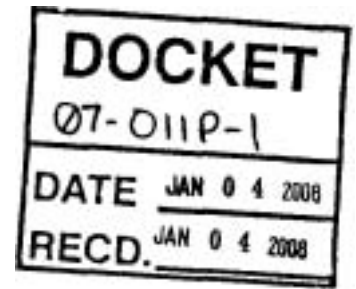


**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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

[Also filed at the California Energy Commission]

Rulemaking 06-04-009
(Filed April 13, 2006:)

CEC Docket 07-OIIP-01

**OPENING COMMENTS OF THE INDEPENDENT ENERGY
PRODUCERS ASSOCIATION ON MODELING RELATED
ISSUES**

**INDEPENDENT ENERGY PRODUCERS
ASSOCIATION**

Steven Kelly
Policy Director
1516 K Street, Suite 900
Sacramento, CA 95814
Telephone: (916) 448-9499
Facsimile: (916) 448-0182
Email: steven@iepa.com

**GOODIN, MACBRIDE, SQUERI,
DAY & LAMPREY, LLP**
Brian T. Cragg
505 Sansome Street, Suite 900
San Francisco, CA 94111
Telephone: (415) 392-7900
Facsimile: (415) 398-4321
Email: bcragg@goodinmacbride.com

Attorneys for the Independent Energy Producers
Association

Date: **January** 4, 2008

**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.

[Also filed at the California Energy Commission]

Rulemaking 06-04-009
(Filed April 13, 2006)

CEC Docket 07-OIIP-01

**OPENING COMMENTS OF THE INDEPENDENT ENERGY
PRODUCERS ASSOCIATION ON MODELING-RELATED
ISSUES**

Pursuant to the Administrative Law Judge's Ruling Requesting Comments on Modeling-Related Issues (issued November 9, 2007 and modified by ruling dated November 30, 2007), the Independent Energy Producers Association ("IEP") submits its comments on modeling-related issues. IEP's comments are organized as responses to the questions posed in the November 9, 2007 ruling. These comments are also being filed in Docket 07-OIIP-01 of the California Energy Commission.

I. INTRODUCTION

IEP recognizes the efforts made by the Commission's consultants in Stage 1 of the greenhouse gas ("GHG") modeling project. Much progress has been made, and IEP agrees with the Commission's desire to understand the cost implications of various resource addition and load reduction strategies designed to enable compliance with the statewide mandates of AB 32. IEP intends to become actively involved in Stage 2 of the Commission's GHG modeling process and appreciates the opportunity to offer these comments.

II. ANSWERS TO SPECIFIC QUESTIONS

Q6. Does E3's modeling documentation adequately document the methodology, inputs, and other assumptions underlying its model? If not, what additional documentation should be added?

IEP's review of the documentation prepared by E3 leads to a conclusion that while assumptions regarding incremental resource additions are fairly well-documented, there is no discussion of assumptions and modeling inputs as they pertain to the existing infrastructure, either in California or the balance of the WECC. Absent documentation of this these data and assumptions, the project's stated goal of transparency cannot be attained. Data and assumptions that require documentation or revelation include, but are not limited to:

- Thermal unit
 - o ownership
 - o size (MW)
 - o heat rates
 - o forced outage rates
 - o maintenance rates
 - o chronological constraints
 - o O&M cost
- Hydro
 - o capacity and energy by region
 - o seasonal/monthly energy availability
- System Reliability
 - o ancillary service requirements

In addition to documentation of the above data and assumptions, expansion of the

documentation of the GHG calculator spreadsheet is required to allow full use and validation of that tool. The spreadsheet is quite complex, but its documentation is limited to instructions for changing a limited amount of input data and reading summary results. This documentation should be expanded to provide parties an understanding of how the model is intended to work and how and whether data and assumptions other than selected resource additions can be changed and the results evaluated.

Q7. Provide feedback, as desired or appropriate, on the structure and approach taken by E3 in its GHG Calculator spreadsheet tool.

As noted above, there is insufficient documentation of the model to be able to respond to this question.

Q8. Provide feedback, as desired or appropriate, on the data sources used by E3 for its assumptions in its issue papers. If you prefer different assumptions or sources, provide appropriate citations and explain the reason for your preference.

IEP appreciates that E3 has relied on publicly available data as a basis for its assumptions regarding resource construction cost and operation characteristics, renewable supply curves, and fuel costs. IEP is concerned, however, that the data sources are public agencies which have never built or operated a power plant. IEP and its members are still in the process of evaluating the resource cost estimates used by E3 and will offer recommendations if and when they become available.

