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

Order Instituting Rulemaking to Implement the  
Commission's Procurement Incentive Framework and  
to Examine the Integration of Greenhouse Gas  
Emissions Standards into Procurement Policies.

R. 06-04-009

**BEFORE THE CALIFORNIA ENERGY COMMISSION**

AB 32 Implementation – Greenhouse Gas  
Emissions.

Docket 07-OIIP-01

**OPENING COMMENTS  
OF THE ALLIANCE FOR RETAIL ENERGY MARKETS  
ON TYPE AND POINT OF REGULATION ISSUES**

Gregory S. G. Klatt  
Douglass & Liddell  
21700 Oxnard Street, Suite 1030  
Woodland Hills, California 91367  
Telephone: (818) 961-3002  
Facsimile: (818) 961-3004  
Email: [klatt@energyattorney.com](mailto:klatt@energyattorney.com)

Attorney for the  
ALLIANCE FOR RETAIL ENERGY MARKETS

Date: December 3, 2007

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**OPENING COMMENTS  
OF THE ALLIANCE FOR RETAIL ENERGY MARKETS  
ON TYPE AND POINT OF REGULATION ISSUES**

In response to the *Administrative Law Judges' Ruling Requesting Comments on Type and Point of Regulation Issues* dated November 9, 2007 ("ALJ Ruling"), the Alliance for Retail Energy Markets ("AReM") respectfully submits these opening comments.<sup>1</sup>

**A. INTRODUCTION**

The ALJ Ruling poses a series of questions concerning the pros and cons of various proposed models for regulating GHG emissions in California's electricity sector, including: (1) a load-based cap-and-trade system; (2) a deliverer/first seller approach; (3) a pure source-based cap-and-trade system (regulation of in-state generation only); and (4)

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<sup>1</sup> AReM is a California non-profit mutual benefit corporation formed by electric service providers ("ESPs") that are active in California's direct access market. The positions taken in this filing represent the views of AReM but not necessarily those of individual members or affiliates of its members with respect to the issues addressed herein.

a source-based system for in-state generation, and a load-based system for imports. The ALJ Ruling also posits the deferral of implementing a California-only cap-and-trade system and working with other Western states to develop a regional cap-and-trade system and/or work toward a national cap-and-trade program; in the meantime, existing state programs in the electricity sector—e.g., energy efficiency programs and the Renewables Portfolio Standard (“RPS”)—would be “ramped up” to meet the GHG emissions reduction goals for California established by Assembly Bill (“AB”) 32.

Of the proposed regulatory models, pending the implementation of a regional and federal source-based cap-and-trade program, AReM believes that the state’s GHG emissions reduction goals would be best achieved by implementing a deliverer/first seller approach for regulating emissions in the electricity sector in combination with a statewide (i.e., economy-wide) cap-and-trade system. AReM believes further that the disadvantages of relying on indirect approaches such as increasing energy efficiency and RPS targets as the primary means of reducing GHG emissions in the electricity sector are underscored by the advantages of moving forward with a well-designed cap-and-trade system. AReM expands on these points in our responses to the questions posed in the ALJ Ruling.

## **B. RESPONSES TO QUESTIONS**

### **1. General**

#### **Q1. What do you view as the incremental benefits of a market-based system for GHG compliance, in the current California context?**

Compared to command-and-control regulation, a market-based approach system for GHG compliance—i.e., a cap-and-trade system—will have several benefits. Experience shows that market-based systems with transparent pricing produce greater

efficiency, promote innovation, provide necessary investment signals, and reduce consumer costs. The same benefits can be expected to result from adoption of a market-based system for GHG compliance. That is, the market will develop the most efficient means for meeting emissions reduction goals, including investment in new technologies and the development of innovative compliance strategies, and at a lower overall cost to consumers. Furthermore, the experience gained by California in developing and implementing a market-based system for GHG compliance can be expected to produce long-term benefits for the California economy and the state's businesses and consumers, particularly given the likelihood that GHG emissions will eventually be regulated at the federal level under a market-based system whose development can be guided by a well-designed market-based approach in California.

**Q2. Can a market-based system provide additional emissions reductions beyond existing policies and/or programs? If so, at what level? How much of such additional emission reductions could be achieved through expansion of existing policies and/or programs?**

AReM believes that a market-based system for GHG compliance would provide additional emissions reductions beyond those achievable through "ramping up" existing policies and programs. While AReM has not performed a detailed analysis of the comparative effectiveness of a market-based system and policy/program expansion in terms of reducing GHG emissions, it seems clear that it is unrealistic to expect the latter to produce significant overall emissions reductions in the electricity sector. That is because electricity demand has been steadily increasing in California and can be expected to continue to do so in the future as the state's population and economy grow.

