MEETING NOTICE
AND AGENDA

ENERGY WORKING GROUP
The Energy Working Group may take action on any item appearing on this agenda.

June 22, 2006
11:30 a.m.-2 p.m.

SANDAG, 7th Floor Conference Room
401 B Street, Suite 800
San Diego, CA 92101-4231

Staff Contact: Rob Rundle
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rru@sandag.org

AGENDA HIGHLIGHTS

• LONG TERM RESOURCE PLAN ACTIONS
• LEGISLATIVE UPDATE AND ACTIONS

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<td>WELCOME AND INTRODUCTIONS</td>
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<td>MEETING SUMMARY FOR THE MAY 25, 2006 MEETING</td>
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<td>Please review the attached meeting summary and provide any comments</td>
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<td>3.</td>
<td>PUBLIC COMMENT AND COMMUNICATIONS</td>
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<td>Anyone who would like to address the EWG on a topic not on the agenda should do so at this time.</td>
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<td>4.</td>
<td>SB 1539: LEGISLATION IN SUPPORT OF THE EWG UPDATE</td>
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<td>Senator Kehoe sponsored SB 1539 that would provide resources for EWG to implement the Regional Energy Strategy 2030 (RES).</td>
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<td>SB 1: CALIFORNIA SOLAR INITIATIVE</td>
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<td>SB1 would codify the California Solar Initiative, a program to promote solar. The most recent version of the bill (June 8, 2006) is attached.</td>
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<td>SDG&amp;E’S LONG TERM RESOURCE PLAN</td>
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<td>EWG Resource Subcommittee addressed compatibility of LTRP with the RES. EWG will discuss/take action on planning assumptions to be presented by SDG&amp;E staff. Please see attachment. Additional materials to be provided at meeting.</td>
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<td>7.</td>
<td>SUGGESTED TOPICS FOR NEXT MEETING</td>
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<td>Energy Working Group members should suggest additional items to be discussed at the next or future meetings.</td>
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<td>8.</td>
<td>ADJOURN</td>
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<td>The next EWG meeting will be held July 27, 2006. The meeting will be held at SANDAG from 11:30 – 2 p.m. in the 7th floor conference room.</td>
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+ next to an item indicates an attachment
MAY 25, 2006 MEETING SUMMARY

Members in Attendance

Mayor Art Madrid, Co-Chair, East Suburban Communities
Councilmember Steve Castaneda, South Bay Communities
Scott Anders, EPIC
Alan Sweedler, SDSU
Paul O’Neal, San Diego North EDC
Ralph Torres, DOD
Dave Weil, UCSD

Robb Anderson, SDG&E (alt.)
Pat Zeutonian, County of San Diego (alt.)
Bob Campbell, North County Inland Communities
Patti Krebs, IEA
Irene Stillings, SDREO
Michael Shames, UCAN
Paul Blackburn, Sierra Club
Jim McCollum, IEA (alt)

Others in Attendance:

Kurt Kammerer, KJK&A
Bob Resley
Sharon Firooz, Advanced Energy Solutions
Skip Fralick
Don Wood, C-3
Al Figueroa, ESC
Mike Gearhart
J. William Naish, San Diego City Schools

David Hicks, Duke Energy
Jennifer Porter, SDREO
Julie Gelfat, IBEW 569
Alexandra Hart, IBEW 569
J.C. Thomas, SDG&E
Kelly Fuller, Sierra Club
Rob Rundle, SANDAG

1. Welcome
Co-chair Art Madrid called the meeting to order. Rob Rundle introduced the new SANDAG intern, Trisha Rominger.

2. Meeting Summary of the April 27, 2006 Meeting
Rob Rundle informed the EWG that the minutes that were distributed for review contained minor typographical errors, which were corrected in the agenda attachment. Mr. Paul O’Neal motioned to approve the April 27, 2006 meeting minutes. Ms. Irene Stillings seconded the motion. Motion passed unanimously.
3. Public Comment
Mr. Skip Fralick commented that at the last EWG meeting, some questions were raised re: the EWG resource subcommittee renewables team presentation. The team is working to address the issues that were raised and will make corrections and updates - for example, team is addressing the possibility of development of multiple, large-scale renewable installations within San Diego County. Preliminary results should be ready by June 5. Co-Chair Madrid asked for clarification on what it meant to place renewable energy capacity in the county. Mr. Fralick clarified that one of the issues/questions is whether or not capacity would be placed in Imperial Valley. Mr. Fralick also added that using land within the County for a renewable energy park could be expensive, but is a possibility.

Dr. Sweedler asked for clarification on guiding parameters used for deciding whether to place renewable energy out of the county and whether there were any political or jurisdictional downside to it. Mr. Fralick stated that the team is using the Regional Energy Strategy (approved by the SANDAG board of directors in 2003) as their guide and that it recommends a steady increase in renewables. He also added that transmission to Imperial Valley was needed because there won’t be enough renewable capacity in the county. He mentioned Nevada Power’s energy park as an example that could work in San Diego.

Co-Chair Madrid added that another aspect to consider was the dependence created between jurisdictions if Imperial Valley is providing a majority of the energy.

4. SANDAG EWG Staffing Update
Rob Rundle stated that the Board of Directors indicated support of funding for a SANDAG senior staff person for energy issues. The overall work plan and budget will be heard by the Board of Directors at their June meeting, with a hire date around July. Mr. Rundle added that the job specifications are being reviewed at this time and will be posted.

Co-Chair Madrid added Co-Chair Henry Abarbanel did an outstanding job presenting to the Board of Directors at the April 14 policy meeting. Board members mentioned that transportation fuel issues may be more appropriately discussed through the Transportation Committee.

Dr. Alan Sweedler commented that the Board Meeting presentation presents a significant development; the SANDAG Board of Directors is beginning to accept energy as very important for SANDAG. SANDAG has been involved in energy on an ad-hoc basis over the past 20-25 years. Dr. Sweedler added SANDAG is beginning to address energy on a long term basis. Co-Chair Madrid added that the passage of SB 1703, which made SANDAG an extension of a governmental entity, also made SANDAG legitimate partners in energy issues. He added that there may be an opportunity to add an Energy Committee to the five existing full committees of SANDAG.

Dr. Sweedler added that he felt it was heartening to see that what the Regional Energy Policy Advisory Council (REPAC) planned occurring - SANDAG serving as a legitimate representative of the people through the member agencies. He added that he did not know if a full committee would be necessary but that the more important thing was that energy issues remain high on the priority list at SANDAG, and that regional planning couldn’t occur without considering the energy elements of regional planning at all levels.
Co-chair Madrid commented that there is a need for collaboration between the EWG and the Transportation Committee. He added energy expenses for the two transit agencies (MTS & NCTD) have escalated 20-70%.

5. SB 1539: Legislation in Support of the EWG
Rob Rundle provided an update on Senator Kehoe’s sponsored SB 1539, which would provides legislative intent for activities the EWG should engage in and to implement the Regional Energy Strategy 2030 (RES). The bill has passed out of the Senate Committee, with the language referring to funding taken out.

Dr. Sweedler asked Mr. Rundle what removing the funding language would mean. Mr. Rundle explained that removing the funding language does not gut the intent of the bill, because the bill was intended to formalize the activities of the EWG. Presumably, the EWG could be a strong contender for available funding that would support their activities. Co-Chair Madrid added that Co-Chair Abarbanel and he had attended meetings with the CPUC and the CEC. Some senators were concerned that if Senator Kehoe received funding for her area, that every area would also solicit the same funding.

Ms. Patti Krebs asked if there were any mechanism in place to provide a report to the legislature from the EWG. Ms. Krebs suggested that formalizes a report back to legislature on items the group is working on, providing accountability and responsibility. Co-Chair Madrid added that was a good idea, and to testify to this in the Assembly. Mr. Paul O’Neal added that if the funding language remained, it may not have made it out of committee. Dr. Sweedler stated that the bill provided visibility at the state level.

Mr. Kurt Kammerer stated that there are laws on the books that allow agencies such as SANDAG to form Regional Energy Authorities. Mr. Kammerer suggests that if the bill is not passed, that the EWG look at the option of forming a Regional Energy Authority, which involves action of the SANDAG Board of Directors, as has been done by Humboldt County, Ventura County and the Association of Monterey Bay Area Governments. It allows Joint Powers Authorities of cities and counties to do energy planning for the region. He added that Humboldt County has proposed a renewable energy park to include bio-mass, wind and wave energy, providing more than 50% of their in-region resources from renewables. He encouraged the group to look at the other models that are already being pursued in California.