At this time IEP notes that E3's assumptions regarding biomass fuel costs are (a) not discussed in its documentation (Section 9), and (b) markedly lower than other any of the other biomass fuel cost estimates that are documented. In light of E3's reliance on biomass

resources in its “Aggressive Policy” Case, IEP suggests review of biomass fuel cost assumptions.

Q9. Are uncertainties inherent in the resource potential and cost estimates adequately identified? Does E3’s model provide enough flexibility to test alternative assumptions with respect to these uncertainties?

E3’s documentation reflects ranges of costs, but to date its modeling reflects only point estimates. IEP recommends that Stage 2 efforts include assigning probabilities to cost distributions and specific modeling of a broad range of cost/resource mix cases.

As to the model’s ability to test alternative assumptions, the lack of documentation of the model prevents a response to this question.

Q10. Has the E3 model adequately accounted for the implications of increased reliance on preferred resources (renewables, efficiency) on system costs?

IEP does not have a position on this issue at this time.

Q11. Should E3’s model, in Stage 2, attempt to model potential market transformation scenarios, in the form of cost decreases, new technologies, or behavioral changes? What might be an appropriate way to characterize such potential for market transformation?

IEP does not have a position on this issue at this time. IEP notes, however, that the costs of photovoltaic resources have increased, rather than decreased, as increased demand has pushed up the cost of the components of this zero GHG technology.

Q12. What specific flexible GHG emission reduction mechanisms to mitigate

the economic impacts of achieving the desired GHG emission reductions should be modeled in Stage 2?

IEP does not have a position on this issue at this time. Stage 2 should, among other things, focus on more detailed transmission modeling to assure that resource addition strategies are achievable and their costs properly reflected and recognized. Stage 1 modeling of transmission requirements and capabilities to accommodate resource additions in either the “Business As Usual” or the “Aggressive Policy” cases was insufficient to place any confidence in the cost implications of either case.

Q13. What output metric or metrics should be utilized to evaluate the least cost way to meet a 2020 emission reduction target for the sector?

It is important to remember that the GHG emission reductions goals set forth in AB 32 are not sector specific. Regulators at all levels of government must recognize that simple pro-rata sector reductions may not be the least-cost or most-effective way to achieve the statewide, all-sector reduction goals. For example, it is possible that the most cost-effective way for California to meet its goals is to electrify the transportation sector. The net effect of this policy path is that, in all likelihood, electric sector GHG emissions will increase, while statewide GHG emissions will decrease. Considering these implications, it is important that the modeling tools being developed by the Commission have the flexibility to evaluate a broader range of emission reduction strategies than a simple sector specific target.

Respectfully submitted this 4th day of January, 2008 at San Francisco, California.

GOODIN, MACBRIDE, SQUERI,
DAY & LAMPREY, LLP
Brian T. Cragg
505 Sansome Street, Suite 900
San Francisco, California 94111
Telephone: (415) 392-7900
Facsimile: (415) 398-4321

By /s/ Brian T. Cragg
Brian T. Cragg

Attorneys for the Independent Energy
Producers Association

2970/019/X95628.v1

CERTIFICATE OF SERVICE

I, Melinda LaJaunie, certify that I have on this 4th day of January 2008 caused a copy of the foregoing

**OPENING COMMENTS OF THE INDEPENDENT ENERGY
PRODUCERS ASSOCIATION ON MODELING-RELATED ISSUES**

to be served on all known parties to R.06-04-009 listed on the most recently updated service list available on the California Public Utilities Commission website, via email to those listed with email and via U.S. mail to those without email service. I also caused courtesy copies to be hand-delivered as follows:

Commissioner President Michael R. Peevey
California Public Utilities Commission
State Building, Room 5218
505 Van Ness Avenue
San Francisco, CA 94102

ALJ Charlotte TerKeurst
California Public Utilities Commission
State Building, Room 5117
505 Van Ness Avenue
San Francisco, CA 94102

ALJ Jonathan Lakritz
California Public Utilities Commission
State Building, Room 5020
505 Van Ness Avenue
San Francisco, CA 94102

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 4th day of January 2008 at San Francisco, California.