In any event, expanding existing policies and programs would likely be very expensive and would place a disproportionate share of the GHG compliance burden on

load-serving entities, and there are limits to how much could be achieved thereby in terms of reducing GHG emissions. For one thing, the industrial and commercial sectors in California have already made significant efforts at increasing energy efficiency, and the extent to which those sectors can further reduce their energy consumption is limited. There are also practical limits on how much new renewable generation can be developed in California and neighboring states due to cost considerations, equipment shortages, transmission constraints, the NIMBY problem, and the fact that many of the remaining locales where new renewable generation could be developed are environmentally sensitive.

2. **Principles or Objectives to Be Considered in Evaluating Design Options**

Public Utilities Commission Staff proposes that the following principles or objectives be used to evaluate GHG program design options and to develop recommendations regarding a GHG regulatory approach.

- **Goal attainment:** Does the approach being considered have any particular advantages in terms of meeting overall emission reduction goals? For example, does the approach have any advantages to promoting energy efficiency, combined heat and power, or renewable energy?
- **Cost minimization:** Is the approach likely to minimize the total cost to end users of achieving a given GHG reduction target?
- **Compatibility with wholesale markets and the Market Redesign and Technology Upgrade:** What are the implications of the approach on efficient functioning of wholesale markets generally and the California Independent System Operator day-ahead and real-time markets?
- **Legal risk:** Is the approach at greater relative risk of being delayed or overturned in court?
- **Environmental Integrity:** Does the approach mitigate or allow contract shuffling and the leakage of emissions occurring outside of California as a result of efforts to reduce emissions in California?

- **Expandability:** Would the approach integrate easily into a broader regional or national program? A related consideration is the suitability of the approach as a model for a national or regional program.
- **Accuracy:** Does the approach support accuracy in reporting and, therefore, ensure that reported emission reductions are real?
- **Administrative Simplicity:** Does the approach promote greater simplicity for reporting entities, verifiers, and state agency staff? How easy will the program design be to administer?

**Q3. Do you agree with this set of objectives? Are there other objectives or principles that you wish to see included? If so, please include your recommendations and reasoning. Finally, please rank the objectives above, and any additional factors you propose, in order of importance.**

AReM generally agrees with the proposed objectives, and believes that the paramount objectives should be goal attainment and expandability. Another important goal should be that system implementation does not *unfairly* advantage or disadvantage any class of generators or retail providers. AReM ranks these objectives as follows:

1. **Goal attainment:** Pending the implementation of a source-based point of regulation system at the regional and federal level, a deliver/first seller market-based system is most likely to produce the desired result of reducing overall GHG emissions in California's electricity sector, as capturing the cost of emissions at the generator level would be the most effective and transparent means of creating incentives for investment in, and dispatch of, low-emission resources while minimizing leakage and contract shuffling through power imports.
2. **Expandability:** A deliver/first seller market-based system could readily be integrated with a regional or national source-based GHG compliance system.

3. Equity: A deliver/first seller market-based system would be least likely to unfairly advantage or disadvantage any class of consumers or retail providers.
4. Cost minimization: A deliver/first seller market-based system would be the most cost-effective means of reducing GHG emissions in the electricity sector.
5. Compatibility with wholesale markets and MRTU: Because a deliver/first seller market-based system provides for direct cost assignment to the generators and power importers, it will create the best price transparency and granularity to stimulate emission reduction investments in the long-run. The system will ensure a level playing field for all consumers and retail providers, will not discriminate between in-state generation and imported power, and therefore will be the least likely to interfere with the wholesale markets or degrade grid reliability.
6. Administrative Simplicity: A deliver/first seller market-based system would be relatively simple to administer.
7. Environmental Integrity: The potential problem of emissions leakage is created by having an emissions cap that applies to a limited geographic area rather than regionally or nationally. However, the implementation of the Emission Performance Standard contained in Senate Bill ("SB") 1368 will greatly minimize such leakage pending the adoption of a regional and national source-based cap-and-trade program.

