

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue
Implementation and Administration of California
Renewable Portfolio Standard Program.

**R. 08-08-009
(Filed August 21, 2008)**

**SIERRA CLUB CALIFORNIA
COMMENTS ON THE COMMISSION'S ENERGY DIVISION
FEED-IN TARIFF PROPOSAL OF MARCH 2009**

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Jim Metropulos, Senior Advocate
Sierra Club California
801 K Street, Suite 2700
Sacramento, CA 95814
Tel: 916-557-1100, extension 109
jim.metropulos@sierraclub.org

**COMMENTS ON THE COMMISSION'S ENERGY DIVISION FEED-IN TARIFF
PROPOSAL OF MARCH 2009**

I. INTRODUCTION.

Sierra Club California files these comments on the Energy Division's Feed-in Tariff Proposal of March 27, 2009, in response to ALJ Mattson's ruling dated March 27, 2008 (sic), and we respectfully note that the year of this date should be corrected to 2009.

Broadly we agree with most of the recommendations of staff, and find that their presentation is well done and very helpful. However, in our comments we will focus on areas where we have concern, disagreement or recommendations for clarification or improvement.

II. BACKGROUND.

Sierra Club California urges that Commission, as it develops new rules for the feed-in tariff program, to consider and comply with the intent stated at the top of Section 399.20 of the Public Resources Code that establishes the state's renewable energy feed-in tariff:

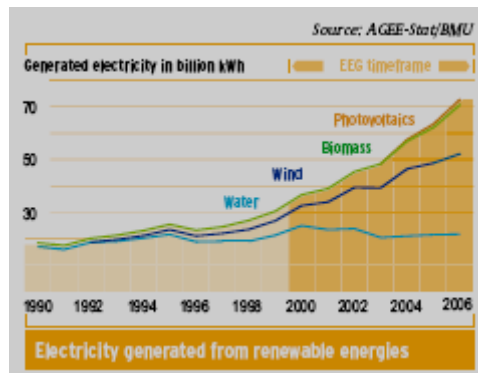
399.20.(a) It is the policy of this state and the intent of the Legislature to encourage energy production from renewable energy resources.

Expansion of the feed-in tariff program is an important next step in fulfilling this intent. The low subscription rate of the current FiT is in part a function of mismatch between small generators and the methodology used to establish the feed-in tariff price. In short, the cost of generating electricity for small renewable generators is likely to be higher than what has been considered by the Commission as the market price of electricity, even if certain externalities are accounted for.

Economy of scale, in particular, is an important way to reduce the cost per kilowatt-hour of electricity generated from a renewable project, and thus to bring renewable project costs more in line with acceptable tariffs. For this reason, Sierra Club California strongly

recommends that project size caps be increased from the current 1.5 megawatt limit, up to the full 20 megawatt limit proposed by the Energy Commission.

Feed-in tariffs have proved to be very effective instruments for encouraging the growth of energy production from renewable sources when they are well designed. It is well known that the German Feed-in Tariffs have been very successful in achieving this goal under the Renewable Energy Law (EEG) established in 2000. In just 6 years renewable energy doubled from approximately 35 billion kwh to over 70 billion kwh. ¹



The UK Parliament investigated the German program and concluded that its success was not due only to the feed-in tariffs themselves:

145. Although the feed-in tariff is hailed as the impetus for the large-scale deployment of renewable electricity devices in countries such as Germany and Spain, we note that it is only one part of a much broader policy landscape. For example, the EEG obliges grid operators to purchase and transmit all electricity from renewable generators as a priority. Consequently, Germany's success in deploying renewable technologies should be attributed not only to the feed-in tariff but also to the coherence and consistency of their renewables policy. ²

¹ EEG – The Renewable Energy Sources Act, publication by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), Berlin, Germany, July 2007. (http://www.erneuerbare-energien.de/files/pdfs/allgemein/application/pdf/eeg_brochure_engl.pdf)

² Select Committee on Innovation, Universities, Science and Skills [Fifth Report](#), Section 5, The Renewables Obligation, House of Commons, 11 June, 2008. (<http://www.publications.parliament.uk/pa/cm200708/cmselect/cmdius/216/21608.htm#note150>)

Thus, we note that it is especially important that rules be established that support the overall goal of the feed-in tariff program to encourage energy production from renewable sources. The rules that are adopted should be measured by the degree to which they can and do accomplish this. Evaluation of future performance should be performed as follow-up, with modifications to the program made as necessary. This process has been critical for maintaining and increasing the effectiveness of feed-in tariff programs in other countries. We urge the Commission to adopt this practice, recognizing that building an effective program will necessarily involve a learning curve for all parties.

