) or
40 (c) of Section 2838.

1 (2) Fails to submit an energy storage portfolio compliance plan
2 required pursuant to paragraph (2) of subdivision (d) of Section
3 2838.

4 (3) Fails to comply with the energy storage portfolio within six
5 months after the required date of submittal of a compliance plan,
6 as required by paragraph (3) of subdivision (d) of Section 2838.

7 (4) Fails to remain in compliance with the energy portfolio
8 standard requirements of subdivisions (a) and (b) of Section 2836.

9 (b) The civil penalties authorized by subdivision (a) may be
10 imposed on an electrical corporation or local publicly owned
11 electric utility by any court of competent jurisdiction in an action
12 brought by the Attorney General.

13 (c) In determining the amount of civil penalties to impose, the
14 court shall consider equitable factors including the extent of
15 noncompliance, potential harm resulting from noncompliance,
16 whether there are valid reasons for noncompliance that are beyond
17 the control of the electric corporation or local publicly owned
18 utility, and any good faith efforts to achieve compliance.

19 (d) Any civil penalties imposed on an electrical corporation
20 pursuant to this section shall be the responsibility of the
21 corporation's shareholders and may not be recovered, directly or
22 indirectly, in rates or otherwise passed along to the ratepayers of
23 the utility.

24 SEC. 4. Section 9615 of the Public Utilities Code is amended
25 to read:

26 9615. (a) Each local publicly owned electric utility, in
27 procuring energy to serve the load of its retail end-use customers,
28 shall first acquire all available energy efficiency and demand
29 reduction resources that are cost effective, reliable, and feasible.

30 (b) On or before June 1, 2007, and by June 1 of every third year
31 thereafter, each local publicly owned electric utility shall identify
32 all potentially achievable cost-effective electricity efficiency
33 savings and shall establish annual targets for energy efficiency
34 savings and demand reduction for the next 10-year period. A local
35 publicly owned electric utility's determination of potentially
36 achievable cost-effective electricity efficiency savings shall be
37 made without regard to previous minimum investments undertaken
38 pursuant to Section 385. A local publicly owned electric utility
39 shall treat investments made to achieve energy efficiency savings
40 and demand reduction targets as procurement investments.

1 (c) Within 60 days of adopting annual targets pursuant to
 2 subdivision (b), each local publicly owned electric utility shall
 3 report those targets to the ~~State Energy Resources Conservation~~
 4 ~~and Development~~ Energy Commission, and the basis for
 5 establishing those targets.

6 (d) Each local publicly owned electric utility shall report
 7 annually to its customers and to the ~~State Energy Resources~~
 8 ~~Conservation and Development~~ Energy Commission. The report
 9 shall contain, but is not limited to, both of the following:

10 (1) Its investments in energy efficiency and demand reduction
 11 programs.

12 (2) A description of programs, expenditures, cost-effectiveness,
 13 and expected and actual energy efficiency savings and demand
 14 reduction results.

15 (e) Each local publicly owned electric utility shall also annually
 16 develop and submit to the ~~State Energy Resources Conservation~~
 17 ~~and Development~~ Energy Commission a report containing all of
 18 the following:

19 (1) The sources of funding for its investments in energy
 20 efficiency and demand reduction program investments.

21 (2) The methodologies and input assumptions used to determine
 22 cost-effectiveness.

23 (3) The results of an independent evaluation that measures and
 24 verifies the energy efficiency savings and reduction in energy
 25 demand achieved by its energy efficiency and demand reduction
 26 programs.

27 (f) (1) *Each local publicly owned electric utility, by January*
 28 *1, 2011, shall develop and submit to the Energy Commission a*
 29 *plan to procure new energy storage systems that are sufficient to*
 30 *allow the utility to meet the energy portfolio requirements of*
 31 *subdivisions (a) and (b) of Section 2836. The plan shall address*
 32 *the acquisition and use of energy storage systems in order to*
 33 *achieve the following purposes:*

34 (A) *Integrate intermittent generation from eligible renewable*
 35 *energy resources into the reliable operation of the transmission*
 36 *and distribution grid.*

37 (B) *Allow intermittent generation from eligible renewable energy*
 38 *resources to operate at or near full capacity at offpeak times.*

1 (C) Eliminate the need for new fossil-fuel powered peaking
2 generation facilities by using stored electricity to meet peak
3 demand.

4 (D) Reduce purchases of electricity generation sources with
5 higher emissions of greenhouse gases.

6 (E) Reduce transmission and distribution losses that occur when
7 there is congestion on the grid.

8 (F) Reduce the demand for electricity during peak periods and
9 achieve permanent load-shifting by using thermal storage to meet
10 air-conditioning needs.

11 (G) Avoid or defer investments in transmission and distribution
12 system upgrades.

13 (2) Each local publicly owned electric utility, by January 1,
14 2011, shall develop and submit to the Energy Commission the
15 utility's plan setting forth a program, to be implemented over the
16 following five years, requiring the use of distributed thermal,
17 mechanical, or electrochemical energy storage systems to maximize
18 shifting of electricity use for air-conditioning and refrigeration
19 from peak demand periods to offpeak times pursuant to subdivision
20 (c) of Section 2836. The purposes of the program shall include
21 reducing electricity demand during peak demand periods and
22 reducing emissions of oxides of nitrogen so as to mitigate adverse
23 ozone and other air quality impacts.