8. Accuracy: While accuracy is important, it is most closely tied to implementation of a regional or national GHG compliance system and therefore is ranked lower by AReM.
9. Legal risk: AReM believes that deliver/first seller market-based system would be the least discriminatory and therefore the most likely to survive the inevitable legal challenges.

3. **Load-Based Cap-and-Trade System Design**

- Q4. With a load-based cap-and-trade system, should exports from in-state generation sources be included and accounted for under the cap?**

AReM reserves comment on this issue.

- Q5. How extensive do you view the threat of contract shuffling under a load-based program, given the accessibility of clean resources within the western interconnect? What mechanisms do you propose to combat this possibility? On what basis do you support your position?**

AReM reserves comment on this issue.

**Under a load-based system, three basic options may be used to match a retail provider's load to the sources of electricity used to serve the load: (1) the use of contracts and settlements data, (2) the development of a tracking system to facilitate matching sources to loads, with unclaimed sources pooled and assigned to all retail providers for any electricity that cannot be accounted for on a specified basis, and (3) the use of a tracking system and tradable emission attribute certificates (TEAC) to ensure that all electricity is assigned.**

- Q6. Which of these systems best accounts for all imports? What are the advantages and disadvantages of each potential tracking system in terms of accuracy, cost of development and administration of tracking systems, costs of administration to the parties, and overall costs to ratepayers? Are there alternative tracking approaches that you would recommend, and for what reasons?**

AReM believes the TEAC model used in conjunction with a regional tracking system such as the Western Renewable Energy Generation Information System ("WREGIS") would best account for all imports and has several other advantages over



other tracking mechanisms. Most significantly, it would be compatible with future regional and national market-based systems and would provide retail providers with flexibility in meeting GHG compliance requirements.

**Q7. If a load-based approach is pursued, would the potential benefits of a full TEAC system be great enough to warrant the start-up and administrative costs?**

Yes, particularly given that much of the start-up costs associated with a TEAC model would be avoided since it could be built into WREGIS; hence, the associated administrative and start up costs are minimized with a common registry and trading platform that has already been implemented for renewable generation in the Western Electricity Coordinating Council ("WECC").

**4. Source-based Cap-and-trade System Design Options**

**4.1. Pure Source-based (GHG Regulation of In-state Generation Only)**

**Under an in-state-only source-based approach, the regulated entities would be the power plants located in California that generate electricity and emit GHGs. Under such a system, electricity use associated with imports would not be directly regulated under the cap-and-trade system. Instead, other policies and programs such as energy efficiency and the Renewable Portfolio Standard (RPS) would be utilized to decrease reliance on imported GHG-intensive power sources.**

**Q8. Do you view this approach as compliant with Assembly Bill (AB) 32? Please support your answer.**

As AB 32 simply requires that the state of California account for GHG emissions in setting the emissions cap and implement emissions reduction measures, a source-based system would not be inconsistent with the statute.

**The threat of leakage can be viewed over two time horizons: short-term and long-term.**

**Q9. In light of the relatively high capacity factors of carbon-intensive facilities outside the state, how extensive do you expect the short-term threat of substituting higher-carbon imports for in-state generation to**

**be? Might this possibility be dealt with through specific program design (e.g., allocations, limiting conditions, etc.)?**

AReM does not believe that emission leakage should be addressed through system design elements such as the allocation of allowances or limiting conditions, since such measures would result in inequities and interfere with the operation of the emissions trading market.

**Q10. Given existing procurement oversight and the prospect for a regional or federal GHG program in the foreseeable future, how extensive do you expect the threat to be of a longer-term shift of production to regions beyond the reach of a California source-based cap-and-trade regime?**

AReM reserves comment on this issue.

**Q11. If emissions associated with imported power are excluded from a cap-and-trade program, what policies beyond the existing suite of program including energy efficiency, California Solar Initiative, RPS, and Emission Performance Standard (EPS) do you recommend that California employ to achieve the necessary reductions from the electricity sector?**

AReM reserves comment on this issue.

**Q12. As the Public Utilities Commission does not currently have authority to oversee all energy efficiency and renewable procurement programs for all kinds of retail providers (investor owned utilities (IOUs), community choice aggregators (CCAs), electric service providers (ESPs), and publicly owned utilities (POUs)), which agency(ies) should fill in any gaps? Which agency should be responsible for overseeing energy efficiency and renewable procurement for POUs? Would the California Air Resources Board (ARB) have the authority to require certain energy efficiency and renewable targets be met by POUs?**

ESPs are already subject to the Commission's authority for purposes of the RPS program. However, AReM strongly opposes any extension of that authority in connection with energy efficiency programs as inappropriate and unnecessary.