6. SB 1: California Solar Initiative
Ms. Jennifer Porter presented this item. The goal of SB 1 is to drive down the costs of solar energy installation over a ten year period. The goal is to have 3,000 MW of solar installed over the next ten years. SB 1 as amended 5/8/06, includes some of the requirements and stipulations authorizing incentives for systems that are up to 1 MW. It also mandates a reduction in the level incentives by 7% each year, to reach 0% by 2016. It requires that new production homes will offer a solar option by 2011. Dr. Sweedler inquired about solar thermal and Ms. Porter responded that the bill is intended for solar to produce electricity only. It also increases the net metering cap for each territory to 2.5% aggregated customer peak demand. It also requires the adoption of a performance based incentive program by June 30, 2010 on at least 50% of the installation cost. It requires that existing buildings provide energy efficiency improvements starting in January 1, 2008.
It requires time variant pricing for solar energy system billing. The total costs cannot exceed $3 billion. Lastly, it prohibits money to do research on the systems themselves.

There are several distinctions between the California Solar Initiative and SB 1. The CPUC program applies to investor owned utilities only and that has created problems with funding initiative. SB 1 would apply to all publicly controlled utilities as well. The CPUC currently receives funding from a surcharge on electricity and natural gas bills; SB 1 would eliminate the natural gas surcharge because all electricity customers would pay for SB 1. Under the CPUC mandate, there is $2 billion to be spent on energy efficiency (EE) programs, with an audit component for existing buildings. However, there are no mandates to make any efficiency upgrades. SB 1 would mandate the EE improvements. Lastly, under the CPUC order, multiple solar technologies, including solar thermal would be included, whereas with SB 1, solar only technologies that produce electricity are funded.

Dr. Sweedler asked if SB 1 passes, does it supersede CPUC and become law. Ms. Porter answered, that yes, if SB 1 passes, it will supersede CPUC and become law.

Ms. Irene Stillings added that in her opinion, leaving out solar thermal is a big negative for this bill. The EE mandate for existing buildings is something the CPUC has been talking about for some time. However, they have not determined standards, measurement and if assistance would be provided to implement recommendations. She added that if incentives are provided to buildings for EE, it would add a lot of administrative costs. She feels that it is a good thing to do, but challenging. She added that it is very positive that it applies to municipalities.

Mr. Tom Blair commented that one of the positives is that it raises the maximum that one can qualify for net metering from 1 to 5 MW, which would create larger systems. However, it only provides the incentives up to 1 MW. He pointed out that there is a lot of language unclear language about “cost effective expenditure of the funds”. Ms. Blair believes it is too early to support this bill The only thing that has to be passed at this time is the expansion of the net metering caps.

Co-Chair Madrid suggested that we invite Senator Ducheny & Saldana to discuss the EWG’s concerns. He added that he and Co-Chair Abarbanel attended the U.S. Conference of Mayors Energy Workshop in Chicago, IL. They toured a solar thermal factory, subsidized by the City of Chicago. He added that San Diego could be a very viable place for this type of production.

Ms. Stillings motioned to invite Senators Ducheny and Saldana to an EWG meeting for clarification on SB 1. Dr. Sweedler seconded. Dr. Sweedler suggested allowing more time for some expert presentation on the details of the bill at a future EWG meeting, before supporting or opposing it. Co-Chair Madrid asked Rob Rundle to draft a letter/invitation to Senators Ducheny and Saldana to discuss SB 1 and the EWGs concerns and amend it to reflect them. Dr. Sweedler asked staff to prepare a presentation for the EWG that goes through enough detail, outlining the most pertinent issues on June 22. Motion passed unanimously.

7. EWG LTRP Project Update
Jennifer Porter presented this item. According to the CPUC, the Long Term Resource Plan is a plan to implement a long term strategy for the investor owned utilities by doing the following: Review and approve the plans of the utilities for long term procurement; establish policies and costs; ensure
the investor owned utilities have reserve margins; and implement a long term energy planning process. Ms. Porter informed the EWG that there were copies of a presentation from the 2004 Long Term Resource Plan available for review. The 2004 plan was intended to be in effect until 2016. The LTRP is a plan for procurement of resources. In the 2004 LTRP, the CPUC mandated three scenarios that investor owned utilities had to research and report on – Base, High and Low demand growth scenario.

Co-chair Madrid mentioned a presentation on Global Warming that he sat in on at the U.S. Conference of Mayors. Dr. Sweedler stated that global warming was not the same as climate change, but definitely related. He asked for clarification on whether or not the CPUC is requiring Climate Change to be a part of the LTRP. Mr. Rob Anderson stated that he expects that this year SDG&E will be required to show what the expected greenhouse gases will be from their portfolio.

Ms. Porter stated that the CPUC and the CEC have put into law a preferred loading order for procurement of resources. Efficiency is at the top of the loading order, followed by renewable energy and distributed energy, the procurement of fossil fuels and transmission fuels. This summer, SDG&E will file their LTRP with the CPUC and the EWG should provide some input into that prior to their submission. In December, the CPUC is expected to make their decisions on LTRPs. Rob Anderson and SANDAG EWG representatives have been meeting to discuss input for SDG&E’s LTRP, specifically the correlation of the RES and SDG&E’s plans. Three meetings have been held: May 8th, May 17th, and another scheduled for May 31st.

Ms. Porter proposed at the June 22nd to have a broad based and in depth discussion of the SDG&E LTRP and answer questions such as “What are they planning to submit?”, “Which of the RES goals are addressed in their strategy and if there are some differences of opinion?”, “How will the goals be addressed before the plan is submitted to the CPUC this summer?”.

Mr. Sweedler asked if there were any differences of opinions that have emerged when the subcommittee met. Ms. Porter stated not at this time.

Mr. Sweedler asked if when the SDG&E LTRP is presented to the CPUC, would it be presented in such a manner that indicates that it has received significant input or endorsement from the EWG. Mr. Anderson clarified that since SDG&E is the jurisdictonal entity, the CPUC governs them. SDG&E will be filing the LTRP. SDG&E has always encouraged input from the EWG and have agreed to put the input in the filings. Dr. Sweedler added that he believes that this may be the first time that this level of input has been received.

Ms. Stillings reminded that the RES was a policy document, setting the direction and included aggressive stretch goals. Co-chair Madrid suggested the EWG accept the report and that staff acknowledge all of the concerns that have been raised.
8. Reports from the Subcommittees

A. Public Policy Subcommittee
Paul O’Neal presented this item. The Public Policy Subcommittee reviewed six pieces of legislation at their May 17th meeting:
- AB 1996 – No position
- AB 2778 – Support
- SB 1 – Support.
- SB 1368 – No position
- SB 1539 -Support (Does not need any recommendation to the Board of Directors).
- SB 1059 – No position.
Next subcommittee meeting will be on June 21 at 8:30 at the SDREO offices.

B. Resources Subcommittee
Mr. O’Neal commended Rob Anderson and SDG&E for soliciting and encouraging the EWG’s input for the SDG&E’s LTRP. Mr. O’Neal believes that the only problem is that there is little time to develop and create in-depth policy input. The subcommittee will develop overviews that will allow the EWG to provide input. The subcommittee will report at the EWG meeting in June and define their positions taken on aspects of the LTRP: Renewables, In Region Resources, Out of Region Resources and Transmission

Mr. O’Neal stated that the one thing that troubles him regarding the SDG&E LTRP is that in the transmission element, it does not discuss the LEAPS project out of Riverside County, which terminates in San Diego County and could serve the region. The subcommittee has invited LEAPS representatives to the next subcommittee meeting as they are a very important part of this discussion.

Dr. Sweedler asked for clarification on the subcommittee’s support of the Sunrise Powerlink. Mr. O’Neal clarified that the subcommittee has not declared support. The subcommittee has gathered input that ties Sunrise to its relationship with the. The subcommittee still needs to determine its position.

Dr. Sweedler asked if the EWG will be getting a series of specific recommendations from the subcommittee. Mr. O’Neal stated that he is acting chair of the subcommittee at this time, and that he believes the subcommittee will come back to the EWG with recommendations.