/s/ Melinda LaJaunie
Melinda LaJaunie

Service List – R.06-04-009 (Updated January 2, 2008)

ANDREW BROWN
abb@eslawfirm.com

ASHLEE M. BONDS
abonds@thelen.com

AUDREY CHANG
achang@nrdc.org

ADAM BRIONES
adamb@greenlining.org

Anne Gillette
aeg@cpuc.ca.gov

Andrew Campbell
agc@cpuc.ca.gov

ANN G. GRIMALDI
agrimaldi@mckennalong.com

AIMEE BARNES
aimee.barnes@ecosecurities.com

ADAM J. KATZ
ajkatz@mwe.com

AKBAR JAZAYEIRI
akbar.jazayeri@sce.com

ALEXIA C. KELLY
akelly@climatetrust.org

ALAN COMNES
alan.comnes@nrgenergy.com

ALDYN HOEKSTRA
aldyn.hoekstra@paceglobal.com

ANDREW L. HARRIS
alho@pge.com

AMBER MAHONE
amber@ethree.com

ANDREW BRADFORD
andrew.bradford@constellation.com

ANDREW MCALLISTER
andrew.mcallister@energycenter.org

ANDREW J. VAN HORN
andy.vanhorn@vhcenergy.com

ANITA HART
anita.hart@swgas.com

ANNABELLE MALINS
annabelle.malins@fco.gov.uk

ANNETTE GILLIAM
annette.gilliam@sce.com

ALVIN PAK
apak@sempraglobal.com

ARNO HARRIS
arno@recurrentenergy.com
ALLEN K. TRIAL
atrial@sempra.com

ANN L. TROWBRIDGE
atrowbridge@daycartermurphy.com

AUDRA HARTMANN
Audra.Hartmann@Dynegy.com

ANDREA WELLER
aweller@sel.com

ELIZABETH BAKER
bbaker@summitblue.com

Bishu Chatterjee
bbc@cpuc.ca.gov

BUD BEEBE
bbeebe@smud.org

B. B. BLEVINS
bblevins@energy.state.ca.us

BRIAN T. CRAGG
bcragg@goodinmacbride.com

BALDASSARO DI CAPO
bdicapo@caiso.com

RYAN BERNARDO
bernardo@braunlegal.com

BETH VAUGHAN
beth@beth411.com

BETTY SETO
Betty.Seto@kema.com

WILLIAM H. CHEN
bill.chen@constellation.com

BILL SCHRAND
bill.schrand@swgas.com

BRUNO JEIDER
bjeider@ci.burbank.ca.us

BARRY LOVELL
bjl@bry.com

BRIAN M. JONES
bjones@mjbbradley.com

BRIAN K. CHERRY
bkc7@pge.com

Beth Moore
blm@cpuc.ca.gov

BARRY F. MCCARTHY
bmcc@mccarthyllaw.com

BRIAN MCQUOWN
bmquown@reliant.com

BOB LUCAS
Bob.lucas@calobby.com

BRIAN POTTS
bpotts@foley.com

BALWANT S. PUREWAL
bpurewal@water.ca.gov

BARRY RABE
brabe@umich.edu

BARBARA R. BARKOVICH
brbarkovich@earthlink.net

BIANCA BOWMAN
BRBc@pge.com

BRENDA LEMAY
brenda.lemay@horizonwind.com

DALLAS BURTRAW
burtraw@rff.org

JOSHUA BUSHINSKY
bushinskyj@pewclimate.org

BARRY R. WALLERSTEIN
bwallerstein@aqmd.gov

BRAD WETSTONE
bwetstone@hotmail.com

CHRIS MARNAY
C_Marnay@lbl.gov

CINDY ADAMS
cadams@covantaenergy.com

CATHIE ALLEN
californiadockets@pacificorp.com

CARLA PETERMAN
carla.peterman@gmail.com

IAN CARTER
carter@ieta.org

CASE ADMINISTRATION
case.admin@sce.com

CATHY A. KARLSTAD
cathy.karlstad@sce.com

CARMEN E. BASKETTE
cbaskette@enernoc.com

CLARE BREIDENICH
cbreidenich@yahoo.com

CLIFF CHEN
cchen@ucsusa.org

CALIFORNIA ENERGY
MARKETS
cem@newsdata.com

Cathleen A. Fogel
cfl@cpuc.ca.gov

Charlotte TerKeurst
cft@cpuc.ca.gov

CHARLIE BLAIR
charlie.blair@delta-ee.com

CHRISTOPHER A. HILEN
chilen@sppc.com

CHRISTOPHER J. WARNER
cjw5@pge.com

CYNTHIA MITCHELL
ckmitchell1@sbcglobal.net

CATHERINE M. KRUPKA
ckrupka@mwe.com

CLARENCE BINNINGER
clarence.binninger@doj.ca.gov

CLARK BERNIER
clark.bernier@rlw.com

CLYDE MURLEY
clyde.murley@comcast.net

CAROLYN M. KEHREIN
cmkehrein@ems-ca.com

COLIN PETHERAM
colin.pctheram@att.com

Eugene Cadenasso
cpe@cpuc.ca.gov

CARL PECHMAN
cpechman@powereconomics.com

CATHY S. WOOLLUMS
cswoolums@midamerican.com

CURT BARRY
curt.barry@iwpnews.com

CURTIS L. KEBLER
curtis.kebler@gs.com

CYNTHIA A. FONNER
Cynthia.A.Fonner@constellation.com

CYNTHIA SCHULTZ
cynthia.schultz@pacificorp.com

DANIEL A. KING
daking@sempra.com

DAN ADLER
Dan.adler@calcef.org

DAN SKOPEC
danskopec@gmail.com