**Q13. What sources would a source-based system cover? Could it cover California utility-owned facilities located outside of California?**

AReM reserves comment on this issue.

**Q14. Would a strengthened EPS assist in reducing emissions due to California imports? What recommended changes would you make to the EPS?**

No, it would not. AReM also believes that making the EPS more restrictive would be less efficient and more costly for consumers than a market-based system.

**4.2. Deliverer/First Seller**

**Q15. Please comment on the “First Seller Design Description” paper, which is Attachment A to this ruling. Does the paper accurately describe the deliverer/first seller program? If not, describe your concerns and include an accurate description from your perspective.**

The “First Seller Design Description” paper appears to provide an accurate overview of the deliverer/first-seller approach.

**4.3. Source-based for In-state Generation, Load-based for Imports**

**Q16. Please describe in detail your view of how this option would work.**

For in-state generation, the point of regulation would be the generator. For imports, the point of regulation would be the power importer.

**Q17. Do you support such an approach? Why or why not?**

AReM does not support this approach, as it would appear to be administratively complex and inefficient compared to a deliverer/first seller system.

**Q18. Does this approach have legal issues associated with it? Provide a detailed analysis and legal citations.**

No comment.

**Q19. If retail providers are responsible for internalizing the cost of carbon for imported power, all power generated in-state may need to be tracked to load to avoid double regulation of in-state power. Do you agree?**

Yes. This is another reason why a deliverer/first seller approach would be less complex and more efficient.

**Q20. If that is the case, does a mixed source-based/load-based approach offer any advantages compared to a load-based approach in terms of simplifying reporting and tracking? What if the load-based system uses TEACs? How could imports be differentiated from in-state generation in a way that reduces the complexity of reporting and tracking compared to a load-based approach?**

This question and sub-questions illustrate the added complexity that would be created by adopting a hybrid source-based/load-based approach.

#### **5. Deferral of a Market-based Cap-and-Trade System**

**In this scenario, a California-only cap-and-trade system would not be implemented for the electricity sector at this time. Instead, California would work with other Western states to develop a Western Climate Initiative cap-and trade system and/or work toward a national cap-and-trade program. In the meantime, existing policies and programs in the electricity sector may need to be ramped up to meet the AB 32 goals.**

**Several variations of this option may be possible. For example, a load-based cap could still be developed for retail providers, with assignment of individual entity obligations and trading available within the California electricity sector only, but not with other sectors. A second alternative would be to develop individual entity caps (or carbon budgets) which entities could not exceed without facing penalties or fees, but not allow for any trading of allowances at this time. Another option would be to ramp up the mandatory levels of existing programs such as the energy efficiency and RPS programs to higher goals, and make all retail providers obligated to meet these additional goals, without assigning specific cap levels to individual entities.**

**Q21. How important is it that a cap-and-trade system be included in the near-term as part of the electricity sector's AB 32 compliance strategy?**

It would be counter-productive to defer implementation of a cap-and-trade system and attempt to regulate GHG emissions in the electricity sector in isolation. Without a

statewide cap-and-trade system in place, GHG compliance will likely be more complicated for regulated entities and more expensive for consumers. A command-and-control system, with regulated entities subject to caps without there being a market to buy and sell allowances, would be too rigid and would likely increase compliance costs. Simply ramping up RPS requirements and placing ESPs under regulation for purposes of energy efficiency goals would also be costly and inefficient, and the increased regulatory burden imposed on such entities would act as a barrier to market entry. Given the requirements of AB 32, the best option for California is to implement a market-based system that encompasses all sector and sources.

**Q22. Would your answer to Q21 be different if there is no market-based cap-and-trade system? If so, please explain.**

No, as AReM believes none of the alternative scenarios are acceptable.

**Q23. Address the following:**

- **How emission reduction obligations could be met if there is no cap-and-trade system for the electricity sector,**
- **How increased programmatic goals would impact rates, and**
- **How deferral of a cap-and-trade program for the electricity sector would facilitate or hinder California's integration into a subsequent regional or federal program.**

With regard to the first two issues, please see AReM's response to Question 21.

As for the third issue, not implementing a cap-and-trade system for the electricity sector would delay the development of the reporting and tracking mechanisms necessary for implementation of broader-based cap-and-trade system (i.e., statewide, regional and/or national systems).