Ms. Porter informed the group that handouts were available that illustrated the Sunrise Powerlink proceedings timeline. Ms. Porter added that the EWG should not feel rushed to come to a decision on it; EWG needs to determine a) whether or not to take a position on the Sunrise Powerlink and b) what that position will be.

Mr. O’Neal motioned that EWG support SB 2778 (continuation of the Self-Generation Incentive Program SGIP), which would be presented to the Executive Committee and ultimately presented to the full Board of Directors for endorsement and support. Ms. Stillings seconded the motion.

Discussion
Ms. Irene Stillings stated that the SGIP has been in place since 2001 as part of the response to the energy crisis. The SGIP promotes various types of renewable and non-renewable self generation.
There are three levels: solar; fuel cells and turbines; clean non-renewable self generation. SB 2778 keeps these levels intact and extends the program through 2017 to coincide with the California Solar Initiative.

Co-Chair Madrid asked if going to the Board of Directors with the EWGs’ support of SB 2778 was needed. Rob Rundle stated that in this case, because it’s a recommendation on legislation, the EWG would make its recommendation to the Executive Committee. A brief summary of the bill and its relevance to EWG would be attached to the EWG’s recommendation.

Ms. Porter said Assemblymember Lieber’s staff anticipated amendments to the bill to shorten the timeframe from 2017 to 2012.

Scott Anders inquired why the EWG would vote on SB 2778 at this point Co-chair Madrid stated that by establishing a subcommittee, the EWG is entrusting them to make sound recommendations. Mr. Rundle asked if he could attach the bill to the next agenda then the EWG could discuss it. Ms. Porter added that waiting would not cause any adverse action.

Paul O’Neal asked members to save the date (October 25) for the EPIC Energy Summit.

9. Advanced Metering Infrastructure (AMI) Letter
Co-Chair Madrid suggested the group accept the letter.

10. Suggested Meeting Topics for Next Meeting
The next meetings’ topics will be restricted to discussion of SB 1 (with Ducheny &Saldana or their staffs) and LTRP.

11. Adjourn
Discussion
Kurt Kammerer suggested that some discussion occur regarding Peak Oil. Some would suggest that the topic of Peak Oil and Peak Fossil Fuels will far surpass global warming. Mr. Kammerer suggested that when the EWG is considering climate change, they consider impacts of peak oils.

Don Wood expressed his concerns about how the CPUC is implementing the CSI. He suggested the group consider these concerns when giving the authors feedback on SB 1. SB 1 includes a 10% mandate for low-income customers. It then includes a mandate to meet Title 24 new construction standards. Mr. Wood added that low income homes often, after you’ve weatherized the home, still won’t meet Title 24. A minimum standard should be that low income customers participate in the utilities’ low income energy efficiency weatherization program or the state’s low income weatherization program, which is funded by DOE.

Another concern that Mr. Wood expressed was the CPUC’s adoption of solar policies that encourage installation of solar systems on customer’s roofs, but does not allow the utilities to count this solar generation towards the RPS.
Ms. Stillings replied that comments are due to the CPUC this Friday, on various aspects of the administration of the program. She encouraged anyone that had any thoughts or input, contact her so she can put those in SDREO’s comments.

Co-Chair Madrid added that Chicago is the greenest city because of their aggressive program. They have solar panels everywhere. He suggested that the group somehow adopt a position that does not support any bond measure for building public facilities unless they have a certain percentage of greening.

Co-Chair Madrid adjourned the meeting at 1:12 p.m. The next EWG meeting will be on June 22, 2006.
SENATE BILL No. 1

Introduced by Senator Murray
(Principal coauthor: Assembly Member Levine)
(Coauthors: Senators Alquist, Chesbro, Ducheny, and Kehoe)
(Coauthors: Assembly Members Bermudez, Blakeslee, Chan, Cohn, Garcia, Koretz, Laird, Leno, Lieber, Nation, Pavley, Saldana, Wolk, and Yee)

December 6, 2004

An act to add Sections 25405.5 and 25405.6 to, and to add Chapter 8.8 (commencing with Section 25780) to Division 15 of, the Public
SB 1

Resources Code, and to amend Section 2827 of, and to add Sections 387.5 and 2851 to, the Public Utilities Code, relating to solar electricity.

LEGISLATIVE COUNSEL'S DIGEST

SB 1, as amended, Murray. Electricity: renewable--solar energy resources: California Solar Initiative--net metering.

1) Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission) to expand and accelerate development of alternative sources of energy, including solar resources. Existing law requires the Energy Commission to develop and adopt regulations governing solar devices, as defined, designed to encourage the development and use of solar energy and to provide maximum information to the public concerning solar devices.

This bill would require beginning January 1, 2011, a seller of production homes, as defined, to offer the option of a solar energy system, as defined, to all customers negotiating to purchase a new production home constructed on land meeting certain criteria and to disclose certain information. The bill would require the Energy Commission to develop an offset program that allows a developer or seller of production homes to forgo the offer requirement on a project by installing solar energy systems generating specified amounts of electricity on other projects. The bill would require, not later than July 1, 2007, the Energy Commission to initiate a public proceeding to study and make findings whether, and under what conditions, solar energy systems should be required on new residential and nonresidential buildings and to periodically update the study thereafter.

2) Under existing law, the Public Utilities Commission (PUC) has regulatory authority over public utilities, including electrical corporations. Existing law required the PUC, on or before March 7, 2001, and in consultation with the Independent System Operator, to take certain actions, including, in consultation with the Energy Commission, adopting energy conservation demand-side management and other initiatives in order to reduce demand for electricity and reduce load during peak demand periods, including differential incentives for renewable or super clean distributed generation resources. Pursuant to this requirement, the PUC has developed a self-generation incentive program to encourage customers of electrical
corporations to install distributed generation that operates on renewable fuel or contributes to system reliability. Existing law requires the PUC, 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 existed on January 1, 2004, subject to certain air emissions and efficiency standards. In a PUC decision, the PUC adopted the California Solar Initiative, which modified the self-generation incentive program for distributed generation resources and provides incentives to customer-side photovoltaics and solar thermal electric projects under one megawatt.

This bill would require the PUC, in implementing the California Solar Initiative, to authorize the award of monetary incentives for up to the first megawatt of alternating current generated by an eligible solar energy system, that meets the eligibility criteria established by the Energy Commission. The bill would authorize the commission, prior to the establishment of eligibility criteria by the Energy Commission, to determine the eligibility of a solar energy system, as defined, to receive monetary incentives. The bill would require that awards of monetary incentives decline at a rate of an average of at least 7% for each year following implementation, and be zero by December 31, 2016. The bill would require the PUC, by June 30, 2010, to adopt a performance-based incentive program, as specified. The bill would require that the PUC, by January 1, 2008, and in consultation with the Energy Commission, require reasonable and cost-effective energy efficiency improvements in existing buildings as a condition of providing incentives for eligible solar energy systems. The bill would require the commission to require time-variant pricing for all ratepayers with a solar energy system. The bill would prohibit costs of the program from being recovered from certain customers and would require the commission to ensure that the total cost over the duration of the program does not exceed $3,200,000,000, consisting of 3 specified program components. The bill would prohibit the PUC from allocating additional moneys for certain research, development, and demonstration. The bill would require that by June 30, 2009, and by June 30 of every year thereafter, the PUC submit to the Legislature an assessment of the success of the California Solar Initiative program, that includes specified information.
This bill would require the Energy Commission, by January 1, 2008, and in consultation with the PUC, local publicly owned electric utilities, and interested members of the public, to establish and thereafter revise eligibility criteria for solar energy systems and to establish conditions for ratepayer funded incentives that are applicable to the California Solar Initiative. The bill would require the Energy Commission to adopt guidelines for solar energy systems receiving ratepayer funded incentives at a publicly noticed meeting. The bill would, upon establishment of eligibility criteria by the Energy Commission, prohibit ratepayer funded incentives from being made for a solar energy system that does not meet the eligibility criteria. The bill would require the Energy Commission to make certain information available to the public, to provide assistance to builders and contractors, and to conduct random audits of solar energy systems to evaluate their operational performance.

This bill would require all local publicly owned electric utilities, as defined, that sell electricity at retail, on or before January 1, 2008, to adopt, implement, and finance a solar initiative program, as prescribed, for the purpose of investing in, and encouraging the increased installation of, residential and commercial solar energy systems. The bill would require a local publicly owned electric utility to make certain program information available to its customers, to the Legislature, and to the Energy Commission on an annual basis beginning June 1, 2008. By imposing additional duties upon local publicly owned electric utilities, the bill would thereby impose a state-mandated local program.