III. FIT GUIDING PRINCIPLES.

We find some concern regarding a couple of the guiding principles, not with regard to their fundamental aim, but rather with embedded concepts that we find questionable.

The second goal correctly proposes that the feed-in tariff payments should balance the need to stimulate renewables with avoiding overpayment. This is conjoined to the notion that they not “reduce the ability of competitive solicitations to put downward pressure on price.” While there is no doubt that competitive markets can sometimes put downward pressure on price, this is by no means the only possible outcome. There can be both buyer and seller markets, which can push prices up or down respectively. In particular, one of the described problems confronted by a renewables mandate is the risk that it can produce upward pressure on market prices. That this is a specific factor for California’s RPS program was specifically noted by the CPUC:

Construction costs are increasing for both renewable and conventional generation, and the RPS program has seen a rise in bid and contract prices since the program began in 2002. There is a concern that constrained supply and policy-driven demand are driving up the costs of RPS contracts....³

The assumption of staff in developing the recommendations for the FIT is that market pressure in the context of renewables procurement will tend to produce lower prices. This in turn underlies the justification for the staff recommendation to limit project size to

³ Renewables Portfolio Standard Quarterly Report, California Public Utilities Commission, July 2008, p. 9.

10 megawatts, under the assumption that it would be better for larger projects to participate in the state's competitive procurement process. However, this ignores the observation in the CPUC July report on the RPS program that the policy driven demand may in fact drive up the cost of the constrained supply of renewables. This is one of the principle reasons that we recommend that the project size cap be raised.

The ninth principle states that the FIT program should:

Complement, but not impede or replace existing programs, especially the California Solar Initiative and the existing Renewable Portfolio Standard programs, which are both aimed at achieving the state's energy policy and climate change goals.

Again, we agree with the intent of this principle, but disagree with its embedded assumption. The current RPS program is already impeded, and has not been successful to date in meeting the legal requirements for increasing renewable energy in California. Many people are looking at FITs to help overcome the limits and problems of existing programs.

It is important that the RPS program, and its unsuccessful design elements, not impede the progress of feed-in tariffs. In this regard we agree that there is a *"need for a paradigm shift in procurement and transmission planning"*⁴ if the state is to meet the 2020 goal of 33% renewable energy. After 2016, the California Solar Initiative will end, and a feed-in tariff should be considered as a replacement after that point in time.

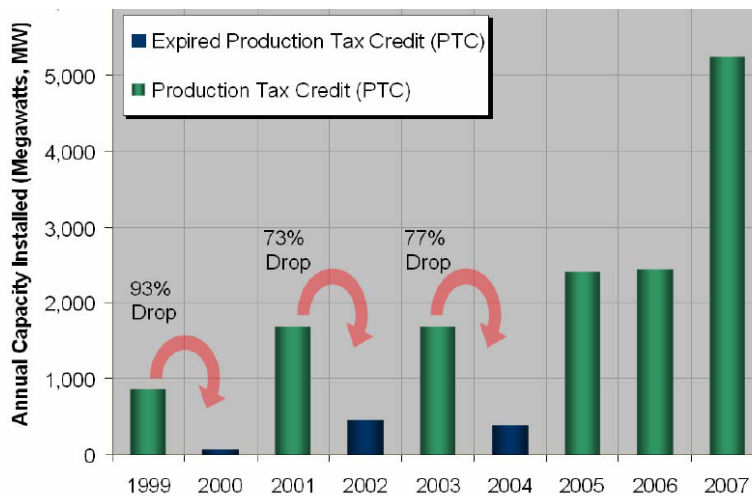
The tenth principle contains some important considerations:

10. Provide some market certainty for project development, but also avoid creating a "boom and bust" market for renewable energy that brings many projects online quickly, but does not create a long-term sustainable marketplace for renewable energy.