| | | | |
|---|---|---|---|
| DAN SILVERIA dansvec@hdo.net | Donald R. Smith dsh@cpuc.ca.gov | FARROKH ALBUYEH farrokh.albuyeh@oati.net | J. ANDREW HOERNER hoerner@redefiningprogress.org |
| DAVID L. MODISSETTE dave@ppallc.com DAVID ZONANA david.zonana@doj.ca.gov | DARRELL SOYARS dsoyars@sppc.com | FIJI GEORGE fiji.george@elpaso.com | CAROL J. HURLOCK hurlock@water.ca.gov HUGH YAO HYao@SemptraUtilities.com |
| DAVID BRANCHCOMB david@branchcomb.com | DEAN R. TIBBS dtibbs@acs4u.com | KAREN TERRANOVA filings@a-klaw.com | Harvey Y. Morris hym@cpuc.ca.gov |
| DAVID NEMTZOW david@nemtzw.com | DEVRA WANG dwang@nrdc.org | F. Jackson Stoddard fjs@cpuc.ca.gov | SUE KATELEY info@calseia.org |
| DAVID REYNOLDS davidreynolds@ncpa.com | DON WOOD dwood8@cox.net | FRANK STERN fstern@summitblue.com | JACK BURKE jack.burke@energycenter.org |
| DOUGLAS BROOKS dbrooks@nevpc.com | DONALD SCHOENBECK dws@r-c-s-inc.com | WES MONIER fwmonier@tid.org | JAIRAM GOPAL Jairam.gopal@sce.com |
| DONALD BROOKHYSER deb@a-klaw.com | ED CHIANG echiang@elementmarkets.com | GARY BARCH gbarch@knowledgeinenergy.com | JAMES W. KEATING james.keating@bp.com |
| DEBORAH SLON deborah.slon@doj.ca.gov | Ed Moldavsky edm@cpuc.ca.gov | GREG BLUE gblue@enxco.com | JANILL RICHARDS janill.richards@doj.ca.gov |
| DENNIS M.P. EHLING dehling@kling.com | ELIZABETH WESTBY egw@a-klaw.com | GEORGE HOPLEY george.hopley@barcap.com | JEANNE B. ARMSTRONG jarmstrong@goodinmacbride.com |
| DEREK MARKOLF derek@climaterestry.org | ELIZABETH W. HADLEY ehadley@reupower.com | GARY HINNERS ghinners@reliant.com | JASON DUBCHAK jason.dubchak@niskags.com |
| DAN HECHT dhecht@semptratading.com | E.J. WRIGHT ej_wright@oxy.com | GLORIA BRITTON GloriaB@anzaelectric.org | Jamie Fordyce jbf@cpuc.ca.gov |
| DAVID L. HUARD dhuard@manatt.com | EVELYN KAHL ek@a-klaw.com | GREGGORY L. WHEATLAND glw@eslawfirm.com | JOHN B. WELDON, JR. jbw@slwplc.com |
| DIANE I. FELLMAN Diane_Fellman@fpl.com | ELSTON K. GRUBAUGH ekgrubaugh@iid.com | GREGG MORRIS gmorris@emf.net | JENNIFER CHAMBERLIN jchamberlin@strategicenergy.com |
| WILLIAM F. DIETRICH dietrichlaw2@earthlink.net | Elizabeth Stoltzfus eks@cpuc.ca.gov | GORDON PICKERING gpickering@navigantconsulting.com | Judith Ikle jci@epuc.ca.gov |
| Diana L. Lee dil@cpuc.ca.gov | ED LUCHA ELL5@pge.com | GREGORY KOISER gregory.koiser@constellation.com | JONATHAN FORRESTER JDF1@PGE.COM |
| DOUGLAS K. KERNER dkk@eslawfirm.com | EDWARD VINE elvine@lbl.gov | GRANT ROSENBLUM, ESQ. grosenblum@caiso.com | JEFFERY D. HARRIS jdh@eslawfirm.com |
| Don Schultz dks@cpuc.ca.gov | MAHLON ALDRIDGE emahlon@ecoact.org | GLORIA D. SMITH gsmith@adamsbroadwell.com | JEFFREY DOLL jdoll@arb.ca.gov |
| DOUGLAS MACMULLEN dmacmull@water.ca.gov | ELENA MELLO emello@sppc.com | GRACE LIVINGSTON-NUNLEY gx12@pge.com | JEANNE M. SOLE jeanne.sole@sfgov.org |
| DARYL METZ dmetz@energy.state.ca.us | EDWARD G POOLE epoole@adplaw.com | HARVEY EDER harveyederpspc.org@hotmail.com | JEFFREY P. GRAY jeffgray@dwt.com |
| DESPINA NIEHAUS dniehaus@semptrautilities.com | EDWARD J. TIEDEMANN etiedemann@kmtg.com | HAYLEY GOODSON hayley@turn.org | JEN MCGRAW jen@cnt.org |
| DANIEL W. DOUGLASS douglass@energyattorney.com | ELLEN WOLFE ewolfe@resero.com | HOLLY B. CRONIN hcronin@water.ca.gov | JENINE SCHENK jenine.schenk@apses.com |
| DANIELLE MATTHEWS SEPERAS dseperas@calpine.com | ELIZABETH ZELLJADT ez@pointcarbon.com | HOWARD V. GOLUB hgolub@nixonpeabody.com | JENNIFER PORTER jennifer.porter@energycenter.org |