(3) Existing law requires all electric service providers, as defined, to develop a standard contract or tariff providing for net energy metering, and to make this contract available to eligible customer generators, upon request. Existing law requires all electric service providers, upon request, to make available to eligible customer generators contracts for net energy metering on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer generators exceeds 0.5% of the electric service provider’s aggregate customer peak demand.

This bill would require the PUC to order electric service providers to expand the availability of net energy metering so that it is offered on a first-come-first-served basis until the time that the total rated generating capacity used by all eligible customer-generators exceeds
2.5% of the electric service provider’s aggregate customer peak demand. The bill would require the commission, by January 1, 2010, in consultation with the Energy Commission, to submit a report to the Governor and Legislature on the costs and benefits of net energy metering, wind energy co-metering, and co-energy metering to participating customers and nonparticipating customers and with options to replace the economic costs of different forms of net metering with a mechanism that more equitably balances the interests of participating and nonparticipating customers.

(4) Existing law, the Contractors’ State License Law, provides for the licensure and regulation of contractors by the Contractors’ State License Board.

This bill would require the board to review and, if needed, revise its licensing classifications and examinations to ensure that contractors authorized to perform work on solar energy systems, as specified, have the requisite qualifications to perform the work.

(4)–

(5) 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.


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

SECTION 1. (a) The Legislature finds and declares that the Public Utilities Commission (PUC) adopted the California Solar Initiative in Decision 06-01-024.

(b) Nothing in this act shall be construed to codify PUC Decision 06-01-024.

SECTION 1.

SEC. 2. Section 25405.5 is added to the Public Resources Code, to read:

25405.5. (a) As used in this section, the following terms have the following meanings:
(1) “kW” means kilowatts or 1,000 watts, as measured from the alternating current side of the solar energy system inverter consistent with Section 223 of Title 15 of the United States Code.

(2) “Production home” means a single-family residence constructed as part of a development of at least 50 homes per project that is intended or offered for sale.

(3) “Solar energy system” means a solar energy device that has the primary purpose of providing for the collection and distribution of solar energy for the generation of electricity, that produces at least one kW, and not more than five megawatts, alternating current rated peak electricity, and that meets or exceeds the eligibility criteria established pursuant to Section 25782.

(b) A seller of production homes shall offer a solar energy system option to all customers that enter into negotiations to purchase a new production home constructed on land for which an application for a tentative subdivision map has been deemed complete on or after January 1, 2011, and disclose the following:

(1) The total installed cost of the solar energy system option.

(2) The estimated cost savings associated with the solar energy system option, as determined by the commission pursuant to Chapter 8.8 (commencing with Section 25780) of Division 15.

(c) The State Energy Resources Conservation and Development Commission shall develop an offset program that allows a developer or seller of production homes to forgo the offer requirement of this section on a project, by installing solar energy systems generating specified amounts of electricity on other projects, including, but not limited to, low-income housing, multifamily, commercial, industrial, and institutional developments. The amount of electricity required to be generated from solar energy systems used as an offset pursuant to this subdivision shall be equal to the amount of electricity generated by solar energy systems installed on a similarly sized project within that climate zone, assuming 20 percent of the prospective buyers would have installed solar energy systems.

(d) The requirements of this section shall not operate as a substitute for the implementation of existing energy efficiency measures, and the requirements of this section shall not result in lower energy savings or lower energy efficiency levels than would otherwise be achieved by the full implementation of
Section 25405.6 is added to the Public Resources Code, to read:

25405.6. Not later than July 1, 2007, the commission shall initiate a public proceeding to study and make findings whether, and under what conditions, solar energy systems should be required on new residential and new nonresidential buildings, including the establishment of numerical targets. As part of the study, the commission may determine that a solar energy system should not be required for any building unless the commission determines, based upon consideration of all costs associated with the system, that the system is cost effective when amortized over the economic life of the structure. When determining the cost-effectiveness of the solar energy system, the commission shall consider the availability of governmental rebates, tax deductions, net-metering, and other quantifiable factors, if the commission can determine the availability of these financial incentives if a solar energy system is made mandatory and not elective. The commission shall periodically update the study and incorporate any revision that the commission determines is necessary, including revisions that reflect changes in the financial incentives originally considered by the commission when determining cost-effectiveness of the solar energy system. For purposes of this section, “solar energy system” means a photovoltaic solar collector or other photovoltaic solar energy device that has a primary purpose of providing for the collection and distribution of solar energy for the generation of electricity. This section is intended to be for study purposes only and does not authorize the commission to develop and adopt any requirement for solar energy systems on either residential or nonresidential buildings.

Section 3.

Chapter 8.8 (commencing with Section 25780) is added to Division 15 of the Public Resources Code, to read:
CHAPTER 8.8. CALIFORNIA SOLAR INITIATIVE

25780. The Legislature finds and declares all both of the following:

(a) California has a pressing need to procure a steady supply of affordable and reliable peak electricity;

(b) Solar-generated electricity is uniquely suited to California’s needs because it produces electricity when California needs it most, during the peak demand hours in summer afternoons when the sun is brightest and air conditioners are running at capacity;

(c) Procuring solar electric generation capacity to meet peak electricity demand increases system reliability and decreases California’s dependence on unstable fossil fuel supplies;

(d) Solar-generated electricity diversifies California’s energy portfolio. California currently relies on natural gas for the bulk of its electricity generation needs. Increasing energy demands place increasing pressure on limited natural gas supplies and threaten to raise costs;

(e) More than 150,000 homes will be built annually in California in the coming years, challenging energy reliability and affordability;

(f) Investing in residential and commercial solar electricity generation installations today will lower the cost of solar generated electricity for all Californians in the future. In 10 years, solar peak electric generation can be procured without the need for rebates;

(g) Increasing California’s solar electricity generation market will also bring additional manufacturing, installation, and sales jobs to the state at a higher rate than most conventional energy production sources;

(h) The California Solar Initiative is intended to be a cost-effective investment by ratepayers in peak electricity generation capacity. Pursuant to the initiative, it is further intended that ratepayers recoup the cost of their investment through lower rates as a result of avoiding purchases of electricity at peak rates, with additional system reliability and pollution reduction benefits;

(i) Solar energy systems provide substantial energy reliability and pollution reduction benefits. Solar energy systems also

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diversify our energy supply and thereby reduce our dependence on imported fossil fuels.

(a) It is the goal of the state to install solar energy systems with a generation capacity equivalent of 3,000 megawatts, to establish a self-sufficient solar industry in which solar energy systems are a viable mainstream option for both homes and businesses in 10 years, and to place solar energy systems on 50 percent of new homes in 13 years.

(b) A solar initiative should be a cost-effective investment by ratepayers in peak electricity generation capacity where ratepayers recoup the cost of their investment through lower rates as a result of avoiding purchases of electricity at peak rates, with additional system reliability and pollution reduction benefits.

25781. As used in this chapter, the following terms have the following meanings:

(a) “California Solar Initiative” means the program providing ratepayer funded incentives for eligible solar energy systems adopted by the Public Utilities Commission in Decision 06-01-024.

(b) “kW” means kilowatts or 1,000 watts, as measured from the alternating current side of the solar energy system inverter consistent with Section 223 of Title 15 of the United States Code.

(c) “kWh” means kilowatthours, as measured by the number of kilowatts generated in an hour.

(d) “MW” means megawatts or 1,000,000 watts.

(e) “Solar energy system” means a solar energy device that has the primary purpose of providing for the collection and distribution of solar energy for the generation of electricity, that produces at least one kW, and not more than five MW, alternating current rated peak electricity, and that meets or exceeds the eligibility criteria established pursuant to Section 25782.

25782. (a) The commission shall, by January 1, 2008, in consultation with the Public Utilities Commission, local publicly owned electric utilities, and interested members of the public, establish eligibility criteria for solar energy systems receiving ratepayer funded incentives that include all of the following:
(1) Design, installation, and electrical output standards or incentives.
(2) The solar energy system is intended primarily to offset part or all of the consumer’s own electricity demand.
(3) All components in the solar energy system are new and unused, and have not previously been placed in service in any other location or for any other application.
(4) The solar energy system has a warranty of not less than 10 years to protect against defects and undue degradation of electrical generation output.
(5) The solar energy system is located on the same premises of the end-use consumer where the consumer’s own electricity demand is located.
(6) The solar energy system is connected to the electrical corporation’s electrical distribution system within the state.
(7) The solar energy system has meters or other devices in place to monitor and measure the system’s performance and the quantity of electricity generated by the system.
(8) The solar energy system is installed in conformance with the manufacturer’s specifications and in compliance with all applicable electrical and building code standards.