⁴ Renewables Portfolio Standard Quarterly Report, California Public Utilities Commission, July 2008, p. 9.

The primary cause of “boom and bust” markets in renewable energy has been the intermittent nature of federal tax policy, especially the lapsing of the production tax credit. Whenever this incentive expires, the market for wind power in the US drops dramatically:

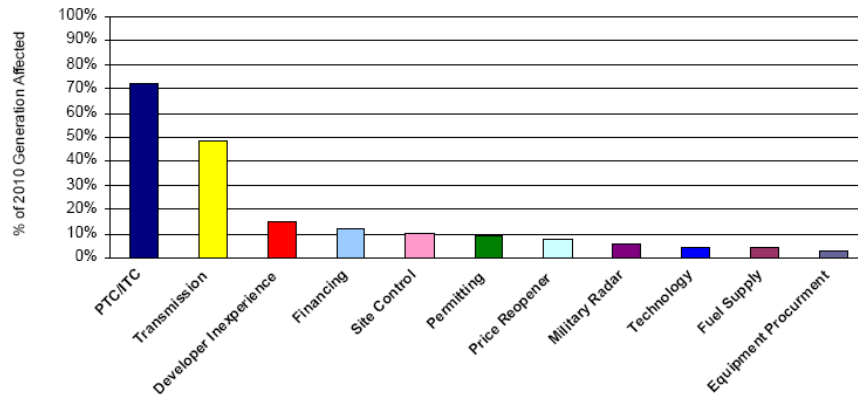
Historic Impact of Production Tax Credit on Annual Installation of Wind Capacity ⁵



Addressing this adequately will require an accommodation of tariff pricing that can compensate for the temporary loss of the credit. Otherwise renewables that depend on this credit will not be able to be viable. In fact, the CPUC has identified the loss of the credits as the single most important reason why RPS goals have not been met:

⁵ American Wind Energy Association (AWEA)

Risk Factors for 2010 RPS Generation ⁶



Allowing modification of FIT pricing sufficient to counteract the loss of a 2 cent per kilowatt-hour tax credit will require modifying the market price referent methodology to account for this largest risk for renewable projects.

IV. FIT PROGRAM DESIGN ISSUES.

We have concerns regarding the following program design issues:

a. Utility Applicability

While we recognize that smaller utilities might not be able to assimilate multiple generators over 1.5 megawatts, we disagree that continuing the current RPS and FIT program can necessarily be assumed as an acceptable alternative. The ability of smaller utilities to meet the RPS program targets should be investigated, and consideration given as to whether a modification of the under 1.5 megawatt FIT program in these cases could be helpful to them.

b. Eligible Generator Project Size

We strongly urge the Commission to increase the project size cap to 20 megawatts as per the Energy Commission's recommendation. The Energy Commission has deliberated on this issue with considerable stakeholder input and expert consultancy, and we believe that there are multiple reasons for the higher cap.

⁶ Renewables Portfolio Standard Quarterly Report, California Public Utilities Commission, July 2008. p. 7.

The specific provision, of “allowing” the utilities to use a standard contract for projects between 10 and 20 megawatts leaves discretion and success of this market sector completely in the hands of the utilities. This leaves developers of projects in this size range dependent upon the disposition of the utilities and under greatly increased market risk. Contrary to the expectation that this will lead to lower cost renewables are factors that could lead to just the opposite:

- increased price and development risk will lead investors to want higher rates of return
- this subjects utilities, and ultimately ratepayers, to a sellers market where there is restricted supply and policy driven demand

A feed-in tariff can be a potent tool for controlling this upward market pressure. This is exactly why feed-in tariffs have been found to be actually less expensive than mandates or “quota” systems, and quite the opposite of the view that they must necessarily be “higher priced” contracts.

In addition to the above reasons, larger projects have lower costs per kilowatt-hour than smaller ones. Restricting the program to smaller projects means that you are effectively “locking in” higher priced resources into the program, and excluding just those projects that will most effectively lower the average cost per kilowatt-hour of the FIT program.

Using a variety of project sizes is in fact an essential tool for managing program cost and impact on ratepayers, and excluding this critical tool will tend—unnecessarily— to make FITs appear as an expensive tool. The fact that some FITs can actually be at or below the average market price can bring the entire portfolio of the FIT program into a competitive range, where smaller projects left to themselves would not be able to accomplish this.