**Q25. If neither a regional system nor a national system is implemented within a reasonable timeframe, should California proceed with implementing its own cap-and-trade system for the electricity sector? If so, how long should California wait for other systems to develop before acting alone?**

Yes. Because AReM believes that a market-based system is the most cost-effective means of reducing GHG emissions in the electricity sector, a statewide cap-and-trade system is necessary and sufficient for compliance, regardless of whether there is a regional or federal system in place. A market-based system provides allocative and productive efficiencies, such that the lowest compliance cost is ensured for the ultimate consumer.

**Q26. What flexible compliance mechanisms could be integrated into a non-market based GHG emission reduction approach?**

AReM seeks flexible compliance options under a GHG emission reduction program such as offsets, trading, banking, and/or borrowing. For example, flexible compliance tools that are provided to retail sellers under the RPS program (forward banking, carry-over of deficits) should be provided to entities regulated under the GHG program, regardless of whether a cap-and-trade system is also implemented.

**Q27. If a market-based cap-and-trade system is not implemented for the electricity sector in 2012, how would you recommend addressing early actions that entities may have undertaken in anticipation of a market?**

AReM reserves comment on this issue.

## **6. Recommendation and Comparison of Alternatives**


**Q28. Submit your comprehensive proposal for the approach California should utilize regarding the point of regulation and whether California should implement a cap-and-trade program at this time for the electricity sector. If you recommend that another approach be considered besides those detailed above, propose it here. If you recommend one of the above options, give as detailed a discussion as possible of how the approach would work.**

For the reasons discussed above and in previous comments, AReM recommends that California implement a deliverer/first seller approach for the electricity sector and a statewide (economy-wide) cap-and trade system.

**Q29. Address and compare how each of the alternatives identified in the above questions, and the proposal you submit in response to the preceding question, would perform relative to each of the principles or objectives listed above and any other principles or objectives you propose. For each alternative, address important tradeoffs among the principles.**

Please see AReM's responses to Questions 1, 2 and 3.

Respectfully submitted,

  
Gregory S.G. Klatt

DOUGLASS & LIDDELL  
21700 Oxnard Street, Suite 1030  
Woodland Hills, California 91367  
Telephone: (818) 961-3002  
Facsimile: (818) 961-3004  
Email: [klatt@energyattorney.com](mailto:klatt@energyattorney.com)

Attorney for the  
ALLIANCE FOR RETAIL ENERGY MARKETS

Date: December 3, 2007

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a copy of **Opening Comments of the Alliance for Retail Energy Markets on Type and Point of Regulation Issues** on all parties of record in proceeding **R. 06-04-009** by serving an electronic copy on their email addresses of record and by mailing a properly addressed copy by first-class mail with postage prepaid to each party for whom an email address is not available.

Executed on December 3, 2007, at Woodland Hills, California.

  
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Michelle Dangott



## SERVICE LIST

R.06-04-009

cadams@covantaenergy.com  
steven.schleimer@barclayscapital.com  
steven.huhman@morganstanley.com  
rick\_noger@praxair.com  
keith.mccrea@sabl原因.com  
ajkatz@mwe.com  
ckrupka@mwe.com  
kyle\_boudreaux@fpl.com  
cswoollums@midamerican.com  
Cynthia.A.Fonner@constellation.com  
kevin.boudreaux@calpine.com  
trdill@westernhubs.com  
ej\_wright@oxy.com  
pseby@mckennalong.com  
todil@mckennalong.com  
steve.koerner@elpaso.com  
jenine.schenk@apses.com  
jbw@slwplc.com  
kelly.barr@srpnet.com  
rrtaylor@srpnet.com  
smichel@westernresources.org  
roger.montgomery@swgas.com  
Lorraine.Paskett@ladwp.com  
ron.deaton@ladwp.com  
snewsom@semprautilities.com  
dhuard@manatt.com  
curtis.kebler@gs.com  
dehling@kling.com  
gregory.koiser@constellation.com  
npedersen@hanmor.com  
mmazur@3phasesRenewables.com  
vitaly.lee@aes.com  
tiffany.rau@bp.com  
klatt@energyattorney.com  
rhelgeson@scppa.org  
douglass@energyattorney.com  
pssed@adelphia.net  
bwallerstein@aqmd.gov  
akbar.jazayeri@sce.com  
annette.gilliam@sce.com  
cathy.karlstad@sce.com  
Laura.Genao@sce.com  
rkmoore@gswater.com  
dwood8@cox.net  
amsmith@sempra.com  
atrial@sempra.com  
apak@sempraglobal.com  
dhecht@sempratrading.com  
daking@sempra.com