(b) The commission shall establish conditions on ratepayer funded incentives that require all of the following:
(1) Appropriate siting and high quality installation of the solar energy system by developing installation guidelines that maximize the performance of the system and prevent qualified systems from being inefficiently or inappropriately installed. The conditions established by the commission shall not impact housing designs or densities presently authorized by a city, county, or city and county. The goal of this paragraph is to achieve efficient installation of solar energy systems to promote the greatest energy production per ratepayer dollar.
(2) Optimal solar energy system performance during periods of peak electricity demand.
(3) Appropriate energy efficiency improvements in the new or existing home or commercial structure where the solar energy system is installed.

(c) The commission shall set rating standards for equipment, components, and systems to assure reasonable performance and
shall develop standards that provide for compliance with the
minimum ratings.
(d) Upon establishment of eligibility criteria pursuant to
subdivision (a), no ratepayer funded incentives shall be made for
a solar energy system that does not meet the eligibility criteria.
25783. The commission shall do all the following:
(a) Publish educational materials designed to demonstrate how
builders may incorporate solar energy systems during
construction as well as energy efficiency measures that best
complement solar energy systems.
(b) Develop and publish the estimated annual electrical
generation and savings for solar energy systems. The estimates
shall vary by climate zone, type of system, size, lifecycle costs,
electricity prices, and other factors the commission determines to
be relevant to a consumer when making a purchasing decision.
(c) Provide assistance to builders and contractors. The
assistance may include technical workshops, training,
educational materials, and related research.
(d) The commission shall annually conduct random audits of
solar energy systems to evaluate their operational performance.
(e) The commission, in consultation with the Public Utilities
Commission, shall evaluate the costs and benefits of having an
increased number of operational solar energy systems as a part of
the electrical system with respect to their impact upon the
distribution, transmission, and supply of electricity, using the
best available load profiling and distribution operations data from
the Public Utilities Commission, local publicly owned electric
utilities, and electrical corporations, and performance audits of
installed solar energy systems.
25784. The commission shall adopt guidelines for solar
energy systems receiving ratepayer funded incentives at a
publicly noticed meeting offering all interested parties an
opportunity to comment. Not less than 30 days’ public notice
shall be given of the meeting required by this section, before the
commission initially adopts guidelines. Substantive changes to
the guidelines shall not be adopted without at least 10 days’
written notice to the public. Notwithstanding any other provision
of law, any guidelines adopted pursuant to this chapter shall be
exempt from the requirements of Chapter 3.5 (commencing with
Section 11340) of Part 1 of Division 3 of Title 2 of the
Government Code.

SEC. 4.
SEC. 5. Section 387.5 is added to the Public Utilities Code, to
read:
387.5. (a) The—In order to further the state goal of
couraging the installation of 3,000 megawatts of photovoltaic
solar energy in California, the governing body of a local publicly
owned electric utility, as defined in subdivision (d) of Section
9604, that sells electricity at retail, shall adopt, implement, and
finance a solar initiative program, funded in accordance with
subdivision (b), for the purpose of investing in, and encouraging
the increased installation of, residential and commercial solar
energy systems. This program shall be consistent with the goals
of the state to encourage the installation of 3,000 megawatts of
photovoltaic solar energy in California in accordance with
Chapter 8.8 (commencing with Section 25780) of Division 15 of
the Public Resources Code.
(b) On or before January 1, 2008, a local publicly owned
electric utility shall offer monetary incentives for the installation
of solar energy systems of at least two dollars and eighty cents
($2.80) per installed watt, or for the electricity produced by the
solar energy system, measured in kilowatthours, as determined
by the governing board of a local publicly owned electric utility,
for photovoltaic solar energy systems. The incentive level shall
decline each year thereafter at a rate of no less than an average of
7 percent per year.
(c) A local publicly owned electric utility shall initiate a public
proceeding to fund a solar energy program to adequately support
the goal of installing 3,000 megawatts of photovoltaic solar
energy in California in accordance with Chapter 8.8
(commencing with Section 25780) of Division 15 of the Public
Resources Code. The proceeding shall determine what additional
funding, if any, is necessary to provide the incentives pursuant to
subdivision (b). The public proceeding shall be completed and
the comprehensive solar energy program established by January
1, 2008.
(d) The solar energy program of a local publicly owned
electric utility shall be consistent with all of the following:

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(1) That a solar energy system receiving monetary incentives comply with the eligibility criteria, design, installation, and electrical output standards or incentives established by the State Energy Resources Conservation and Development Commission pursuant to Section 25782 of the Public Resources Code.

(2) That solar energy systems receiving monetary incentives are intended primarily to offset part or all of the consumer’s own electricity demand.

(3) That all components in the solar energy system are new and unused, and have not previously been placed in service in any other location or for any other application.

(4) That the solar energy system has a warranty of not less than 10 years to protect against defects and undue degradation of electrical generation output.

(5) That the solar energy system be located on the same premises of the end-use consumer where the consumer’s own electricity demand is located.

(6) That the solar energy system be connected to the electric utility’s electrical distribution system within the state.

(7) That the solar energy system has meters or other devices in place to monitor and measure the system’s performance and the quantity of electricity generated by the system.

(8) That the solar energy system be installed in conformance with the manufacturer’s specifications and in compliance with all applicable electrical and building code standards.

(d) A local publicly owned electric utility shall, on an annual basis beginning June 1, 2008, make available to its customers, to the Legislature, and to the State Energy Resources Conservation and Development Commission, information relating to the utility’s solar initiative program established pursuant to this section, including, but not limited to, the number of photovoltaic solar watts installed, the total number of photovoltaic systems installed, the total number of applicants, the amount of incentives awarded, and the contribution toward the program goals.

(e) In establishing the program required by this section, no moneys shall be diverted from any existing programs for low-income ratepayers, or from cost-effective energy efficiency or demand response programs.
(f) The statewide expenditures for solar programs adopted, implemented, and financed by local publicly owned electric utilities shall be seven hundred eighty-four million dollars ($784,000,000). The expenditure level for each local publicly owned electric utility shall be based on that utility’s percentage of the total statewide load served by all local publicly owned electric utilities. Expenditures by a local publicly owned electric utility may be less than the utility’s cap amount, provided that funding is adequate to provide the incentives required by subdivision subdivisions (a) and (b).

SEC. 5.
SEC. 6. Section 2827 of the Public Utilities Code is amended to read:

2827. (a) The Legislature finds and declares that a program to provide net energy metering for eligible customer-generators is one way to encourage substantial private investment in renewable energy resources, stimulate in-state economic growth, reduce demand for electricity during peak consumption periods, help stabilize California’s energy supply infrastructure, enhance the continued diversification of California’s energy resource mix, and reduce interconnection and administrative costs for electricity suppliers.

(b) As used in this section, the following definitions apply:

(1) “Electric service provider” means an electrical corporation, as defined in Section 218, a local publicly owned electric utility, as defined in Section 9604, or an electrical cooperative, as defined in Section 2776, or any other entity that offers electrical service. This section shall not apply to a local publicly owned electric utility, as defined in Section 9604 of the Public Utilities Code, that serves more than 750,000 customers and that also conveys water to its customers.

(2) “Eligible customer-generator” means a residential, small commercial customer as defined in subdivision (h) of Section 331, commercial, industrial, or agricultural customer of an electric service provider, who uses a solar or a wind turbine electrical generating facility, or a hybrid system of both, with a capacity of not more than one megawatt that is located on the customer’s owned, leased, or rented premises, is interconnected and operates in parallel with the electric grid, and is intended
primarily to offset part or all of the customer’s own electrical requirements.