In the realm of energy efficiency, removing the “low hanging fruit” from a program would be considered a lost opportunity cost. And while it may be claimed that the lower

cost facility should be able to compete on its own in the market against natural gas facilities using non-standard offer contracts, this has not been shown to be the case to date. On the contrary, the overwhelming problem has been that subjecting projects to this risk has lead all too often to contract failure.

The recommendation that “IOUs should also continue to procure projects over 10 MW through existing procurement mechanisms, including competitive solicitations or bilateral negotiations.” implies that this procedure has been successful and effective, when it in fact has not been notably so.

We accept the staff’s point that not all sites will be suitable to larger facility development. However, we disagree that this is any reason to exclude eligibility of such projects. On the contrary, the best way to address the problems of connection with the grid is either to examine options for improving the distribution grid or to limit projects to suitable locations. We note that staff recommends that projects of this size not be restricted to customer owned or controlled property, thus the option for finding alternative sites may be available to the developer. Options for developers that can increase the likelihood of new renewables being built, such as assurance of availability a must-take contract, should not be limited. We see this as more closely aligned with the legislative intent quoted at the beginning of our comments.

For all these reasons, we urge the Commission to raise the project cap to 20 megawatts.

c. Total Program Capacity Size Cap/ Wait-List

While 1000 megawatts of new FIT projects, on top of the 500 megawatts for the existing program, may be sufficient for now, it will pose an increasing risk if the cap is approached.

We are quite concerned about staff’s statement about leaving the option of *lowering the cap* open, and we would strongly disagree with such a course of action. Lowering the cap would contradict the legislature’s stated intent to “encourage energy production from

renewable energy resources.” This would especially be the case if the program actually succeeds in increasing the amount of renewables in the state. Further, if the program looks like the cap may be approached, increasing the cap in a timely way will be important for reducing the risk for developers that they might be pushed aside into an indefinite wait list.

We also note that the notion that the 1000 megawatt cap “is enough to see if there is sufficient program interest” is only valid with regard to the cap. The contrary side of this proposal is definitely not the case: namely that allowing 1000 megawatts of capacity is in itself any test of the program. The most important constraint regarding program interest is not the cap, but the details of program implementation, especially the contract terms and price.

d. Length of Time to Achieve Commercial Operation

We are concerned about whether 18 months is sufficient development time for all projects, even given regulatory clearance, and recommend further discussion with a broad range of potential developers. Developer inexperience, site control, and equipment procurement were cited in the July 2008 CPUC report on RPS as specific problems. While these challenges may only be applicable to a relatively small minority of projects, it is important to keep the door of opportunity open—to make allowance for supply bottlenecks, new market participants, and other potential challenges to work themselves out. The fact that only a minority of projects actually deal with these issues should also mean that they would have limited effect on the program as a whole.

And while an 18 month screen might limit the program to only viable projects, the converse—that the excluded projects are necessarily unviable—is not likely to be true. Again, we believe the greater danger is if viable projects are excluded rather than unviable ones being included for what will in any case only be a limited time. In this context, we recommend that additional criteria be allowed for getting the 6 month extension, and agree with the staff-recommended maximum 2 year limit.

f. FIT contract price

We agree with staff that the price is an essential element of program success, though we might be even more emphatic by saying that it is probably the single most important element. We strongly believe that the market price referent, as currently constructed, is the largest barrier to renewables in California, and recommend that a new market price system be developed for the FIT program. The prices should be differentiated by technology and allow full cost recovery plus a reasonable profit; a system recommended by the Energy Commission and well proven by successful feed-in tariff programs.

While we do not object to the idea that the Commission should revisit this at another time, the issue still needs urgently to be addressed so that the current minimal participation can be repaired. We see a few courses of action that can be taken even at this stage to bring the price closer to real project costs:

- increasing the project cap size to 20 megawatts will reduce the cost of projects to the point where they will stand a much better chance of covering expenses through an MPR based FIT price
- Insuring that 10 to 20 megawatt FIT contracts are at the option of the project developer, not the utility, will reduce project risk and thus costs
- recognizing locational benefits of renewables when evaluating the MPR for the FIT

We strongly urge the Commission to address the question of price structure as soon as reasonably possible.

