BILL ANALYSIS

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SENATE RULES COMMITTEE
Office of Senate Floor Analyses
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327-4478
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UNFINISHED BUSINESS

Bill No: SB 1

Author: Murray (D), et al

Amended: 6/29/06 Vote:

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SENATE ENERGY, UTILITIES & COMMUN. COMM. : 10-0, 4/26/05 AYES: Escutia, Morrow, Alarcon, Battin, Campbell, Cox, Dunn, Kehoe, Murray, Simitian NO VOTE RECORDED: Bowen

SENATE APPROPRIATIONS COMMITTEE : 8-4, 5/26/05 AYES: Migden, Alarcon, Alquist, Escutia, Florez, Murray, Ortiz, Romero

NOES: Aanestad, Ashburn, Battin, Poochigian NO VOTE RECORDED: Dutton

SENATE FLOOR: 30-5, 6/1/05

AYES: Alarcon, Alquist, Campbell, Cedillo, Chesbro, Cox,
Denham, Ducheny, Dunn, Dutton, Escutia, Figueroa, Florez, Kehoe, Kuehl, Lowenthal, Maldonado, Migden, Morrow, Murray, Ortiz, Perata, Poochigian, Romero, Scott, Simitian, Soto, Speier, Torlakson, Vincent NOES: Aanestad, Ackerman, Battin, Hollingsworth,

McClintock NO VOTE RECORDED: Ashburn, Bowen, Machado, Margett, Runner

ASSEMBLY FLOOR : 49-19, 6/29/06 - See last page for vote

SENATE ENERGY, UTILITIES & COMMUN. COMM. : 9-0, 8/8/06 AYES: Escutia, Alarcon, Battin, Bowen, Cox, Dunn, Dutton, Kehoe, Murray

NO VOTE RECORDED: Simitian

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SUBJECT : Electricity: solar energy: net metering

SOURCE : Author

This bill makes changes to the California Solar Initiative, which is implemented by the California Public Utilities Commission.

<u>Assembly Amendments</u> delete most of the prior provisions. As it left the Senate, the bill established the Million Solar Roofs Initiative. That program was subsequently implemented as the California Solar Initiative (CSI). This bill now contains the specific statutory changes required for the CSI and the language necessary to, among other things, (1) include municipal utilities, (2) raise the net metering cap, (3) establish a cost cap of \$3.4 billion, and (4) impose some constraints on the program.

Current law and regulations establish subsidy programs for the installation of solar photovoltaic (PV) systems administered by California Energy Commission (CEC) and the California Public Utilities Commission (CPUC). These programs, known collectively as the California Solar Initiative (CSI), provide \$3.2 billion in subsidies through rebates for the installation of photovoltaic projects.

Current law requires investor-owned utilities (IOUs) to increase their existing level of renewable resources by one percent of sales per year until a portfolio of 20 percent renewable resources is achieved by no later than 2017.

Municipal electric utilities are not subject to these standards, but are required to implement and enforce their own renewable resource procurement programs.

This bill establishes goals of installing 3000 MW of solar generation capacity, establishing a self-sufficient solar industry, and placing PV systems on 50 percent of new homes in 13 years.

This bill requires the CPUC, in implementing the CSI, to:

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- 1.Adopt a subsidy that declines not less than an average of seven percent per year, and shall be zero as of December 31 2016
- 2.Adopt performance-based subsidies (e.g. subsidies that pay based on the amount of electricity produced) by January 1, 2008 for all large PV systems and for half of all medium-sized systems. Performance-based subsidies are encouraged, but not required, for smaller systems. Performance-based incentives shall also decline at an average of not less than seven percent per year.

This bill authorizes the CPUC to award \$101 million in subsidies for solar thermal systems.

This bill authorizes the CPUC to award \$50 million for solar research and development.

This bill requires municipal utilities to establish solar energy programs in support of the 3000 MW goal. Such programs shall be established by January 1, 2008 and shall cost \$784 million.