(3) “Net energy metering” means measuring the difference between the electricity supplied through the electric grid and the electricity generated by an eligible customer-generator and fed back to the electric grid over a 12-month period as described in subdivision (h). Net energy metering shall be accomplished using a single meter capable of registering the flow of electricity in two directions. An additional meter or meters to monitor the flow of electricity in each direction may be installed with the consent of the customer-generator, at the expense of the electric service provider, and the additional metering shall be used only to provide the information necessary to accurately bill or credit the customer-generator pursuant to subdivision (h), or to collect solar or wind electric generating system performance information for research purposes. If the existing electrical meter of an eligible customer-generator is not capable of measuring the flow of electricity in two directions, the customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is able to measure electricity flow in two directions. If an additional meter or meters are installed, the net energy metering calculation shall yield a result identical to that of a single meter. An eligible customer-generator who already owns an existing solar or wind turbine electrical generating facility, or a hybrid system of both, is eligible to receive net energy metering service in accordance with this section.

(4) “Wind energy co-metering” means any wind energy project greater than 50 kilowatts, but not exceeding one megawatt, where the difference between the electricity supplied through the electric grid and the electricity generated by an eligible customer-generator and fed back to the electric grid over a 12-month period is as described in subdivision (h). Wind energy co-metering shall be accomplished pursuant to Section 2827.8.

(5) “Co-energy metering” means a program that is the same in all other respects as a net energy metering program, except that the local publicly owned electric utility, as defined in Section 9604, has elected to apply a generation-to-generation energy and time-of-use credit formula as provided in subdivision (i).
(6) “Ratemaking authority” means, for an electrical corporation as defined in Section 218, or an electrical cooperative as defined in Section 2776, the commission, and for a local publicly owned electric utility as defined in Section 9604, the local elected body responsible for regulating the rates of the local publicly owned utility.

(c) (1) Every electric service provider shall develop a standard contract or tariff providing for net energy metering, and shall make this contract available to eligible customer-generators, upon request, on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer-generators exceeds 2.5 percent of the electric service provider’s aggregate customer peak demand.

(2) On an annual basis, beginning in 2003, every electric service provider shall make available to the ratemaking authority information on the total rated generating capacity used by eligible customer-generators that are customers of that provider in the provider’s service area. For those electric service providers who are operating pursuant to Section 394, they shall make available to the ratemaking authority the information required by this paragraph for each eligible customer-generator that is their customer for each service area of an electric corporation, local publicly owned electric utility, or electrical cooperative, in which the customer has net energy metering. The ratemaking authority shall develop a process for making the information required by this paragraph available to energy service providers, and for using that information to determine when, pursuant to paragraph (3), a service provider is not obligated to provide net energy metering to additional customer-generators in its service area.

(3) Notwithstanding paragraph (1), an electric service provider is not obligated to provide net energy metering to additional customer-generators in its service area when the combined total peak demand of all customer-generators served by all the electric service providers in that service area furnishing net energy metering to eligible customer-generators exceeds 2.5 percent of the aggregate customer peak demand of those electric service providers.

(4) By January 1, 2010, the commission, in consultation with the State Energy Resources Conservation and Development Commission, shall submit a report to the Governor and the
Legislature on the costs and benefits of net energy metering, wind energy co-metering, and co-energy metering to participating customers and nonparticipating customers and with options to replace the economic costs and benefits of net energy metering, wind energy co-metering, and co-energy metering with a mechanism that more equitably balances the interests of participating and nonparticipating customers, and that incorporates the findings of the report on economic and environmental costs and benefits of net metering required by subdivision (n).

(d) Electric service providers shall make all necessary forms and contracts for net metering service available for download from the Internet.

(e) (1) Every electric service provider shall ensure that requests for establishment of net energy metering are processed in a time period not exceeding that for similarly situated customers requesting new electric service, but not to exceed 30 working days from the date the electric service provider receives a completed application form for net metering service, including a signed interconnection agreement from an eligible customer-generator and the electric inspection clearance from the governmental authority having jurisdiction. If an electric service provider is unable to process the request within the allowable timeframe, the electric service provider shall notify both the customer-generator and the ratemaking authority of the reason for its inability to process the request and the expected completion date.

(2) Electric service providers shall ensure that requests for an interconnection agreement from an eligible customer-generator are processed in a time period not to exceed 30 working days from the date the electric service provider receives a completed application form from the eligible customer-generator for an interconnection agreement. If an electric service provider is unable to process the request within the allowable timeframe, the electric service provider shall notify the customer-generator and the ratemaking authority of the reason for its inability to process the request and the expected completion date.

(f) (1) If a customer participates in direct transactions pursuant to paragraph (1) of subdivision (b) of Section 365 with an electric supplier that does not provide distribution service for
the direct transactions, the service provider that provides
distribution service for an eligible customer-generator is not
obligated to provide net energy metering to the customer.
(2) If a customer participates in direct transactions pursuant to
paragraph (1) of subdivision (b) of Section 365 with an electric
supplier, and the customer is an eligible customer-generator, the
service provider that provides distribution service for the direct
transactions may recover from the customer’s electric service
provider the incremental costs of metering and billing service
related to net energy metering in an amount set by the ratemaking
authority.
(g) Except for the time-variant kilowatthour pricing
portion of any tariff adopted by the commission pursuant to
paragraph (4) of subdivision (a) of Section 2851, each net energy
metering contract or tariff shall be identical, with respect to rate
structure, all retail rate components, and any monthly charges, to
the contract or tariff to which the same customer would be
assigned if the customer did not use an eligible solar or wind
electrical generating facility, except that eligible
customer-generators shall not be assessed standby charges on the
electrical generating capacity or the kilowatthour production of
an eligible solar or wind electrical generating facility. The
charges for all retail rate components for eligible
customer-generators shall be based exclusively on the
customer-generator’s net kilowatthour consumption over a
12-month period, without regard to the customer-generator’s
choice of electric service provider. Any new or additional
demand charge, standby charge, customer charge, minimum
monthly charge, interconnection charge, or any other charge that
would increase an eligible customer-generator’s costs beyond
those of other customers who are not customer-generators in the
rate class to which the eligible customer-generator would
otherwise be assigned if the customer did not own, lease, rent, or
otherwise operate an eligible solar or wind electrical generating
facility are contrary to the intent of this section, and shall not
form a part of net energy metering contracts or tariffs.
(h) For eligible residential and small commercial
customer-generators, the net energy metering calculation shall be
made by measuring the difference between the electricity
supplied to the eligible customer-generator and the electricity
generated by the eligible customer-generator and fed back to the
electric grid over a 12-month period. The following rules shall
apply to the annualized net metering calculation:
(1) The eligible residential or small commercial
customer-generator shall, at the end of each 12-month period
following the date of final interconnection of the eligible
customer-generator’s system with an electric service provider,
and at each anniversary date thereafter, be billed for electricity
used during that period. The electric service provider shall
determine if the eligible residential or small commercial
customer-generator was a net consumer or a net producer of
electricity during that period.
(2) At the end of each 12-month period, where the electricity
supplied during the period by the electric service provider
exceeds the electricity generated by the eligible residential or
small commercial customer-generator during that same period,
the eligible residential or small commercial customer-generator is
a net electricity consumer and the electric service provider shall
be owed compensation for the eligible customer-generator’s net
ikilowatthour consumption over that same period. The
compensation owed for the eligible residential or small
commercial customer-generator’s consumption shall be
calculated as follows:
(A) For all eligible customer-generators taking service under
tariffs employing “baseline” and “over baseline” rates, any net
monthly consumption of electricity shall be calculated according
to the terms of the contract or tariff to which the same customer
would be assigned to or be eligible for if the customer was not an
eligible customer-generator. If those same customer-generators
are net generators over a billing period, the net kilowatthours
generated shall be valued at the same price per kilowatthour as
the electric service provider would charge for the baseline
quantity of electricity during that billing period, and if the
number of kilowatthours generated exceeds the baseline quantity,
the excess shall be valued at the same price per kilowatthour as
the electric service provider would charge for electricity over the
baseline quantity during that billing period.
(B) For all eligible customer-generators taking service under
tariffs employing “time of use” rates, any net monthly
consumption of electricity shall be calculated according to the
terms of the contract or tariff to which the same customer would
be assigned to or be eligible for if the customer was not an
eligible customer-generator. When those same
customer-generators are net generators during any discrete time
of use period, the net kilowatthours produced shall be valued at
the same price per kilowatthour as the electric service provider
would charge for retail kilowatthour sales during that same time
of use period. If the eligible customer-generator’s time of use
electrical meter is unable to measure the flow of electricity in two
directions, paragraph (3) of subdivision (b) shall apply.