24 (3) In developing and implementing the plans required by this
25 subdivision, each of the attributes that an energy storage system
26 would provide shall be considered and valued when determining
27 if a proposed energy storage system is cost effective.

28 (4) Each local publicly owned electric utility, within one year
29 of its issuance, shall consider and, where feasible, incorporate
30 into the utility's plans required by this subdivision, the Energy
31 Commission's evaluation of energy storage locations, technologies,
32 and benefits as identified in the most current Integrated Energy
33 Policy Report prepared pursuant to subdivision (e) of Section
34 25302 of the Public Resources Code.

35 (f)

36 (g) ~~The State Energy Resources Conservation and Development~~
37 Energy Commission shall include a summary of the information
38 reported pursuant to subdivision (e) in the integrated energy policy
39 report prepared pursuant to Chapter 4 (commencing with Section
40 25300) of Division 15 of the Public Resources Code. ~~The State~~

1 ~~Energy Resources Conservation and Development~~ *Energy*
 2 Commission shall also include, for each local publicly owned
 3 electric utility, a comparison of the local publicly owned electric
 4 utility’s annual targets established in accordance with this section,
 5 and the local publicly owned electric utility’s actual energy
 6 efficiency savings and demand reductions. If the ~~State Energy~~
 7 ~~Resources Conservation and Development~~ *Energy* Commission
 8 determines that improvements can be made in either the level of
 9 a local publicly owned electric utility’s annual targets to achieve
 10 all cost-effective, reliable, and feasible energy savings and demand
 11 reductions and to enable the local publicly owned electric utilities,
 12 in the aggregate, to achieve statewide targets established pursuant
 13 to Section 25310, or in meeting each local publicly owned electric
 14 utility’s annual targets, the ~~State Energy Resources Conservation~~
 15 ~~and Development~~ *Energy* Commission shall provide
 16 recommendations to the local publicly owned electric utility, the
 17 Legislature, and the Governor on those improvements.

18 SEC. 5. Section 9620 of the Public Utilities Code is amended
 19 to read:

20 9620. (a) Each local publicly owned electric utility serving
 21 end-use customers, shall prudently plan for and procure resources
 22 that are adequate to meet its planning reserve margin and peak
 23 demand and operating reserves, sufficient to provide reliable
 24 electric service to its customers. Customer generation located on
 25 the customer’s site or providing electric service through
 26 arrangements authorized by Section 218, shall not be subject to
 27 these requirements if the customer generation, or the load it serves,
 28 meets one of the following criteria:

29 (1) It takes standby service from the local publicly owned
 30 electric utility on a rate schedule that provides for adequate backup
 31 planning and operating reserves for the standby customer class.

32 (2) It is not physically interconnected to the electric transmission
 33 or distribution grid, so that, if the customer generation fails, backup
 34 power is not supplied from the electricity grid.

35 (3) There is physical assurance that the load served by the
 36 customer generation will be curtailed concurrently and
 37 commensurately with an outage of the customer generation.

38 (b) Each local publicly owned electric utility serving end-use
 39 customers shall, at a minimum, meet the most recent minimum
 40 planning reserve and reliability criteria approved by the Board of

1 Trustees of the Western Systems Coordinating Council or the
2 Western Electricity Coordinating Council.

3 (c) *Each local publicly owned electric utility shall prudently*
4 *plan for and procure energy storage systems that are adequate to*
5 *meet the requirements of Section 2836.*

6 (e)

7 (d) A local publicly owned electric utility serving end-use
8 customers shall, upon request, provide the ~~State Energy Resources~~
9 ~~Conservation and Development~~ Energy Commission with any
10 information the ~~State Energy Resources Conservation and~~
11 ~~Development~~ Energy Commission determines is necessary to
12 evaluate the progress made by the local publicly owned electric
13 utility in meeting the requirements of this section.

14 (d)

15 (e) The ~~State Energy Resources Conservation and Development~~
16 Energy Commission shall report to the Legislature, to be included
17 in each integrated energy policy report prepared pursuant to Section
18 25302 of the Public Resources Code, regarding the progress made
19 by each local publicly owned electric utility serving end-use
20 customers in meeting the requirements of this section.

21 SEC. 6. No reimbursement is required by this act pursuant to
22 Section 6 of Article XIII B of the California Constitution because
23 a local agency or school district has the authority to levy service
24 charges, fees, or assessments sufficient to pay for the program or
25 level of service mandated by this act or because costs that may be
26 incurred by a local agency or school district will be incurred
27 because this act creates a new crime or infraction, eliminates a
28 crime or infraction, or changes the penalty for a crime or infraction,
29 within the meaning of Section 17556 of the Government Code, or
30 changes the definition of a crime within the meaning of Section 6
31 of Article XIII B of the California Constitution.