svongdeuane@semprasolutions.com  
troberts@sempra.com  
liddell@energyattorney.com  
marcie.milner@shell.com  
rwinthrop@pilotpowergroup.com  
tdarton@pilotpowergroup.com  
lschavrien@semprautilities.com  
GloriaB@anzaelectric.org  
llund@commerceenergy.com  
thunt@cecmail.org  
jeanne.sole@sfgov.org  
john.hughes@sce.com  
llorenz@semprautilities.com  
marcel@turn.org  
nsuetake@turn.org  
dil@cpuc.ca.gov  
fjs@cpuc.ca.gov  
achang@nrdc.org  
rsa@a-klaw.com  
ek@a-klaw.com  
kgrenfell@nrdc.org  
mpa@a-klaw.com  
sls@a-klaw.com  
bill.chen@constellation.com  
bkc7@pge.com  
epoole@adplaw.com  
agrimaldi@mckennalong.com  
bcragg@goodinmacbride.com  
jsqueri@gmssr.com  
jarmstrong@goodinmacbride.com  
kbowen@winston.com  
lcottle@winston.com  
sbeatty@cwclaw.com  
vprabhakaran@goodinmacbride.com  
jkarp@winston.com  
jeffgray@dwt.com  
cjlw5@pge.com  
ssmyers@att.net  
lars@resource-solutions.org  
alho@pge.com  
aweller@sel.com  
jchamberlin@strategicenergy.com  
beth@beth411.com  
kerry.hattevik@mirant.com  
kowalewskia@calpine.com  
wbooth@booth-law.com  
hoerner@redefiningprogress.org  
janill.richards@doj.ca.gov  
cchen@ucsusa.org

gmorris@emf.net  
tomb@crossborderenergy.com  
kjinovation@earthlink.net  
bmcc@mccarthyllaw.com  
sberlin@mccarthyllaw.com  
Mike@alpinenaturalgas.com  
joyw@mid.org  
UHelman@caiso.com  
jjensen@kirkwood.com  
mary.lynn@constellation.com  
lrdevanna-rf@cleanenergysystems.com  
abb@eslawfirm.com  
mclaughlin@braunlegal.com  
glw@eslawfirm.com  
jluckhardt@downeybrand.com  
jdh@eslawfirm.com  
vwelch@environmentaldefense.org  
www@eslawfirm.com  
westgas@aol.com  
schohn@smud.org  
atrowbridge@daycartermurphy.com  
dansvec@hdo.net  
notice@psrec.coop  
deb@a-klaw.com  
cynthia.schultz@pacificorp.com  
kyle.l.davis@pacificorp.com  
ryan.flynn@pacificorp.com  
carter@ieta.org  
jason.dubchak@niskags.com  
bjones@mjbardley.com  
kcolburn@symbioticstrategies.com  
rapcowart@aol.com  
Kathryn.Wig@nrgenergy.com  
sasteriadis@apx.com  
george.hopley@barcap.com  
ez@pointcarbon.com  
burtraw@rff.org  
vb@pointcarbon.com  
andrew.bradford@constellation.com  
gbarch@knowledgeinenergy.com  
ralph.dennis@constellation.com  
smindel@knowledgeinenergy.com  
brabe@umich.edu  
bpotts@foley.com  
james.keating@bp.com  
jimross@r-c-s-inc.com  
tcarlson@reliant.com  
ghinners@reliant.com  
zaiontj@bp.com