This bill establishes an aggregate cost cap for these solar programs of $\$3.4\ \text{billion}.$

This bill prohibits the CPUC from imposing the cost of the CSI on low income customers and bars the CPUC from imposing a surcharge on natural gas to pay for the CSI.

This bill requires the CEC to commence a proceeding by July 1, 2006, and conclude that proceeding within three years, to consider if and when solar energy systems should be required on new buildings.

This bill requires sellers of production homes, as defined, to offer PV systems on new homes for which tentative subdivision maps are completed on or after January 1, 2011.

This bill raises the net metering cap from 0.5 percent to 2.5 percent.

This bill requires the CEC to establish eligibility criteria, installation guidelines, and equipment rating ${\bf r}$

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standards for solar energy systems receiving ratepayer subsidies. The CEC is also required to perform random performance audits on PV systems.

This bill requires the Contractors' State Licensing Board to review and, if needed, revise its licensing classifications to ensure that PV contractors have the proper qualifications.

Background

As passed by the Senate in 2005, this bill established the Governor's Million Solar Rooftops proposal. Because this bill did not pass the Assembly in 2005, the CPUC instead created a solar program by regulation, known as the California Solar Initiative. That program is similar to the one envisioned in this bill, though there are important differences noted below. Rather than create a solar program, the current version of this bill now creates limits on the CPUC's solar program and includes municipal utilities, over which the CPUC has no jurisdiction.

California Solar Initiative

After the 2005 session adjourned without passing this bill, the CPUC established the CSI by regulation. The CSI shares the goals and basic mechanism of this bill, which is to

provide a long-term subsidy for photovoltaic systems with incentives that are reduced annually. But the CSI differs from this bill in important ways, some of which are due to the jurisdictional limitations of the CPUC and others which are differences in policy.

The major difference is that the cost of the program increased substantially. The last 2005 version of this bill had a cost cap of \$2.5 billion. This amount reflects what the solar industry said it would take to accomplish the goals of the program. But the CPUC's CSI raised the cost cap to \$3.2 billion. The CPUC has never justified the cost-effectiveness of the higher price tag. And the increased program cost will not lead to more installed solar capacity. Part of the cost increase will cover \$160 million in new R&D expenditures. Funding is also made available for a solar water heating subsidy program. And

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the CPUC allows \$250 million to be spent on utility administration. The cost of the CSI is recovered exclusively from CPUC-regulated utility customers, both gas and electric.

Importantly, the CSI does not raise the net metering cap. Net metering is a major benefit to PV customers because it allows the customer to sell his excess electricity production back to the utility at retail rates. Because net metering creates an additional, substantial subsidy, the amount of PV capacity that can be net metered has been limited by statute. PG&E and Southern California Edison are nearing their limit. Consequently, a bill raising the net metering cap is required for any significant solar capacity to be added.

Current Subsidies

Even without the CSI, solar energy is already heavily subsidized. For commercial customers federal tax credits and accelerated depreciation cover about 50 percent of the cost of the system. Accelerated depreciation for state tax purposes is worth another six percent.

Since 1976 California has provided \$1.1 billion in tax credits and another \$1 billion in rebates for solar energy systems, resulting in over 160 MW of solar power. State and federal policy has been generous to the solar industry. And, just as high gasoline prices make alternative transportation fuels more attractive, so too do high (and rising) electric prices make solar more attractive.

California -- a Green Energy Leader

By any measure, California has been a leader in the pursuit of alternative energy sources and energy efficiency. Every year customers of California's IOUs, through a surcharge on CPUC-regulated utility bills, pay at least an extra \$228 million to fund energy efficiency and conservation, \$135 million for renewable energy, and \$62.5 million for energy research, development and demonstration. Legislation authorizing the surcharge was enacted in 1996 (AB 1890, Brulte, Chapter 854, Statutes of 1996) and again in 2000 (AB 995, Wright, Chapter 1051, Statutes of 2000), both on a

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bipartisan basis. Authorization of a 5-year spending plan for some of these funds is pending again this year in SB 1250 (Perata). California's Renewable Portfolio Standard is a further major commitment to renewable energy. It requires electric utilities to increase their purchase of renewable energy by 1 percent of total energy needs annually until 20 percent of their energy is from renewable sources.

