AMENDED IN ASSEMBLY MAY 2, 2005 AMENDED IN ASSEMBLY APRIL 19, 2005 AMENDED IN ASSEMBLY APRIL 7, 2005

CALIFORNIA LEGISLATURE—2005-06 REGULAR SESSION

ASSEMBLY BILL

No. 1348

Introduced by Assembly Member Sharon Runner

February 22, 2005

An act to add *and repeal* Section 379.7—to of the Public Utilities Code, relating to electricity.

LEGISLATIVE COUNSEL'S DIGEST

AB 1348, as amended, Sharon Runner. Antelope Valley Fairgrounds EE and PV Synergy Demonstration Project.

Existing law requires the commission, in consultation with the Energy Commission, to administer, until January 1, 2008, a self-generation incentive program for distributed generation resources in the same form that exists on January 1, 2004. Existing law establishes a net energy metering pilot program for eligible biogas digester customer-generators.

This bill would-require the Public Utilities Commission to establish authorize the Antelope Valley Fairgrounds EE and PV Synergy Demonstration Project, as specified, at the Antelope Valley Fairgrounds, that would include the installation of cost-effective energy efficient equipment and fixtures, and a photovoltaic solar energy system of up to 630 kilowatts. The bill would require an electrical corporation providing electrical service to the Antelope Valley Fairgrounds to file a tariff with the commission meeting certain criteria.

AB 1348 -2-

5

6

10

11 12

13

14 15

16

17 18

19

20

21

22

23

Under existing law, a violation of the Public Utilities Act or an order or direction of the commission is a crime.

Because the provisions of this bill would be a part of the act and because the failure to file a required tariff or the violation of a filed and approved tariff implementing its requirements would be a crime, the bill would impose a state-mandated local program by creating a new crime.

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

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

1 SECTION 1. The Legislature finds and declares all of the 2 following:

3 SECTION 1. Section 379.7 is added to the Public Utilities 4 Code, to read:

379.7. (a) The Legislature finds and declares that the demonstration project authorized pursuant to this section, at the Antelope Valley Fairgrounds, to determine actual energy and cost savings that may be achieved when investments are made onsite to both reduce overall electricity demand and to offset peak electricity demand through the installation of (1) cost-effective energy efficient equipment and fixtures, and (2) a photovoltaic solar energy system, will provide valuable empirical data upon which to optimize future ratepayer investments in cost-effective energy efficiency and photovoltaic solar systems.

- (b) (1) The demonstration project authorized pursuant to this section shall be referred to as the Antelope Valley Fairgrounds EE and PV Synergy Demonstration Project.
- (2) To ensure that potential energy and cost savings from cost-effective energy efficient equipment and fixtures are achieved, the Antelope Valley Fairgrounds shall do both of the following:
- (A) Implement the recommendations of the energy audit performed on July 27, 2004.
- 24 (B) Include cost-effective energy efficient equipment and 25 fixtures in all future expansions of the fairgrounds.
- 26 (3) To ensure that potential energy and cost savings are 27 achieved from a photovoltaic solar energy system of up to 630 28 kilowatts installed at the Antelope Valley Fairgrounds, the

-3- AB 1348

1 photovoltaic solar energy system shall meet both of the following 2 criteria:

- (A) Be installed in a manner that optimizes operating efficiency, including appropriate siting.
- (B) Consist of components that are new and unused and have a warranty of not less than 10 years to protect against defects and undue degradation of electrical generation output.
- (c) An electrical corporation providing electrical service to the Antelope Valley Fairgrounds shall, by February 1, 2006, file with the commission a tariff providing for an incentive rate consistent with this section. The incentive rate shall provide stability and certainty over a 10-year period in an amount and in a manner to support investment in, and to test the durability of, the photovoltaic solar energy system installed at the fairgrounds. The incentive rate, together with an incentive from the self-generation incentive program that recognizes the energy efficiency investments made at the fairgrounds as authorized pursuant to Section 379.6, shall provide for a 10-year payback period for the photovoltaic solar energy system. The incentive rate shall not result in any cost shifting among customer classes of the electrical corporation.
- (d) Actual energy and cost savings shall be determined through annual energy audits and ongoing metering of electricity used and electricity produced on a time-of-use basis.
- (e) The demonstration project will be complete 10 years from the date the Antelope Valley Fairgrounds first takes electrical service pursuant to the incentive rate required by this section.
- (f) Biennial reports shall be submitted to the commission and to the Legislature by the Antelope Valley Fairgrounds. The reports shall include actual recorded electricity usage by the fairgrounds and electricity produced by the photovoltaic solar energy system at the fairgrounds, on a time-of-use basis. A final report shall be submitted to the commission and to the Legislature within six months of the conclusion of the demonstration project. The final report shall include an analysis of the energy and cost savings achieved at the fairgrounds, the effectiveness of combining investment in energy efficiency and a photovoltaic solar energy system on the same site, the performance and durability of the photovoltaic solar energy system over the life of the demonstration project, and

