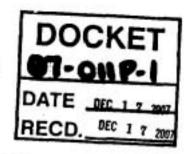
## OF THE STATE OF CALIFORNIA



Order Instituting Rulemaking to Implement the Commission; Procurement Incentive Framework and to Examine the Integration of Greenhouse Gas Emissions Standard into Procurement Policies. Rulemaking 06-04-009 (Filed April 13, 2006)

and

CEC Docket 07-OIIP-01

COMMENTS OF WILD GOOSE STORAGE, LLC ON TYPE AND POINT OF REGULATION ISSUES

> GOODIN, MACBRIDE, SQUERI, DAY & LAMPREY, LLP Jeanne B. Armstrong 505 Sansome Street, Suite 900 San Francisco, CA 94111 Telephone: (415) 392-7900 Facsimile: (415) 398-4321

E-Mail: jarmstrong@goddinmacbride.com

Attorneys for Wild Goose Storage, LLC

Date: December 17, 2007

#### 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 Standard into Procurement Policies. Rulemaking 06-04-009 (Filed April 13, 2006)

and

CEC Docket 07-OIIP-01

# COMMENTS OF WILD GOOSE STORAGE, LLC ON TYPE AND POINT OF REGULATION ISSUES

In accord with the November 28, 2007 Administrative Law Judges' Ruling in the above captioned proceeding ("November 28 Ruling") as modified by the December 10, 2007 Ruling Extending Deadline for Comments, Wild Goose Storage, LLC ("Wild Goose"), hereby submits these comments on issues related to the type and point of regulation of greenhouse gas ("GHG") emissions for the natural gas sector. In lieu of responding to each of the twenty-two questions delineated in the November 28 Ruling, Wild Goose will group its comments around certain subject matters addressed in specific questions.

#### I. PRINCIPLES / OBJECTIVES FOR EVALUATING DESIGN OPTIONS (Questions 3, 11 and 12))

Through question 3, the November 28 Ruling requests that parties comment on a series of potential principles or objectives to be used by the California Public Utilities Commission ("CPUC") and the California Energy Commission ("CEC") to determine the appropriate method for regulating GHG emissions in the natural gas sector. While each of the principles/objectives should be given consideration in determining the ultimate approach for regulation of GHG emissions, Wild Goose submits that with the respect to such regulation of the natural gas sector, the primary objective should be "environmental integrity." To this end, Wild Goose would

emphasize a well known fact – GHG emissions are not a California problem, they are a global problem. Any regulatory program which serves to reduce the amount of natural gas available to the industrial or commercial sector for use in their respective enterprises will result in leakage. If, for example, a manufacturer cannot produce the necessary amount of product to make a profit due to either (1) a cap on the level of natural gas it can burn, or (2) inability to get sufficient gas due to caps being placed on the state's natural gas infrastructure, production of that item or commodity in California will be reduced to the level accommodated by the available gas, and the remaining demand for that item or commodity will be produced elsewhere. The result is a mere transport of the problem from one area to another. Moreover, since California is one of the lowest emitters per capita of GHG, it is likely that global GHG emissions will increase as a result of such a shift (i.e., in replacing production, other jurisdictions will encounter a potentially larger per unit emission total than production in California). In such a situation, having lower concentration of GHG in California will not benefit Californians or anyone else. <sup>1</sup>

In this regard (as posed in questions 11 through 13 of the November 28 Ruling), Wild Goose believes that it is imperative that consideration be given to actions that other jurisdictions are and/or may be taking regarding the regulation of GHG emissions in the natural gas sector. Regional coordination of the types and timing of regulation will help in the control of leakage and thus will serve the ultimate goal of GHG emission reductions.

### II. BASIC DESIGN QUESTIONS: SCOPE OF GHG REGULATION (Questions 4-6)

In considering the scope of GHG regulation for the natural gas sector as articulated in

In the context of natural gas, the impact of leakage is often more than one to one displacement. In other words, if high energy efficiency production using natural gas is curtailed in California and the production is transported to, e.g., Utah, where coal is utilized, every one unit of GHG reduction in California will result in multiple units of GHG creation elsewhere.