GERALD L. LAHR
JerryL@abag.ca.gov

JESUS ARREDONDO
jesus.arredondo@nrgenergy.com
Julie A. Fitch
jf2@cpuc.ca.gov

JULIE GILL
jgill@caiso.com

JOSEPH GRECO
jgreco@caithnessenergy.com

JEFFREY L. HAHN
jhahn@covantaenergy.com

JAMES ROSS
jimross@r-c-s-inc.com

JJ PRUCNAL
jj.prucnal@swgas.com

JOHN JENSEN
jjensen@kirkwood.com

Jason R. Salmi Klotz
jk1@cpuc.ca.gov

JOSEPH M. KARP
jkarp@winston.com

JOSEPH R. KLOBERDANZ
jkloberdanz@semprautilities.com

JOHN LAUN
jlaun@apogee.net

JOHN W. LESLIE
jleslie@luce.com

JANE E. LUCKHARDT
jluckhardt@downeybrand.com

Jaclyn Marks
jm3@cpuc.ca.gov

Jacqueline Greig
jnm@cpuc.ca.gov

JODY S. LONDON
jody_london_consulting@earthlink.net

JOSEPH PAUL
Joe.paul@dynegey.com

JOHN P. HUGHES
john.hughes@sce.com

JOHN R. REDDING
johnredding@earthlink.net

Jonathan Lakritz
jol@cpuc.ca.gov

JOSEPH HENRI
josephhenri@hotmail.com

JOY A. WARREN
joyw@mid.org

JUDITH B. SANDERS
jsanders@caiso.com
JANINE L. SCANCARELLI
jscancarelli@flk.com

JAMES D. SQUERI
jsqueri@gmssr.com

George S. Tagnipes
jst@cpuc.ca.gov

Joel T. Perlstein
jtp@cpuc.ca.gov

JULIE L. MARTIN
julie.martin@bp.com

JOSEPH F. WIEDMAN
jwiedman@goodinmacbride.com

JAMES W. TARNAGHAN
jwmctarnaghan@duanemorris.com

JASMIN ANSAR
jxa2@pge.com

KAREN LINDH
karen@klindh.com

KARLA DAILEY
karla.dailey@cityofpaloalto.org

KATHRYN WIG
Kathryn.Wig@nrgenergy.com

KAREN BOWEN
kbowen@winston.com

KENNETH A. COLBURN
kcolburn@symbioticstrategies.com

KIRBY DUSEL
kdusel@navigantconsulting.com

KEVIN WOODRUFF
kdw@woodruff-expert-services.com

KEITH R. MCCREA
keith.mccrea@sablaw.com

KELLIE SMITH
kellie.smith@sen.ca.gov

KELLY BARR
kelly.barr@srpnet.com

BILL LOCKYER
ken.alex@doj.ca.gov

KEN ALEX
ken.alex@doj.ca.gov

KENNY SWAIN
kenneth.swain@navigantconsulting.com

KERRY HATTEVIK
kerry.hattevik@mirant.com

KEVIN BOUDREAUX
kevin.boudreaux@calpine.com

KEVIN FOX
kfox@wsgr.com

KASSANDRA GOUGH
kgough@calpine.com

KRISTIN GRENFELL
kgrenfell@nrdc.org

KAREN GRIFFIN
kgriffin@energy.state.ca.us

KENNETH C. JOHNSON
kjinnovation@earthlink.net

KEVIN J. SIMONSEN
kjsimonsen@ems-ca.com

KHURSHID KHOJA
kkhoja@thelenreid.com

GREGORY KLATT
klatt@energyattorney.com

KAREN NORENE MILLS
kmills@cfcf.com

KIM KIENER
kмкиener@fox.net

AVIS KOWALEWSKI
kowalewskia@calpine.com

Kristin Ralff Douglas
krd@cpuc.ca.gov

KYLE L. DAVIS
kyle.l.davis@pacificcorp.com

KYLE SILON
kyle.silon@ecosecurities.com

KYLE D. BOUDREAUX