 $\frac{\texttt{FISCAL EFFECT}}{\texttt{Local: Yes}} : \qquad \texttt{Appropriation: No Fiscal Com.: Yes}$

SUPPORT : (Verified 8/8/06)

Governor's Administration Office of the Attorney General Oakland City Mayor Jerry Brown

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Sacramento City Mayor Heather Fargo
San Diego City Council Member Donna Frye
San Francisco County Board of Supervisors
San Francisco Mayor Gavin Newsom
San Jose City Mayor Ron Gonzalez
Akeena Solar
Alliance for Nuclear Responsibility
American Federation of State, County and Municipal
Employees
American Lung Association
American Solar Energy Society
Bluewater Network
Borrego Solar
California Alliance For Consumer Protection
California Building Officials
California Interfaith Power and Light
California League of Conservation Voters
California Public Interest Research Group
California Public Utilities Commission
California Solar Energy Industries Association
Carville Sierra, Inc.
City of Aliso Valley
City of Erkeley
City of Santa Cruz
City of Sebastopol
Clarum Homes
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Clean Power Campaign Coalition for Clean Air Community Environmental Council Cooperative Community Energy East Bay Municipal Utility District Energy Independence Now Environment California Global Green USA Gray Panthers Green Lease, Inc. Greenpeace USA Henry T. Perea, Councilmember 7th District Industrial Environmental Association Marin County Board of Supervisors Merced/Mariposa County Asthma Coalition National Wildlife Federation New Vision Technologies NorCal Solar Northern California Power Agency Our Children's Earth Pacific Environment Pacific Gas and Electric Company (if amended) Physicians for Social Responsibility Planning and Conservation League Powerlight Solar Electric Systems Public Citizen PV Manufacturers Alliance Rainforest Action Network Real Goods Relational Culture Institute Sempra Energy (if amended) Sharp Solar Sierra Club California Solar Integrated Technologies SolarWorks South Coast Air Quality Management District Stopwaste.org Sun Power and Geothermal Energy The Better World Group Union of Concerned Scientists Working Assets World Council for Renewable Energy

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Yolo County Board of Supervisors Several individuals

OPPOSITION : (Verified 8/8/06)

The Utility Reform Network

ASSEMBLY FLOOR:

AYES: Arambula, Baca, Bass, Berg, Bermudez, Blakeslee,
Calderon, Canciamilla, Chan, Chu, Cohn, Coto, Daucher, De
La Torre, Dymally, Frommer, Garcia, Goldberg, Hancock,
Jerome Horton, Shirley Horton, Jones, Karnette, Keene,
Klehs, Koretz, Laird, Leno, Levine, Lieber, Lieu, Maze,
Montanez, Mullin, Nava, Oropeza, Pavley, Richman,
Ridley-Thomas, Ruskin, Saldana, Salinas, Torrico, Tran,
Umberg, Vargas, Wolk, Yee, Nunez
NOES: Aghazarian, Benoit, Bogh, Cogdill, DeVore, Haynes,
Houston, Huff, La Malfa, La Suer, Leslie, Mountjoy,
Nakanishi, Niello, Plescia, Spitzer, Strickland, Walters, Nakanishi, Niello, Plescia, Spitzer, Strickland, Walters,

MO VOTE RECORDED: Chavez, Emmerson, Evans, Liu, Matthews, McCarthy, Nation, Negrete McLeod, Parra, Sharon Runner, Villines

NC:nl 8/9/06 Senate Floor Analyses SUPPORT/OPPOSITION: SEE ABOVE **** END ****

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