Questions 4 through 6 of the November 28 Ruling, the CPUC should keep in mind that natural gas is, in essence, part of the solution to the GHG emissions problem. Natural gas is less carbon intensive than other fuels which can be used as a replacement such as gasoline (gasoline produces 71 Kg CO2 per MMBtu while natural gas produces 53)<sup>2</sup> or fuel oil or diesel. If the determined scope of the GHG regulation of the natural gas sector is such that it limits the availability of natural gas, then the antithetical result will be the encouragement of fuel switching (thereby increasing the level of GHG emissions) or, as discussed above, leakage to other states, or other countries. In either case, intended reduction of GHG emissions may not be achieved and in fact may result in increases of GHG. Accordingly, Wild Goose recommends that natural gas infrastructure (transmission, distribution and storage) should be exempt from any cap which is placed on GHG emissions in the natural gas sector.<sup>3</sup>

Assuring a plentiful supply of natural gas may still result in emission reductions. First, as mentioned above it will preclude switching to more carbon intensive fuels. Moreover, it will ensure the availability of natural gas for switching transportation fuel from gasoline or diesel to compressed natural gas as wells as displacing coal and oil burning with lower GHG natural gas.

If the Commission determines, however, that it is precluded under AB 32 from exempting natural gas infrastructure from GHG regulation, then any such regulation should come in the form of a cap and trade. Programmatic measures will just not work for natural gas transmission and storage providers. They will almost certainly result in reduced natural gas availability and hinder programs to reduce fuel switching from high carbon fuels.

Staff Report: Initial Statement of Reasons for Rulemaking Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (ASSEMBLY BILL 32)

In this vein, Wild Goose submits that it may also be appropriate to extend such exemption to natural gas supply production and processing.

For example, Wild Goose's GHG emissions are associated with the volume of natural gas burned at its storage facilities to operate natural gas compressor sets and the heaters in its natural gas processing unit. Thus, programmatic measures would likely come in the form of dictates on how many hours compressors may be run or what type of equipment can be used. In other words, the measures would need to be at the level of dictating to Wild Goose how to operate its business. While Wild Goose is a public utility subject to the Commission's jurisdiction, it is also a fully at-risk facility; it has no captive ratepayers or guaranteed cost recovery. Programmatic measures which impact operations and thereby decrease the amount of natural gas which Wild Goose can make available will undercut the profitability of Wild Goose's venture. Reducing or hampering the ability of storage providers such as Wild Goose to provide competitive services will ultimately put the natural gas storage sector into a repetitious pattern of raising prices to recover costs of facilities which now, due to imposed programmatic measures, are only able to serve a reduced customer base. The increased price of service drives customers away thus exacerbating the situation and causing the cycle to repeat. The end result of limiting the availability of natural gas in the state (with potential concomitant price increase for such natural gas) will increase (because of negative fuel switching and leakage), not reduce, the level of GHG emissions.

Wild Goose would caution, however, that if a cap and trade form of GHG regulation is imposed on natural gas infrastructure, then the cap cannot be based on historical performance. Rather it must be based on current production (or in the case of a natural gas storage provider such as Wild Goose, volume of service), adjusted annually. Failure to have a forward looking cap will hinder the expansion of independent facilities such as Wild Goose's storage project. The need to purchase credits in the market in order to accommodate enhanced infrastructure will, as a

necessity, increase the cost of providing service. Unlike the incumbent public utilities which can recover the cost of acquiring such credits from the rates charged their captive core customers, i.e., not having to increase the rates for their competitive services, independent storage providers do not have such luxury. The costs of acquiring emission allowance credits will directly factor into the rates which Wild Goose will need to charge its customers, placing it at a distinct competitive disadvantage. The Commission should not set in place a form of regulation which will deter the expansion of natural gas facilities (which as stated above are part of the solution to the problem of GHG emissions) by placing certain of those facilities at a competitive disadvantage.