V. ADDITIONAL TERMS AND CONDITIONS.

a. Location Restriction

While we agree that limits on location should be loosened, there are two concerns.

First, that local delivery of power is superior for a multitude of reasons. It reduces the need for transmission, as well as the attendant risks, cost and environmental impact. Local delivery also reduces line losses, and allows better system planning for resource adequacy.

Second, we are concerned about the relationship of Community Choice Aggregators, Electric Service Providers, Public Utilities, or customers who might not be served by utility procurement but are within the CAISO grid region. For example, a local renewable facility that is on the site or under the regional jurisdiction of a Community Choice Aggregator could sign a FIT contract with an IOU. This potentially could conflict with resource availability and local reliability for the CCA by depriving it of a local resource in its jurisdiction. This could pose a problem for CCAs achieving goals for increasing reliance on local energy supplies, where a utility comes into a community and exports its indigenous resource to a remote part of the state.

The FIT program needs to address these issues equitably, so that local community energy programs are not adversely affected. One possibility is to give local service providers right of first refusal on FIT contracts in their jurisdiction, and to make such contracts transferrable in case of change of service.

c. Project Development Security

We are concerned that posted securities not be so high as to discourage developers. This is especially a risk at the higher project range, since staff is assuming a project size cap of 10 megawatts. If the higher project cap of 20 megawatts is adopted, then the staff

recommended rate would imply up to a \$400,000 security. This is probably too high, and we would propose either a maximum security of \$200,000 or a lower rate of \$10 per kilowatt.

d. Performance Assurance/Delivery Term Security

While we appreciate the need of IOUs to avoid litigation, there are other considerations on this matter. First, the facility is being paid by the kilowatt-hour delivered. Thus, the developer is already taking a large burden of performance risk and has a built in strong incentive to deliver power. Second, one of the major benefits of small, distributed generation projects is that the risk to the grid if any one project of 1 to 20 megawatts fails is quite small compared to conventional coal, nuclear or natural gas plants which can range from 100 to thousands of megawatts for a single plant. The small plants effectively distribute the risk of performance failure in a manner that it becomes exceedingly unlikely that an outage of significant scale will occur. This risk mitigation of many small distributed projects, versus single large projects where the risk to the grid is considerable, should be taken into account when calculating a performance risk security. In addition, it is also important not to create an excessive nest of costs and barriers to participants in the program who will not likely have the same financial resources as conventional large power plant investors.

f. Damage Calculation

As in other cases, we recommend not making liability so high that small developers will question their ability to take excessive financial risks. This could undermine the aforementioned program goal as established by the legislature. Five (.05) cents per kilowatt-hour seems to be excessive. Again, one must consider that system damages from individual generators are likely to be small, and the utility may have the right to cancel the contract in certain cases to limit ongoing damages.

Consideration should be given as to whether there are means to reduce this risk to individual developers in a manner that balances the utility and system needs with the public interest to develop distributed and small scale renewables. One option might be to pool risks, in a similar manner that some utilities hedge hydroelectric performance risk. This might be a way to lessen the burden on a number of the risks discussed by staff in this section.

VI. CONCLUSION.

CPUC staff has laid out an excellent framework for consideration of many important questions. Sierra Club California believes that the most important outstanding issue will be coming up with a pricing structure that will stimulate a robust market in renewables under the FIT program. We also strongly recommend including projects up to 20 megawatts under a must-take contract, and that the needs of alternative service providers, such as CCAs and POUs located in the CAISO region, be accommodated. We urge the CPUC to address concerns in a manner that will achieve the intent of the legislature to “encourage energy production from renewable energy resources.” This should be made the most important guiding principle in determining the features of the FIT program.

SIERRA CLUB CALIFORNIA
COMMENTS ON THE COMMISSION'S ENERGY DIVISION FEED-IN TARIFF
PROPOSAL OF MARCH 2009

Sierra Club California (SCC) respectfully submits these joint comments on the Commission's energy Division Feed-in-Tariff proposal of March 2009.