julie.martin@bp.com  
fiji.george@elpaso.com  
echiang@elementmarkets.com  
fstern@summitblue.com  
nenbar@energy-insights.com  
nlenssen@energy-insights.com  
bbaker@summitblue.com  
william.tomlinson@elpaso.com  
kjsimonsen@ems-ca.com  
Sandra.ely@state.nm.us  
bmcquown@reliant.com  
dbrooks@nevp.com  
anita.hart@swgas.com  
randy.sable@swgas.com  
bill.schrand@swgas.com  
jj.prucnal@swgas.com  
sandra.carolina@swgas.com  
ckmitchell1@sbcglobal.net  
chilen@sppc.com  
emello@sppc.com  
tdillard@sierrapacific.com  
dsoyars@sppc.com  
jgreco@caithnessenergy.com  
leilani.johnson@ladwp.com  
randy.howard@ladwp.com  
Robert.Rozanski@ladwp.com  
robert.pettinato@ladwp.com  
HYao@SempraUtilities.com  
rprince@semprautilities.com  
rkeen@manatt.com  
nwhang@manatt.com  
pjazayeri@stroock.com  
derek@climateregistry.org  
david@nemtzwow.com  
harveyederpspc.org@hotmail.com  
sendo@ci.pasadena.ca.us  
slins@ci.glendale.ca.us  
THAMILTON5@CHARTER.NET  
bjeider@ci.burbank.ca.us  
rmorillo@ci.burbank.ca.us  
roger.pelote@williams.com  
aimee.barnes@ecosecurities.com  
case.admin@sce.com  
tim.hemig@nrgenergy.com  
bjl@bry.com  
aldyn.hoekstra@paceglobal.com  
ygross@sempraglobal.com  
jlaun@apogee.net  
kunkiener@fox.net  
scottanders@sandiego.edu  
jkloberdanz@semprautilities.com  
andrew.mcallister@energycenter.org  
jack.burke@energycenter.org  
jennifer.porter@energycenter.org

sephra.ninow@energycenter.org  
dniehaus@semprautilities.com  
jleslie@luce.com  
ofoote@hkcf-law.com  
ekgrubaugh@iid.com  
pepper@cleanpowermarkets.com  
gsmith@adamsbroadwell.com  
mdjoseph@adamsbroadwell.com  
diane\_fellman@fpl.com  
hayley@turn.org  
mflorio@turn.org  
Dan.adler@calcef.org  
mhays@sfgwater.org  
tburke@sfgwater.org  
norman.furuta@navy.mil  
amber@ethree.com  
annabelle.malins@fco.gov.uk  
dwang@nrdc.org  
filings@a-klaw.com  
nes@a-klaw.com  
obystrom@cera.com  
sdhilton@stoel.com  
scarter@nrdc.org  
abonds@thelen.com  
cbaskette@enernoc.com  
colin.petheram@att.com  
jwmctarnaghan@duanemorris.com  
kfox@wsgr.com  
kkhoja@thelenreid.com  
pvalien@thelen.com  
spauker@wsgr.com  
rreinhard@mofo.com  
cem@newsdata.com  
hgolub@nixonpeabody.com  
jscancarelli@flk.com  
jwiedman@goodinmacbride.com  
mmattes@nossaman.com  
jen@cnt.org  
lisa\_weinzimer@platts.com  
steven@moss.net  
sellis@fypower.org  
arno@recurrentenergy.com  
BRBc@pge.com  
ELL5@pge.com  
gxl2@pge.com  
jxa2@pge.com  
JDF1@PGE.COM  
RHHJ@pge.com  
sscb@pge.com  
svs6@pge.com  
S1L7@pge.com  
vjw3@pge.com  
karla.dailey@cityofpaloalto.org  
farrokh.albuyeh@oati.net

dtibbs@aes4u.com  
jhahn@covantaenergy.com  
andy.vanhorn@vhcenergy.com  
Joe.paul@dynegy.com  
info@calseia.org  
gblue@enxco.com  
sbeserra@sbcglobal.net  
monica.schwebs@bingham.com  
phanschen@mofo.com  
josephhenri@hotmail.com  
pthompson@summitblue.com  
dietrichlaw2@earthlink.net  
Betty.Seto@kema.com  
JerryL@abag.ca.gov  
jody\_london\_consulting@earthlink.net  
steve@schiller.com  
mrw@mrwassoc.com  
rschmidt@bartlewells.com  
adamb@greenlining.org  
stevek@kromer.com  
clyde.murley@comcast.net  
brenda.lemay@horizonwind.com  
carla.peterman@gmail.com  
elvine@lbl.gov  
rhwisser@lbl.gov  
C\_Marnay@lbl.gov  
philm@scdenergy.com  
rita@ritanortonconsulting.com  
cpechman@powereconomics.com  
emahlon@ecoact.org  
richards@mid.org  
rogerv@mid.org  
tomk@mid.org  
fwmonier@tid.org  
brbarkovich@earthlink.net  
johnrredding@earthlink.net  
clark.bernier@rlw.com  
rmccann@umich.edu  
cmkehrein@ems-ca.com  
e-recipient@caiso.com  
grosenblum@caiso.com  
rsmutny-jones@caiso.com  
saeed.farokhpay@ferc.gov  
david@branchcomb.com  
kenneth.swain@navigantconsulting.com  
kduzel@navigantconsulting.com  
gpickering@navigantconsulting.com  
lpark@navigantconsulting.com  
davidreynolds@ncpa.com  
scott.tomashefsky@ncpa.com  
ewolfe@resero.com  
Audra.Hartmann@Dynegy.com  
Bob.lucas@calobby.com  
curt.barry@iwpnews.com