### III. POINT OF REGULATION (Question 10)

In its October 19, 2007 Report on Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions, the Staff of the Air Resources Board concluded that:

[T]he facilities required to annually report their GHG emissions include electricity generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources that emit over 25,000 metric tonnes per year of CO2 from stationary source combustion. The latter category includes diverse facilities such as food processing, glass container manufacture, oil and gas production, and mineral processing.<sup>4</sup>

For reporting purposes, natural gas infrastructure would fall in the last category listed – industry sources that emit over 25,000 metric tonnes per year of CO2 from stationary source combustion. Accordingly (as posed in question 10 of the November 28 Ruling), if the Air Resources Board chooses to individually regulate emissions from facilities in the natural gas sector, then it should

Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (Assembly Bill 32), California Air Resources Board Staff Report (October 19, 2007) ("CARB Staff October 19 Report"), Executive Summary, at pp. iii-iv.

use the same level of GHG emissions – i.e., 25,000 metric tonnes per year – as the threshold to define the large point sources to regulate. The rational that the ARB used to select 25,000 metric tonnes per year threshold for reporting applies equally to compliance:

Using the list of statewide permitted facilities and their estimated CO2 emissions for 2004, staff applied a potential reporting threshold of 10,000 metric tonnes (MT) of CO2. This threshold would bring in over 300 facilities for mandatory reporting and raise the portion of the point source CO2 inventory estimated from [the California Emission Inventory Development and Reporting System] CEIDARS that would be included in reporting to 96 percent, up from 72 percent with just sector specific reporting. When a 25,000 MT threshold was applied to the list of statewide permitted facilities, approximately half of the 300 facilities under the 10,000 MT threshold fell out, but the remaining facilities still allowed for inclusion of an additional 22 percent (and a total of about 94 percent) of the stationary CO2 inventory estimated from CEIDARS. Staff finds that the doubling of facilities subject to reporting under a 10,000 MT threshold, when only improving the inventory capture by 2 percent compared to a 25,000 MT threshold, is not a worthwhile extension of the reporting burden. <sup>5</sup>

The same should hold true for determining the point of regulation. In determining whether to individually regulate emissions from certain sectors (as queried in Question 10 of the November 28 Ruling), the CPUC (and ultimately the ARB) must keep in mind that it is simply not cost beneficial to extend regulation to capture facilities which emit les than 25,000 metric tonnes of CO2 per year if such would only improve inventory capture by two percent. Indeed, given that the totality of the emissions from natural gas sector end user combustion (including natural gas combustion during the transmission distribution and storage of gas) is only 13.87% of the state's total GHG emissions,<sup>6</sup> the amount of inventory capture to be gained by extending regulation to facilities that produce less than 25,000 metric tones of CO2 per year is approximately 0.28% percent.

Moreover, absent a reporting requirement, there is no means of ensuring compliance with

<sup>5</sup> CARB October 19 Report, p. 53 (emphasis added).

the imposed regulation. If the required level of reporting is for sources emitting over 25,000 metric tonnes of CO2, then the extent of the regulation must be at a comparable level. CPUC staff has determined the appropriateness of ceding the development of reporting protocols for GHG emission from the transportation, distribution and storage of natural gas to the ARB:

Staff proposes to rely on those [ARB] processes to be the primary vehicles for addressing reporting requirements for the natural gas sector. Thus this proceeding would not include a separate track for natural gas reporting and tracking. <sup>7</sup>

If the CPUC has determined that the appropriate level for reporting is for sources emitting over 25,000 tonnes of CO2, then that of necessity should become the threshold it recommends to the ARB for regulation.

### IV. OVERALL RECOMMENDATION (Questions 20-22)

Wild Goose recommends that natural gas infrastructure (transmission, distribution and storage) not be subjected to an enforceable cap for GHG emissions and neither should reductions through programmatic requirements be imposed. As noted in the CPUC Staff July 12 Report, the emission from natural gas combustion during the transmission, distribution and storage of gas account for less than 1/20 of 1 percent of the state's total GHG emissions. Natural gas infrastructure is not the problem that needs to be solved in the state's quest to reduce GHG. To the contrary, as stated above it is part of the solution. Natural gas is one of the least carbon intensive sources of fuel. Restricting the operation of the infrastructure (by placing a cap on its GHG emissions) does not serve to advance the state's goal.

Wild Goose is aware that this recommendation does not comport with that of the CPUC

See Preliminary Staff Recommendation for Treatment of Natural Gas Sector Greenhouse Gas Emissions, R. 06-04-009 (July 12, 2007) ("CPUC Staff July 12 Report") at p. 7

<sup>&</sup>lt;sup>7</sup> CPUC Staff July 12 Report, at p. 17.

<sup>8</sup> CPUC Staff July 12 Report, at p.7.