kyle_boudreaux@fpl.com

LARS KVALE
lars@resource-solutions.org

LAURA I. GENAO
Laura.Genao@sce.com

LISA A. COTTLE
lcottle@winston.com

LISA DECARLO
ldecarlo@energy.state.ca.us

LEILANI JOHNSON KOWAL
leilani.johnson@ladwp.com

DONALD C. LIDDELL
liddell@energyattorney.com

LISA SCHWARTZ
lisa.c.schwartz@state.or.us

LISA WEINZIMER
lisa_weinzimer@platts.com

LAD LORENZ
llorenz@semprautilities.com

LYNELLE LUND
llund@commerceenergy.com

LYNN HAUG
lmh@eslawfirm.com

LORRAINE PASKETT
Lorraine.Paskett@ladwp.com

LAURIE PARK
lpark@navigantconsulting.com

LEONARD DEVANNA
lrdevanna-rf@cleanenergysystems.com

Lainie Motamedi
lrn@cpuc.ca.gov

STEVE RAHON
lschavrien@semprautilities.com

LAURIE TEN HOPE
ltenhope@energy.state.ca.us

Lana Tran
ltt@cpuc.ca.gov

MARCEL HAWIGER
marcel@turn.org

MARCIE MILNER
marcie.milner@shell.com

MARY LYNCH
mary.lynych@constellation.com

BRUCE MCLAUGHLIN
mclaughlin@braunlegal.com

MARC D. JOSEPH
mdjoseph@adamsbroadwell.com

MICHEL FLORIO
mflorio@turn.org

MICHELLE GARCIA
mgarcia@arb.ca.gov

MELANIE GILLETTE
mgillette@enemcc.com

MICHAEL A. HYAMS
mhyams@sfwater.org

MIKE LAMOND
Mike@alpinenaturalgas.com

| | | | |
|---|---|---|---|
| Matthew Deal mjd@cpuc.ca.gov | PAM BURMICH pburmich@arb.ca.gov | RICHARD HELGESON rhelgeson@scppa.org | REID A. WINTHROP rwinthrop@pilotpowergroup.com |
| MARTIN A. MATTES mmattes@nossaman.com | PIERRE H. DUVAIR pduvair@energy.state.ca.us | RAYMOND HUNG RHHJ@pge.com | RYAN FLYNN ryan.flynn@pacificcorp.com |
| MICHAEL MAZUR mmazur@3phasesRenewables.com | JAN PEPPER pepper@cleanpowermarkets.com | RYAN WISER rhwiser@lbl.gov | STEPHANIE LA SHAWN SIL7@pge.com |
| MONICA A. SCHWEBS, ESQ. monica.schwebs@bingham.com | PETER W. HANSCHEN phansch@mofo.com | RICHARD SMITH richards@mid.org | SAEED FARROKHPAY saeed.farrokhpay@ferc.gov |
| MICHAEL P. ALCANTAR mpa@a-klaw.com | PHIL CARVER Philip.H.Carver@state.or.us | RICK C. NOGER rick_noger@praxair.com | SAM SADLER samuel.r.sadler@state.or.us |
| MARC PRYOR mpryor@energy.state.ca.us | PHILLIP J. MULLER phil@mcdenergy.com | RITA NORTON rita@ritanortonconsulting.com | SANDRA CAROLINA sandra.carolina@swgas.com |
| MRW & ASSOCIATES, INC. mrw@mrwassoc.com | PETER JAZAYERI pjazayeri@stroock.com | RANDALL W. KEEN rkeen@manatt.com | SANDRA ELY Sandra.ely@state.nm.us |
| MICHAEL SCHEIBLE mscheibl@arb.ca.gov | PHILIP D. PETTINGILL ppettingill@caiso.com | RONALD MOORE rkmoore@gswater.com | ANNIE STANGE sas@a-klaw.com |