(C) For all residential and small commercial
customer-generators and for each billing period, the net balance
of moneys owed to the electric service provider for net
consumption of electricity or credits owed to the
customer-generator for net generation of electricity shall be
carried forward as a monetary value until the end of each
12-month period. For all commercial, industrial, and agricultural
customer-generators the net balance of moneys owed shall be
paid in accordance with the electric service provider’s normal
billing cycle, except that if the commercial, industrial, or
agricultural customer-generator is a net electricity producer over
a normal billing cycle, any excess kilowatthours generated during
the billing cycle shall be carried over to the following billing
period as a monetary value, calculated according to the
procedures set forth in this section, and appear as a credit on the
customer-generator’s account, until the end of the annual period
when paragraph (3) shall apply.

(3) At the end of each 12-month period, where the electricity
generated by the eligible customer-generator during the
12-month period exceeds the electricity supplied by the electric
service provider during that same period, the eligible
customer-generator is a net electricity producer and the electric
service provider shall retain any excess kilowatthours generated
during the prior 12-month period. The eligible
customer-generator shall not be owed any compensation for
those excess kilowatthours unless the electric service provider
enters into a purchase agreement with the eligible
customer-generator for those excess kilowatthours.

(4) The electric service provider shall provide every eligible
residential or small commercial customer-generator with net
electricity consumption information with each regular bill. That information shall include the current monetary balance owed the electric service provider for net electricity consumed since the last 12-month period ended. Notwithstanding this subdivision, an electric service provider shall permit that customer to pay monthly for net energy consumed.

(5) If an eligible residential or small commercial customer-generator terminates the customer relationship with the electric service provider, the electric service provider shall reconcile the eligible customer-generator’s consumption and production of electricity during any part of a 12-month period following the last reconciliation, according to the requirements set forth in this subdivision, except that those requirements shall apply only to the months since the most recent 12-month bill.

(6) If an electric service provider providing net metering to a residential or small commercial customer-generator ceases providing that electrical service to that customer during any 12-month period, and the customer-generator enters into a new net metering contract or tariff with a new electric service provider, the 12-month period, with respect to that new electric service provider, shall commence on the date on which the new electric service provider first supplies electric service to the customer-generator.

(i) Notwithstanding any other provisions of this section, the following provisions shall apply to an eligible customer-generator with a capacity of more than 10 kilowatts, but not exceeding one megawatt, that receives electrical service from a local publicly owned electric utility, as defined in Section 9604, that has elected to utilize a co-energy metering program unless the electric service provider chooses to provide service for eligible customer-generators with a capacity of more than 10 kilowatts in accordance with subdivisions (g) and (h):

(1) The eligible customer-generator shall be required to utilize a meter, or multiple meters, capable of separately measuring electricity flow in both directions. All meters shall provide “time-of-use” measurements of electricity flow, and the customer shall take service on a time-of-use rate schedule. If the existing meter of the eligible customer-generator is not a time-of-use meter or is not capable of measuring total flow of energy in both directions, the eligible customer-generator shall be responsible
for all expenses involved in purchasing and installing a meter that is both time-of-use and able to measure total electricity flow in both directions. This subdivision shall not restrict the ability of an eligible customer-generator to utilize any economic incentives provided by a government agency or the electric service provider to reduce its costs for purchasing and installing a time-of-use meter.

(2) The consumption of electricity from the electric service provider shall result in a cost to the eligible customer-generator to be priced in accordance with the standard rate charged to the eligible customer-generator in accordance with the rate structure to which the customer would be assigned if the customer did not use an eligible solar or wind electrical generating facility. The generation of electricity provided to the electric service provider shall result in a credit to the eligible customer-generator and shall be priced in accordance with the generation component, established under the applicable structure to which the customer would be assigned if the customer did not use an eligible solar or wind electrical generating facility.

(3) All costs and credits shall be shown on the eligible customer-generator’s bill for each billing period. In any months in which the eligible customer-generator has been a net consumer of electricity calculated on the basis of value determined pursuant to paragraph (2), the customer-generator shall owe to the electric service provider the balance of electricity costs and credits during that billing period. In any billing period in which the eligible customer-generator has been a net producer of electricity calculated on the basis of value determined pursuant to paragraph (2), the electric service provider shall owe to the eligible customer-generator the balance of electricity costs and credits during that billing period. Any net credit to the eligible customer-generator of electricity costs may be carried forward to subsequent billing periods, provided that an electric service provider may choose to carry the credit over as a kilowatthour credit consistent with the provisions of any applicable tariff, including any differences attributable to the time of generation of the electricity. At the end of each 12-month period, the electric service provider may reduce any net credit due to the eligible customer-generator to zero.
(j) A solar or wind turbine electrical generating system, or a hybrid system of both, used by an eligible customer-generator shall meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the Public Utilities Commission regarding safety and reliability. A customer-generator whose solar or wind turbine electrical generating system, or a hybrid system of both, meets those standards and rules shall not be required to install additional controls, perform or pay for additional tests, or purchase additional liability insurance.

(k) If the commission determines that there are cost or revenue obligations for an electric corporation, as defined in Section 218, that may not be recovered from customer-generators acting pursuant to this section, those obligations shall remain within the customer class from which any shortfall occurred and may not be shifted to any other customer class. Net-metering and co-metering customers shall not be exempt from the public benefits charge. In its report to the Legislature, the commission shall examine different methods to ensure that the public benefits charge remains a nonbypassable charge.

(l) A net metering customer shall reimburse the Department of Water Resources for all charges that would otherwise be imposed on the customer by the commission to recover bond-related costs pursuant to an agreement between the commission and the Department of Water Resources pursuant to Section 80110 of the Water Code, as well as the costs of the department equal to the share of the department’s estimated net unavoidable power purchase contract costs attributable to the customer. The commission shall incorporate the determination into an existing proceeding before the commission, and shall ensure that the charges are nonbypassable. Until the commission has made a determination regarding the nonbypassable charges, net metering shall continue under the same rules, procedures, terms, and conditions as were applicable on December 31, 2002.

(m) In implementing the requirements of subdivisions (k) and (l), a customer-generator shall not be required to replace its existing meter except as set forth in paragraph (3) of subdivision (b), nor shall the electric service provider require additional
measurement of usage beyond that which is necessary for
customers in the same rate class as the eligible
customer-generator.
(n) On or before January 1, 2005, the commission shall submit
a report to the Governor and the Legislature that assesses the
economic and environmental costs and benefits of net metering
to customer-generators, ratepayers, and utilities, including any
beneficial and adverse effects on public benefit programs and
special purpose surcharges. The report shall be prepared by an
independent party under contract with the commission.
(o) It is the intent of the Legislature that the Treasurer
incorporate net energy metering and co-energy metering projects
undertaken pursuant to this section as sustainable building
methods or distributive energy technologies for purposes of
evaluating low-income housing projects.

SEC. 6.
SEC. 7. Section 2851 is added to Chapter 9 of Part 2 of
Division 1 of the Public Utilities Code, to read:
2851. (a) In implementing the California Solar Initiative,
adopted by the commission in Decision 06-01-024, the
commission shall do all of the following:
(1) The commission shall authorize the award of monetary
incentives for up to the first megawatt of alternating current
generated by solar energy systems that meet the eligibility
criteria established by the State Energy Resources Conservation
and Development Commission pursuant to Chapter 8.8
(commencing with Section 25780) of Division 15 of the Public
Resources Code. The commission shall determine the eligibility
of a solar energy system, as defined in Section 25781 of the
Public Resources Code, to receive monetary incentives until the
time the State Energy Resources Conservation and Development
Commission establishes eligibility criteria pursuant to Section
25782. Monetary incentives shall not be awarded for solar energy
systems that do not meet the eligibility criteria. The incentive
level authorized by the commission shall decline each year
following implementation of the California Solar Initiative, at a
rate of no less than an average of 7 percent per year, and shall be
zero as of December 31, 2016. The commission shall adopt and
publish a schedule of declining incentive levels no less than 30
days in advance of the first decline in incentive levels. The
commission may develop incentives based upon the output of
electricity from the system, provided those incentives are
consistent with the declining incentive levels of this paragraph
and the incentives apply to only the first megawatt of electricity
generated by the system.