Staff in its July 12 Report, which concludes that the "the scope of emissions regulation should include both emission from end users and emissions from natural gas infrastructure." Specifically, Staff suggests that:

Infrastructure emissions associated with the transmission, distribution and storage of natural gas for all end uses should be the responsibility of infrastructure providers and should be regulated within the natural gas sector cap. This includes investor owned utilities, publicly owned utilities, independent storage providers and interstate pipelines for their operations in California.<sup>10</sup>

In assessing the Staff's recommendation, the CPUC should bear in mind its ultimate impact on GHG reduction. In brief, the imposition of a cap implies the setting of an initial level followed by a ratcheting down as steps are taken to reduce GHG emissions. The question then becomes how are natural gas infrastructure facilities suppose to reduce emissions. If fugitive emissions are already at or near zero, then the only source of potential reduction is to reduce the fuel burned at the facility — an accomplishment which can only be met by reducing the amount of gas transported and/or stored. The resulting reduction in the availability of natural gas will necessitate that consumers switch to more carbon intensive fuels and result in leakage to other nearby jurisdictions. The amount of GHG emissions eliminated by capping those of natural gas infrastructure facilities will be dwarfed by the increase in emissions due to fuel switching and leakage.

#### V. CONCLUSION

Wild Goose appreciates this opportunity to offer these comments on issues related to the type and point of regulation of GHG emissions for the natural gas sector. Wild Goose would simply

<sup>9</sup> CPUC Staff July 12 Report, at p.15.

<sup>10</sup> CPUC Staff July 12 Report, at p. 16.

There is also the possibility of converting the facilities pumping units to electric motors, but the carbon required to produce the electricity is greater than the carbon burned in the gas burning engines.

request that the CPUC, in formulating its proposed recommendation to the Air ResourcesBoard on such issues factor into its deliberations the beneficial impact of natural gas use on the overall level of GHG, as discussed above.

Respectfully submitted,

GOODIN, MACBRIDE, SQUERI, DAY & LAMPREY, LLP Jeanne B. Armstrong 505 Sansome Street, Suite 900 San Francisco, CA 94111 Telephone: (415) 392-7900 Facsimile: (415) 398-4321

E-mail: jarmstrong@goodinmacbride.com

By /s/Jeanne B. Armstrong
Jeanne B. Armstrong

Attorneys for Wild Goose Storage, LLC

December 17, 2007

3278/005/X94998.v1

#### **CERTIFICATE OF SERVICE**

I, Melinda LaJaunie, certify that I have on this 17<sup>th</sup> day of December 2007 caused a copy of the foregoing

#### COMMENTS OF WILD GOOSE STORAGE, LLC ON TYPE AND POINT OF REGULATION 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 17<sup>th</sup> day of December 2007 at San Francisco, California.