| MICHAEL WAUGH mwaugh@arb.ca.gov | PAUL M. SEBY pseby@mckennalong.com | RICHARD MCCANN, PH.D rmccann@umich.edu | SAKIS ASTERIADIS sasteriadis@apx.com |
| NADAV ENBAR nenbar@energy-insights.com | Paul S. Phillips psp@cpuc.ca.gov | ROSS A. MILLER rmiller@energy.state.ca.us | SEAN P. BEATTY sbeatty@cwclaw.com |
| Nancy Ryan ner@cpuc.ca.gov | PAUL DELANEY psed@adelphia.net | Rahmon Momoh rmm@cpuc.ca.gov | C. SUSIE BERLIN sberlin@mccarthyaw.com |
| NORA SHERIFF nes@a-klaw.com | PATRICK STONER pstoner@lgc.org | RICHARD J. MORILLO rmorillo@ci.burbank.ca.us | SARAH BESERRA sbeserra@sbcglobal.net |
| NICHOLAS LENSSEN nlenssen@energy-insights.com | PATRICIA THOMPSON pthompson@summitblue.com | ROBERT L. PETTINATO robert.pettinato@ladwp.com | SHERYL CARTER scarter@nrdc.org |
| NORMAN J. FURUTA norman.furuta@navy.mil | PETER V. ALLEN pvallen@thelen.com | ROBERT K. ROZANSKI Robert.Rozanski@ladwp.com | STEVEN M. COHN scohn@smud.org |
| JESSICA NELSON notice@psrec.coop | Pamela Wellner pw1@cpuc.ca.gov | ROGER C. MONTGOMERY roger.montgomery@swgas.com | SCOTT TOMASHEFSKY scott.tomashefsky@ncpa.com |
| NORMAN A. PEDERSEN npedersen@hanmor.com | Pearlie Sabino pzs@cpuc.ca.gov | ROGER VAN HOY rogerv@mid.org | SCOTT J. ANDERS scottanders@sandiego.edu |
| NINA SUETAKE nsuetake@turn.org | RACHEL MCMAHON rachel@ceert.org | RONALD F. DEATON ron.deaton@ladwp.com | Steve Roscow scr@cpuc.ca.gov |
| NANCY TRONAAS ntronaas@energy.state.ca.us | RALPH E. DENNIS ralph.dennis@constellation.com | RASHA PRINCE rprince@semprautilities.com | SETH HILTON sdhilton@stoel.com |
| S. NANCY WHANG nwhang@manatt.com | Richard A. Myers ram@cpuc.ca.gov | ROBERT J. REINHARD reinhard@mofo.com | SHAUN ELLIS sellis@fypower.org |
| OBADIAH BARTHOLOMY obartho@smud.org | RANDY S. HOWARD randy.howard@ladwp.com | ROBERT R. TAYLOR rrtaylor@srpnet.com | STEVE ENDO sendo@ci.pasadena.ca.us |
| OLOF BYSTROM obystrom@cera.com | RANDY SABLE randy.sable@swgas.com | DONALD BROOKHYSER rsa@a-klaw.com | SEPHRA A. NINOW sephra.ninow@energycenter.org |
| ORLANDO B. FOOTE, III ofoote@hkcf-law.com | RICHARD COWART rapcowart@aol.com | REED V. SCHMIDT rschmidt@bartlells.com | Scott Murtishaw sgm@cpuc.ca.gov |
| PANAMA BARTHOLOMY pbarthol@energy.state.ca.us | RAY WELCH ray.welch@navigantconsulting.com | ROBIN SMUTNY-JONES rsmutny-jones@caiso.com | STEVEN G. LINS slins@ci.glendale.ca.us |