Dated: April 10, 2009

Respectfully Submitted,

/s/ Jim Metropulos

Jim Metropulos, Senior Advocate
Sierra Club California
801 K Street, Suite 2700
Sacramento, CA 95814
Tel: 916-557-1100, extension 109
jim.metropulos@sierraclub.org

**CERTIFICATION OF SERVICE
R0808009**

I, Jim Metropulos, certify that on this day April 10, 2009 I sent copies of the attached Sierra Club California comments on the Commission's Energy Division Feed-in-Tariff proposal of March 2009 to be served on all parties by emailing a copy to all parties identified on the electronic service list provided by the California Public Utilities Commission for this proceeding, and also by e-filing to the CPUC Docket office, with a paper copy to Administrative Law Judge Burton W. Mattson, and Presiding Commissioner Michael Peevey.

Dated: April 10, 2009 at Sacramento, California.

/s/ Jim Metropulos

DECLARANT

(Electronic service List attached to original only)

Service List R0808009

dgulino@ridgewoodpower.com,rick_noger@pra
xair.com,keith.mccrea@sablaw.com,gresch@seia
.org,garson_knapp@fpl.com,ssiegel@biological
diversity.org,kevin.boudreaux@calpine.com,jenn
ifer.chamberlin@directenergy.com,dsaul@pacifi
csolar.net,rprince@semprautilities.com,rkeen@
manatt.com,npedersen@hanmor.com,mmazur@
3PhasesRenewables.com,susan.munves@smgov.
net,ej_wright@oxy.com,klatt@energyattorney.c
om,douglass@energyattorney.com,pssed@adelp
hia.net,cathy.karlstad@sce.com,mike.montoya@
sce.com,william.v.walsh@sce.com,rkmoore@gsw
water.com,kswitzer@gswater.com,cponds@ci.ch
ula-
vista.ca.us,fortlieb@sandiego.gov,khassan@sem
pra.com,troberts@sempra.com,email@semprasol
utions.com,cadowney@cadowneylaw.com,marci
e.milner@shell.com,rwinthrop@pilotpowergrou
p.com,tdarton@pilotpowergroup.com,GloriaB@
anzaelectric.org,llund@commerceenergy.com,w
plaxico@heliosenergy.us,kerry.eden@ci.corona.
ca.us,phil@reesechambers.com,thunt@cecmail.o
rg,Joe.Langenberg@gmail.com,dorth@krcd.org,
ek@a-klaw.com,rsa@a-
klaw.com,pepper@cleanpowermarkets.com,bruc
e.foster@sce.com,marcel@turn.org,nao@cpuc.c
a.gov,stephen.morrison@sfgov.org,crmd@pge.c
om,JMcKinney@fbm.com,craig.lewis@greenvol
ts.com,cmb3@pge.com,evk1@pge.com,ecl8@p
ge.com,abrowning@votesolar.org,arno@recurre
ntenergy.com,bcragg@goodinmacbride.com,jsqu
eri@gmssr.com,jarmstrong@goodinmacbride.co
m,mday@goodinmacbride.com,todd.edmister@b
ingham.com,dhuard@manatt.com,jkarp@winsto
n.com,edwardoneill@dwt.com,jeffgray@dwt.co
m,ssmyers@att.net,gpetlin@3degreesinc.com,mr
h2@pge.com,ralf1241a@cs.com,info@calseia.or
g,kowalewska@calpine.com,linda.sherif@calpi
ne.com,wbooth@booth-
law.com,jody_london_consulting@earthlink.net,
elarsen@rcmdigesters.com,gmorrison@emf.net,lwi
sland@ucsusa.org,ndesnoo@ci.berkeley.ca.us,cl
yde.murley@comcast.net,jpross@sungevity.com
,nrader@calwea.org,tomb@crossborderenergy.c
om,janreid@coastecon.com,johnredding@earthl
ink.net,jweil@aglet.org,martinhomec@gmail.co
m,jsanders@caiso.com,kdusel@navigantconsulti
ng.com,jdalessi@navigantconsulting.com,megan
mmyers@yahoo.com,cmkehrin@ems-
ca.com,dgeis@dolphingroup.org,dcarroll@down
eybrand.com,davidb@cwo.com,jmcfarland@tre
asurer.ca.gov,abb@eslawfirm.com,lmh@eslawfir
m.com,Christine@consciousventuresgroup.com,
kmills@cfbf.com,jnelson@psrec.coop,jordan.wh