/s/ Melinda LaJaunie
Melinda LaJaunie

3278/005/X95248.v1

#### Service List – R.06-04-009 (Updated December 13, 2007)

ANDREW BROWN abb@eslawfirm.com	ALVIN PAK apak@sempraglobal.com	BOB LUCAS Bob.lucas@calobby.com	CHARLIE BLAIR charlie.blair@delta-ee.com
ASHLEE M. BONDS abonds@thelen.com	ARNO HARRIS amo@recurrentenergy.com	BRIAN POTTS bpotts@foley.com	CHRISTOPHER A. HILEN chilen@sppc.com
AUDREY CHANG schang@nrdc.org	ALLEN K. TRIAL atrial@sempra.com	BALWANT S. PUREWAL bpurewal@water.ca.gov	CHRISTOPHER J. WARNER cjw5@pge.com
ADAM BRIONES adamb@greenlining.org	ANN L. TROWBRIDGE atrowbridge@daycartermurphy.co m	BARRY RABE brabe@umich.edu	CYNTHIA MITCHELL ckmitchell1@sbcglobal.net
Anne Gillette aeg@cpuc.ca.gov	AUDRA HARTMANN Audra, Hartmann@Dynegy.com	BARBARA R. BARKOVICH brbarkovich@earthlink.net	CATHERINE M. KRUPKA ckrupka@mwe.com
Andrew Campbell agc@cpuc.ca.gov	ANDREA WELLER aweller@sel.com	BIANCA BOWMAN BRBc@pge.com	CLARENCE BINNINGER clarence.binninger@doj.ca.gov
ANN G. GRIMALDI agrimaldi@mckennalong.com	ELIZABETH BAKER bbaker@summitblue.com	BRENDA LEMAY brenda.lemay@horizonwind.com	CLARK BERNIER clark.bernier@rlw.com
AIMEE BARNES aimee.barnes@ecosecurities.com	BUD BEEBE bbeebe@smud.org	DALLAS BURTRAW burtraw@rff.org	CLYDE MURLEY clyde.murley@comcast.net
ADAM J. KATZ ajkatz@mwe.com	B. B. BLEVINS bblevins@energy.state.ca.us	JOSHUA BUSHINSKY bushinskyj@pewclimate.org	CAROLYN M. KEHREIN cmkehrein@ems-ca.com
AKBAR JAZAYEIRI akbar jazayeri@sce.com	BRIAN T. CRAGG bcragg@goodinmacbride.com	BARRY R. WALLERSTEIN bwallerstein@aqmd.gov	COLIN PETHERAM colin.petheram@att.com
ALEXIA C. KELLY akelly@climatetrust.org	BALDASSARO DI CAPO bdicapo@caiso.com	CHRIS MARNAY C_Marnay@lbl.gov	Eugene Cadenasso cpe@cpuc.ca,gov
ALAN COMNES alan.comnes@nrgenergy.com	RYAN BERNARDO bernardo@braunlegal.com	CINDY ADAMS cadams@covantaenergy.com	CARL PECHMAN cpechman@powereconomics.com
ALDYN HOEKSTRA aldyn.hoekstra@paceglobal.com	BETH VAUGHAN beth@beth411.com	CATHIE ALLEN californiadockets@pacificorp.com	CATHY S. WOOLLUMS cswoollums@midamerican.com
ANDREW L. HARRIS alho@pge.com	BETTY SETO	CARLA PETERMAN carla.peterman@gmail.com	CURT BARRY curt.barry@iwpnews.com
AMBER MAHONE amber@ethree.com	Betty.Seto@kema.com WILLIAM H. CHEN	IAN CARTER carter@icta.org	CURTIS L. KEBLER curtis.kebler@gs.com
ANDREW BRADFORD andrew.bradford@constellation.co	bill.chen@constellation.com  BILL SCHRAND	CASE ADMINISTRATION case.admin@sce.com	CYNTHIA A. FONNER Cynthia. A.Fonner@constellation.c
m ANDREW MCALLISTER	bill.schrand@swgas.com  BRUNO JEIDER	CATHY A. KARLSTAD cathy,karlstad@sce.com	om CYNTHIA SCHULTZ
andrew.mcallister@energycenter.or g	bjeider@ci.burbank.ca.us  BARRY LOVELL	CARMEN E. BASKETTE cbaskette@enernoc.com	cynthia.schultz@pacificorp.com  DANIEL A. KING
ANDREW J. VAN HORN andy.vanhorn@vhcenergy.com	bjl@bry.com BRIAN M. JONES	CLARE BREIDENICH cbreidenich@yahoo.com	daking@sempra.com  DAN ADLER
ANITA HART anita.hart@swgas.com	bjones@mjbradley.com BRIAN K. CHERRY	CLIFF CHEN	Dan.adler@calcef.org
ANNABELLE MALINS annabelle.malins@fco.gov.uk	bkc7@pge.com	cchen@ucsusa.org  CALIFORNIA ENERGY	DAN SKOPEC danskopec@gmail.com
ANNE-MARIE MADISON Anne-	Beth Moore blm@cpuc.ca.gov	MARKETS cem@newsdata.com	DAN SILVERIA dansvec@hdo.net
Marie_Madison@TransAlta.com  ANNETTE GILLIAM	BARRY F. MCCARTHY bmcc@mccarthylaw.com	Cathleen A. Fogel cfl@cpuc.ca.gov	DAVID L. MODISETTE dave@ppallc.com DAVID ZONANA
annette.gilliam@sce.com	BRIAN MCQUOWN bmcquown@reliant.com	Charlotte TerKeurst cft@cpuc.ca.gov	david.zonana@doj.ca.gov