| | | |
|---|---|---|
| SEEMA SRINIVASAN sls@a-klaw.com | Theresa Cho tcx@cpuc.ca.gov | Wade McCartney wsm@cpuc.ca.gov |
| STEVEN S. MICHEL smichel@westernresources.org | THOMAS DARTON tdarton@pilotpowergroup.com | WEBSTER TASAT wtasat@arb.ca.gov |
| SAMARA MINDEL smindel@knowledgeinenergy.com | TREVOR DILLARD tdillard@sierrapacific.com | WILLIAM W. WESTERFIELD, 111 www@eslawfirm.com |
| Sara M. Kamins smk@cpuc.ca.gov | TOM HAMILTON THAMILTON5@CHARTER.NET | JUSTIN C. WYNNE wynne@braunlegal.com |
| SID NEWSOM snewsom@semprautilities.com | TAMLYN M. HUNT thunt@cecmail.org | YVONNE GROSS ygross@sempraglobal.com |
| SHERIDAN J. PAUKER spauker@wsgr.com | TIFFANY RAU tiffany.rau@bp.com | JEANNE ZAIONTZ zaiontj@bp.com |
| SEBASTIEN CSAPO sscb@pge.com | TIM HEMIG tim.hemig@nrgenergy.com | DOWNEY BRAND DOWNEY BRAND Sacramento Municipal 555 CAPITOL MALL, 10TH FLOOR SACRAMENTO, CA 95814- 4686 |
| SARA STECK MYERS ssmyers@att.net | TIMOTHY R. ODIL todil@mckennalong.com | MATTHEW MOST EDISON MISSION MARKETING & TRADING, INC. 160 FEDERAL STREET BOSTON, MA 02110-1776 |
| STEPHEN G. KOERNER, ESQ. steve.koerner@elpaso.com | THOMAS ELGIE Tom.Elgie@powerex.com | THOMAS MCCABE EDISON MISSION ENERGY 18101 VON KARMAN AVE., SUITE 1700 IRVINE, CA 92612 |
| STEVEN SCHILLER steve@schiller.com | R. THOMAS BEACH tomb@crossborderenergy.com | MARY MCDONALD DIRECTOR OF STATE AFFAIRS CALIFORNIA INDEPENDENT SYSTEM OPERATOR CAISO 151 BLUE RAVINE ROAD FOLSOM, CA 95630 |
| STEVE KROMER stevek@kromer.com | THOMAS S. KIMBALL tomk@mid.org | |
| STEVEN HUHMAN steven.huhman@morganstanley.com | THOMAS DILL trdill@westernhubs.com | |
| STEVEN S. SCHLEIMER steven.schlimer@barclayscapita.com | THEODORE ROBERTS troberts@sempra.com | |
| STEVEN KELLY steven@iepa.com | UDI HELMAN UHelman@caiso.com | |
| STEVEN A. LIPMAN steven@lipmanconsulting.com | VERONIQUE BUGNION vb@pointcarbon.com | |
| STEVEN MOSS steven@moss.net | VITALY LEE vitaly.lee@aes.com | |
| Sean A. Simon svn@cpuc.ca.gov | VALERIE J. WINN vjw3@pge.com | |
| SYMONE VONGDEUANE svongdeuane@semprasolutions.com | VIDHYA PRABHAKARAN vprabhakaran@goodinmacbride.com | PUC/X95635.v1 |
| SOUMYA SASTRY svs6@pge.com | VIRGIL WELCH vwelch@environmentaldefense.org | |
| Christine S. Tam tam@cpuc.ca.gov | WILLIAM H. BOOTH wbooth@booth-law.com | |
| THERESA BURKE tburke@sfwater.org | RAYMOND J. CZAHAH, C.P.A. westgas@aol.com | |
| TRENT A. CARLSON tcarlson@reliant.com | WAYNE TOMLINSON william.tomlinson@elpaso.com | |