(2) By January 1, 2010, the commission shall adopt a
performance-based incentive program in which at least 50
percent of the moneys thereafter expended pursuant to the
California Solar Initiative are expended to provide incentives that
are based on the actual electrical output of the solar energy
system and that promote the installation of solar energy systems
that maximize electrical output to coincide with peak loads. The
commission shall ensure that the performance-based incentive
declines each year thereafter at a rate of no less than an average
of 7 percent per year. In developing the performance-based
incentive program

(2) The commission shall adopt a performance-based
incentive program so that by January 1, 2008, 100 percent of
incentives for solar energy systems of 100 kilowatts or greater
and at least 50 percent of incentives for solar energy systems of
30 kilowatts or greater are earned based on the actual electrical
output of the solar energy systems. The commission shall
encourage, and may require, performance-based incentives for
solar energy systems of less than 30 kilowatts. Performance-based incentives shall decline at a rate of no less
than 7 percent per year. In developing the performance-based
incentives, the commission may:

(A) Apply performance-based incentives only to customer
classes designated by the commission.

(B) Design the performance-based incentives so that
customers may receive a higher level of incentives than under
incentives based on installed electrical capacity.

(C) Develop financing options that help offset the installation
costs of the solar energy system, provided that this financing is
ultimately repaid in full by the consumer or through the
application of the performance-based rebates.

(3) By January 1, 2008, the commission, in consultation with
the State Energy Resources Conservation and Development
Commission, shall require reasonable and cost-effective energy
efficiency improvements in existing buildings as a condition of
providing incentives for eligible solar energy systems, with appropriate exemptions or limitations to accommodate the limited financial resources of low-income residential housing.

(4) The Notwithstanding subdivision (g) of Section 2827, the commission shall require time-variant pricing for all ratepayers with a solar energy system. The commission shall develop a time-variant tariff that creates the maximum incentive for ratepayers to install solar energy systems so that the system’s peak electricity production coincides with California’s peak electricity demands and that assures that ratepayers receive due value for their contribution to the purchase of solar energy systems and customers with solar energy systems continue to have an incentive to use electricity efficiently. In developing the time-variant tariff, the commission may exclude customers participating in the tariff from the rate cap for residential customers for existing baseline quantities or usage by those customers of up to 130 percent of existing baseline quantities, as required by Section 80110 of the Water Code. Nothing in this paragraph authorizes the commission to require time-variant pricing for ratepayers without a solar energy system.

(b) (1) In implementing the California Solar Initiative, the commission shall not allocate any additional moneys to research, development, and demonstration that explores solar technologies and other distributed generation technologies that employ or could employ solar energy for generation or storage of electricity or to offset natural gas usage. This subdivision does not prohibit the commission from continuing to allocate moneys to research, development, and demonstration pursuant to the self-generation incentive program for distributed generation resources originally established pursuant to Chapter 329 of the Statutes of 2000, as modified pursuant to Section 379.6.

(2) The Legislature finds and declares that a program that provides a stable source of monetary incentives for eligible solar energy systems will encourage private investment sufficient to make solar technologies cost effective.

(3) On or before June 30, 2009, and by June 30th of every year thereafter, the commission shall submit to the Legislature an assessment of the success of the California Solar Initiative program. That assessment shall include the number of residential and commercial sites that have installed solar energy systems, the
electrical generating capacity of the installed solar energy systems, the cost of the program, total electrical system benefits, including the effect on electrical service rates, environmental benefits, how the program affects the operation and reliability of the electrical grid, how the program has affected peak demand for electricity, the progress made toward reaching the goals of the program, whether the program is on schedule to meet the program goals, and recommendations for improving the program to meet its goals.

(c) (1) The commission shall not impose any charge upon the consumption of natural gas, or upon natural gas ratepayers, to fund the California Solar Initiative.

(2) Notwithstanding any other provision of law, any charge imposed to fund the program adopted and implemented pursuant to this section shall be imposed upon all customers not participating in the California Alternate Rates for Energy (CARE) or family electric rate assistance (FERA) programs as provided in paragraph (2), including those residential customers subject to the rate cap required by Section 80110 of the Water Code for existing baseline quantities or usage up to 130 percent of existing baseline quantities of electricity.

(3) The costs of the program adopted and implemented pursuant to this section may not be recovered from customers participating in the California Alternate Rates for Energy or CARE program established pursuant to Section 739.1, except to the extent that program costs are recovered out of the nonbypassable system benefits charge authorized pursuant to Section 399.8.

(d) In implementing the California Solar Initiative, the commission shall ensure that the total cost over the duration of the program does not exceed three billion two hundred million dollars ($3,200,000,000). The financial components of the California Solar Initiative shall consist of the following:

(1) Programs under the supervision of the commission funded by charges collected from customers of San Diego Gas and Electric Company, Southern California Edison Company, and Pacific Gas and Electric Company. The total cost over the duration of these programs shall not exceed two billion sixteen million dollars ($2,016,000,000) and includes moneys collected directly into a tracking account for support of the California
Solar Initiative and moneys collected into other accounts that are used to further the goals of the California Solar Initiative.

(2) Programs adopted, implemented, and financed in the amount of seven hundred eighty-four million dollars ($784,000,000), by charges collected by local publicly owned electric utilities pursuant to Section 387.5. Nothing in this subdivision shall give the commission power and jurisdiction with respect to a local publicly owned electric utility or its customers.

(3) Programs for the installation of solar energy systems on new construction, administered by the State Energy Resources Conservation and Development Commission pursuant to Chapter 8.6 (commencing with Section 25740) of Division 15 of the Public Resources Code, and funded by nonbypassable charges in the amount of four hundred million dollars ($400,000,000), collected from customers of San Diego Gas and Electric Company, Southern California Edison Company, and Pacific Gas and Electric Company pursuant to Article 15 (commencing with Section 399).

SEC. 8. The Contractors’ State License Board shall review and, if needed, revise its licensing classifications and examinations to ensure that contractors authorized to perform work on solar energy systems subject to Chapter 8.8 (commencing with Section 25780) of Division 15 of the Public Resources Code, have the requisite qualifications to perform the work.

SEC. 9. No reimbursement is required by this act pursuant to Section 6 of Article XIIIB of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act, within the meaning of Section 17556 of the Government Code.

CORRECTIONS:
Title — Lines 1 and 2.
Long Term Resource Plan

SANDAG Energy Working Group
5-25-06

What it Does
- Reviews and approves plans for the utilities to purchase energy.
- Establishes policies and utility cost recovery for energy purchases.
- Ensures that the utilities maintain a set amount of energy above what they estimate they will need to serve their customers (called a reserve margin).
- Implements a long-term energy planning process.

2004 LTRP Overview

Timeline: 2007-2016

SDG&E Definition of Resource Plan
Long-term, policy-driven 'blueprint' for future decisions, which serves as the basis for future, specific resource acquisition decisions.

LTRP → Procurement

2004 Resource Planning

3 CPUC Defined Scenarios
- Base
- Low
- High

First=Meets grid reliability criteria
Next=Meets 15-17% reserve margin

2004 LTRP Chapters included...
- Regulatory/Policy Framework
- LTRP Overview
- Resource Planning
- Transmission
- Load Forecast
- Renewables
- Energy Efficiency

2004 LTRP Chapters included...
- Demand Response
- Distributed Generation
- Climate Change
- Natural Gas Price Forecast
- Procurement
- Cost Recovery
- Debt Equivalence
California’s Preferred Loading Order

- Conservation and energy efficiency
- Renewable energy
- Distributed generation
- Clean, fossil fuel, central-station generation
- Transmission grid and distribution facility infrastructure to support growth

2006 Long Term Resource Plan

Potential CPUC LTRP Schedule

April-June - New Generation Proposals

Summer 2006
- SDG&E files LTRP with CPUC
- CPUC to hold workshops on Plans

December 2006 – CPUC Decision on 2006 Long Term Resource Plans

Long Term Resource Plan

SANDAG EWG/SDG&E Meetings

May 8
Outline of schedule for EWG input

May 17 and May 31
Detailed discussion of RES/LTRP correlation

Regional Energy Strategy 2030 Goals

#2 In-region generation
#3 Increase Renewable Energy Supply
#4 Increase Distributed Generation
#5 Increase Transmission System Capacity
#6 Reduce per capita electricity peak demand and consumption

Next Steps

- June 22 EWG meeting
- What are SDG&E goals for LTRP?
- Which RES goals are addressed in SDG&E LTRP filing?
- Which issues need to be vetted further to reach consensus and/or compromise?