AB 1348 —4—

3

4

5

6

7

8

10

11 12

13

14 15

16 17

18

19

20 21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

39

40

recommendations for optimizing ratepayer investment in energy efficiency and photovoltaic solar energy systems.

- (g) This section shall remain in effect only until January 1, 2017, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2017, deletes or extends that date.
- SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.
- (a) Investment in cost-effective energy efficiency produces energy savings, reduces customer demand, and contributes to the safe and reliable operation of the electric distribution grid.
- (b) Investment in solar technology that generates electricity directly from sunlight produces on-peak generating capacity, reduces dependence on fossil fuels, and can increase system reliability.
- (e) Investment in cost-effective energy efficiency and solar technology on the same site in a location with above-average solar incidence on an annual basis could provide synergies that optimize ratepayer benefits.
- (d) A demonstration project, if properly structured, would provide empirical data by which to evaluate synergies between energy efficiency and solar technology. A properly structured demonstration project would provide for all of the following:
- (1) The installation of cost-effective energy efficient equipment and fixtures.
- (2) The installation of solar generating capacity to optimize operating efficiency.
- (3) The adoption of an incentive rate to support investment in, and test durability of, solar generating capacity.
- (4) On-going monitoring of performance to test efficiency, 38 durability, and synergy.
 - (e) The Antelope Valley Fairgrounds, recently completed the construction of a complex, including exhibition halls,

-5- AB 1348

administration building, cattle and sheep barn, swine barn, show arena, and clock tower. The Antelope Valley Fairgrounds is located in Climate Zone 14, and enjoys more than "300" days of sunshine on an average annual basis.

- (f) An energy audit performed on that site on July 27, 2004, found that cost-effective energy efficient heating, ventilation, and air conditioning (HVAC) equipment and cost-effective energy efficient lighting fixtures had been installed, along with a state of the art energy management system (EMS).
- (g) The Antelope Valley Fairgrounds has applied through the Self-Generation Incentive Program (SGIP) for incentives to install an onsite photovoltaic solar system to provide cost-effective energy savings.
- SEC. 2. Section 379.7 is added to the Public Utilities Code, to read:
- 379.7. The commission shall establish a demonstration project at the Antelope Valley Fairgrounds to be referred to as the Antelope Valley Fairgrounds EE and PV Synergy Demonstration Project, that would require all of the following:
- (a) The calibration of energy management system (EMS) settings, the installation of variable speed drive on exhaust fans, the relocation of compressor-condenser units, the installation of occupancy sensors for lighting control, and the inclusion of all cost-effective energy efficient equipment in future expansions of fair facilities.
- (b) The installation of an onsite 630kW photovoltaic (PV)solar system, for which an incentive application has been made through the Self-Generation Incentive Program, in a manner that optimizes operating efficiency, including appropriate siting. Authorized incentives shall recognize the energy efficiency synergy of the project. All components of the solar energy system shall be new and unused and shall have a warranty of not less than 10 years to protect against defects and undue degradation of electrical generation output.
- (c) The establishment of incentive rate that provides rate stability and certainty over a 10-year period in an amount and in a manner that would support investment in, and test the durability of, the photovoltaic solar system to be established. The incentive rate together with an SGIP incentive that recognizes the energy efficiency investments made in the project, as authorized

AB 1348 — 6 —

4

5

8

10

pursuant to subdivision (c) of Section 379.6, shall provide for a
10-year payback period.
(d) The performance of annual energy audits conducted by the

(d) The performance of annual energy audits conducted by the electrical corporation providing electrical service to further ealibrate the EMS, the ongoing monitoring of PV systems conducted to determine performance, operating efficiencies, and durability, the installation of meters to track actual demand and actual energy production on a time-of-use basis, and the preparation of biennial reports to be submitted to the commission.