ite@pacificorp.com, Tom.Elgie@powerex.com, st
even.schleimer@barclayscapital.com,nicole.fabri
@clareenergybrokerage.com,ron.cerniglia@dire
ctenergy.com,vsuravarapu@cera.com,porters@ex
eterassociates.com,tjaffe@energybusinessconsult
ants.com,richard.chandler@bp.com,srassi@fello
nmccord.com,cswoollums@midamerican.com,C
ynthia.A.Fonner@constellation.com,abiecunasjp
@bv.com,tcarlson@reliant.com,echiang@elemen
tmarkets.com,jon.jacobs@paconsulting.com,bb
aker@summitblue.com,kjsimonsen@ems-
ca.com,jenine.schenk@apses.com,LPaskett@Fir
stsolar.com,emello@sppc.com,tdillard@sppc.co
m,jgreco@terra-
genpower.com,Marla.Dickerson@latimes.com,H
Yao@SempraUtilities.com,ctorchia@chadbourne
e.com,harveyederpspc@hotmail.com,Douglas@I
dealab.com,steve@energyinnovations.com,fhall
@solarelectricsolutions.com,jackmack@suesec.c
om,case.admin@sce.com,gary.allen@sce.com,ge
orge.wiltsee@sce.com,Joni.Templeton@sce.com
,kswitzer@gswater.com,Jcox@fce.com,mary@s
olutionsforutilities.com,amsmith@sempra.com,c
kebler@SempraGeneration.com,tcorr@sempra.c
om,ygross@sempraglobal.com,farrellytc@earthl
ink.net,centralfiles@semprautilities.com,cmanzu
k@semprautilities.com,jwright@semprautilities.
com,dniehaus@semprautilities.com,jleslie@luce.
com,shess@edisonmission.com,csteen@bakerla
w.com,rblee@bakerlaw.com,lechnitz@lumospo
wer.com,michaelgilmore@inlandenergy.com,hal
@rwitz.net,m.stout@cleantechamerica.com,mdj
oseph@adamsbroadwell.com,wblattner@sempra
utilities.com,Diane.Fellman@nexteraenergy.com
,matthew@turn.org,nsuetake@turn.org,paulfenn
@local.org,Dan.adler@calcef.org,mramirez@s
fwater.org,mhyams@swater.org,srovetti@sfwate
r.org,tburke@swater.org,whgolove@chevron.co
m,dcover@esassoc.com,filings@a-
klaw.com,mcarboy@signalhill.com,Nick.Allen
@morganstanley.com,sean.hazlett@morganstanl
ey.com,snuller@ethree.com,jay2@pge.com,jsp5
@pge.com,cpuccases@pge.com,nes@a-
klaw.com,sls@a-
klaw.com,cmmw@pge.com,nxk2@pge.com,jsc
ncarelli@flk.com,koconnor@winston.com,derek
@evomarkets.com,judypau@dwt.com,bobgex@
dwt.com,cem@newsdata.com,cem@newsdata.co
m,sho@ograde.us,sara@solaralliance.org,lfavret
@3degreesinc.com,ELL5@pge.com,GXL2@pge
.com,MMCL@pge.com,SEHC@pge.com,vjw3
@pge.com,vjw3@pge.com,rwalther@pacbell.net
,wetstone@alamedapt.com,beth@beth411.com,
mpr-
ca@coolearthsolar.com,andy.vanhorn@vhcenerg
y.com,robert.boyd@ps.ge.com,sbeserra@sbcglo