danskopec@gmail.com  
dseperas@calpine.com  
dave@ppallc.com  
dkk@eslawfirm.com  
wynne@braunlegal.com  
kgough@calpine.com  
kellie.smith@sen.ca.gov  
kdw@woodruff-expert-services.com  
mwaugh@arb.ca.gov  
pbarthol@energy.state.ca.us  
pstoner@lgc.org  
rachel@ceert.org  
bernardo@braunlegal.com  
steven@lipmanconsulting.com  
steven@iepa.com  
wtasat@arb.ca.gov  
etiedemann@kmtg.com  
ltenhope@energy.state.ca.us  
bushinskyj@pewclimate.org  
lmh@eslawfirm.com  
obartho@smud.org  
bbeebe@smud.org  
bpurewal@water.ca.gov  
dmacmull@water.ca.gov  
kmills@cfbf.com  
karen@klindh.com  
ehadley@reupower.com  
Anne-Marie\_Madison@TransAlta.com  
mgarcia@arb.ca.gov  
pduvair@energy.state.ca.us  
wsm@cpuc.ca.gov  
hurlock@water.ca.gov  
hcronin@water.ca.gov  
rmiller@energy.state.ca.us

sas@a-klaw.com  
egw@a-klaw.com  
akelly@climatetrust.org  
alan.comnes@nrgenergy.com  
kyle.silon@ecosecurities.com  
californiadockets@pacificorp.com  
Philip.H.Carver@state.or.us  
samuel.r.sadler@state.or.us  
lisa.c.schwartz@state.or.us  
cbreidenich@yahoo.com  
dws@r-c-s-inc.com  
jesus.arredondo@nrgenergy.com  
charlie.blair@delta-ee.com  
Tom.Elgie@powerex.com  
clarence.binninger@doj.ca.gov  
david.zonana@doj.ca.gov  
agc@cpuc.ca.gov  
aeg@cpuc.ca.gov  
blm@cpuc.ca.gov  
cfl@cpuc.ca.gov  
cft@cpuc.ca.gov  
tam@cpuc.ca.gov  
dsh@cpuc.ca.gov  
edm@cpuc.ca.gov  
cpe@cpuc.ca.gov  
hym@cpuc.ca.gov  
hsl@cpuc.ca.gov  
jm3@cpuc.ca.gov  
dmetz@energy.state.ca.us  
deborah.slone@doj.ca.gov  
dks@cpuc.ca.gov  
kgriffin@energy.state.ca.us  
ldecarlo@energy.state.ca.us  
mpryor@energy.state.ca.us

jnm@cpuc.ca.gov  
jbf@cpuc.ca.gov  
jkl@cpuc.ca.gov  
jst@cpuc.ca.gov  
jtp@cpuc.ca.gov  
jol@cpuc.ca.gov  
jci@cpuc.ca.gov  
jf2@cpuc.ca.gov  
krd@cpuc.ca.gov  
lrm@cpuc.ca.gov  
ltt@cpuc.ca.gov  
mjd@cpuc.ca.gov  
ner@cpuc.ca.gov  
pwl@cpuc.ca.gov  
psp@cpuc.ca.gov  
pzs@cpuc.ca.gov  
rmm@cpuc.ca.gov  
ram@cpuc.ca.gov  
smk@cpuc.ca.gov  
sgm@cpuc.ca.gov  
svn@cpuc.ca.gov  
scr@cpuc.ca.gov  
tcx@cpuc.ca.gov  
ken.alex@doj.ca.gov  
ken.alex@doj.ca.gov  
bdicapo@caiso.com  
jsanders@caiso.com  
jgill@caiso.com  
ppettingill@caiso.com  
mscheibl@arb.ca.gov  
epowers@arb.ca.gov  
jdoll@arb.ca.gov  
pburmich@arb.ca.gov  
bblevins@energy.state.ca.us