bal.net,phanschen@mofo.com,jbarnes@summitblue.com,pletkarj@bv.com,masont@bv.com,tzentai@summitblue.com,dietrichlaw2@earthlink.net,alex.kang@itron.com,nellie.tong@us.kema.com,ramonag@ebmud.com,bepstein@fablaw.com,mrw@mrwassoc.com,cpucdockets@keyesandfox.com,kfox@keyesandfox.com,cwooten@lumenxconsulting.com,rschmidt@bartlewells.com,gteigen@rcmdigesters.com,janice@strategenconsulting.com,sean.beatty@mirant.com,cchen@ucsusa.org,brenda.lemay@horizonwind.com,mcmahon@solarcentury.com,sgallagher@stirlingenergy.com,elvine@lbl.gov,ed.smeloff@sunpowercorp.com,brian@banyansec.com,lynn@lmaconsulting.com,tfaust@redwoodrenewables.com,joe@hnhresources.com,tim@marinemt.org,ed.mainland@sierraclub.org,keithwhite@earthlink.net,eric.cherniss@gmail.com,cpechman@powereconomics.com,sobrien@mccarthy.com,tom_victorine@sjwater.com,davido@mid.org,joyw@mid.org,brbarkevich@earthlink.net,dgrandy@caonsitegen.com,rmccann@umich.edu,demorse@omsoft.com,tobinjmr@sbcglobal.net,bdicapo@caiso.com,saeed.farrokhpay@ferc.gov,e-recipient@caiso.com,dennis@ddecuir.com,rick@sierraecos.com,david.oliver@navigantconsulting.com,kenneth.swain@navigantconsulting.com,cpucrulings@navigantconsulting.com,lpark@navigantconsulting.com,pmaxwell@navigantconsulting.com,karly@solardevelop.com,kevin@solardevelop.com,tpomales@arb.ca.gov,amber@iepa.com,mclaughlin@braunlegal.com,jluckhardt@downeybrand.com,jim.metropulos@sierraclub.org,mgarcia@arb.ca.gov,pstoner@lgc.org,bernardo@braunlegal.com,blaising@braunlegal.com,steveb@cwo.com,steven@iepa.com,dseperas@calpine.com,bsb@eslawfirm.com,cte@eslawfirm.com,dkk@eslawfirm.com,jjg@eslawfirm.com,rroth@smud.org,wwester@smud.org,mdeange@smud.org,vwood@smud.org,hurlock@water.ca.gov,lterry@water.ca.gov,mniroula@water.ca.gov,artrivera@comcast.net,rlauckhart@globalenergy.com,rliebert@cfbf.com,karen@klindh.com,atrowbridge@daycartermurphy.com,DocToxics@aol.com,c.mentzel@cleanenergymaui.com,kyle.l.davis@pacificorp.com,californiadockets@pacificorp.com,dws@r-c-s-inc.com,castille@landsenergy.com,dtownley@infiniacorp.com,MoniqueStevenson@SeaBreezePower.com,jmcmahon@crai.com,ab1@cpuc.ca.gov,as2@cpuc.ca.gov,aes@cpuc.ca.gov,aeg@cpuc.ca.gov,bds@cpuc.ca.gov,bwm@cpuc.ca.gov,cnl@cpuc.ca.gov,ctd@cpuc.ca.gov,css@cpuc.ca.gov,dbp@cpuc.ca.gov,dsh@cpuc.ca.gov,dot@cpuc.ca.gov,trh@cpuc.ca.gov,eks@cpuc.ca.gov,fjs@cpuc.ca.gov,gtd@cpuc.ca.gov,jm3@cpuc.ca.gov,

jjw@cpuc.ca.gov,jf2@cpuc.ca.gov,jmh@cpuc.ca.gov,kar@cpuc.ca.gov,kwh@cpuc.ca.gov,mrl@cpuc.ca.gov,mjs@cpuc.ca.gov,mjd@cpuc.ca.gov,mwt@cpuc.ca.gov,mjh@cpuc.ca.gov,mc3@cpuc.ca.gov,sha@cpuc.ca.gov,nlr@cpuc.ca.gov,nil@cpuc.ca.gov,psd@cpuc.ca.gov,rmm@cpuc.ca.gov,rkn@cpuc.ca.gov,smk@cpuc.ca.gov,svn@cpuc.ca.gov,tbo@cpuc.ca.gov,claufenb@energy.state.ca.us,cleni@energy.state.ca.us,eeg@cpuc.ca.gov,hraitt@energy.state.ca.us,jfleshma@energy.state.ca.us,kzocchet@energy.state.ca.us,lgonzalez@energy.state.ca.us,mpryor@energy.state.ca.us,trf@cpuc.ca.gov,cleni@energy.state.ca.us,dvidaver@energy.state.ca.us,jwoodwar@energy.state.ca.us,mringer@energy.state.ca.us,hlouie@energy.state.ca.us,hcronin@water.ca.gov,rmiller@energy.state.ca.us