		,	
DAVID BRANCHCOMB david@branchcomb.com	DEVRA WANG dwang@nrdc.org	F. Jackson Stoddard fjs@cpuc.ca.gov	Harvey Y. Morris hym@cpuc.ca.gov
DAVID NEMTZOW david@nemtzow.com	DON WOOD dwood8@cox.net	FRANK STERN fstern@summitblue.com	SUE KATELEY info@calseis.org
DAVID REYNOLDS davidreynolds@ncpa.com	DONALD SCHOENBECK dws@r-c-s-inc.com	WES MONIER fwmonier@tid.org	JACK BURKE jack.burke@energycenter.org
DOUGLAS BROOKS dbrooks@nevp.com	ED CHIANG echiang@elementmarkets.com	GARY BARCH gbarch@knowledgeinenergy.com	JAIRAM GOPAL Jairam.gopal@sce.com
DONALD BROOKHYSER deb@a-klaw.com	Ed Moldavsky edm@cpuc.ca.gov	GREG BLUE	JAMES W. KEATING james.keating@bp.com
DEBORAH SLON	ELIZABETH WESTBY	gblue@enxco.com GEORGE HOPLEY	JANILL RICHARDS
deborah.slon@doj.ca.gov  DENNIS M.P. EHLING	egw@s-klaw.com  ELIZABETH W. HADLEY	george.hopley@barcap.com GARY HINNERS	janill.richards@doj.ca.gov  JEANNE B. ARMSTRONG
dehling@klng.com  DEREK MARKOLF	ehadley@reupower.com  E.J. WRIGHT	ghinners@reliant.com GLORIA BRITTON	jarmstrong@goodinmacbride.com  JASON DUBCHAK
derek@climateregistry.org	ej_wright@oxy.com	GloriaB@anzaelectric.org	jason.dubchak@niskags.com
DAN HECHT dhecht@sempratrading.com	EVELYN KAHL ek@a-klaw.com	GREGGORY L. WHEATLAND glw@eslawfirm.com	Jamie Fordyce jbf@cpuc.ca.gov
DAVID L. HUARD dhuard@manatt.com	ELSTON K. GRUBAUGH ekgrubaugh@iid.com	GREGG MORRIS gmorris@emf.net	JOHN B. WELDON, JR. jbw@slwplc.com
DIANE I. FELLMAN Diane_Fellman@fpl.com	Elizabeth Stoltzfus eks@cpuc.ca.gov	GORDON PICKERING gpickering@navigantconsulting.co	JENNIFER CHAMBERLIN jchamberlin@strategicenergy.com
WILLIAM F. DIETRICH dietrichlaw2@earthlink.net	ED LUCHA ELL5@pge.com	m GREGORY KOISER	Judith Ikle jci@cpuc.ca.gov
Diana L. Lee dil@cpuc.ca.gov	EDWARD VINE elvine@lbl.gov	gregory.koiser@constellation.com GRANT ROSENBLUM, ESQ.	JONATHAN FORRESTER JDF1@PGE.COM
DOUGLAS K. KERNER dkk@eslawfirm.com	MAHLON ALDRIDGE emahlon@ecoact.org	grosenblum@caiso.com  GLORIA D. SMITH	JEFFERY D. HARRIS jdh@eslawfirm.com
Don Schultz dks@cpuc.ca.gov	ELENA MELLO emello@sppc.com	gsmith@adamsbroadwell.com  GRACE LIVINGSTON-NUNLEY	JEFFREY DOLL idoll@arb.ca.gov
DOUGLAS MACMULLLEN dmacmull@water.ca.gov	EDWARD G POOLE epoole@adplaw.com	gxl2@pge.com HARVEY EDER	JEANNE M. SOLE jeanne.sole@sfgov.org
DARYL METZ		harveyederpspc.org@hotmail.com	JEFFREY P. GRAY
dmetz@energy.state.ca.us DESPINA NIEHAUS	CALIFORNIA ISO e-recipient@caiso.com	HAYLEY GOODSON hayley@turn.org	jeffgray@dwt.com JEN MCGRAW
dniehaus@semprautilities.com  DANIEL W. DOUGLASS	EDWARD J. TIEDEMANN etiedemann@kmtg.com	HOLLY B. CRONIN hcronin@water.ca.gov	jen@cnt.org JENINE SCHENK
douglass@energyattorney.com  DANIELLE MATTHEWS	ELLEN WOLFE ewolfe@resero.com	HOWARD V. GOLUB hgolub@nixonpeabody.com	jenine.schenk@apses.com
SEPERAS dseperas@calpine.com	ELIZABETH ZELLJADT ez@pointcarbon.com	J. ANDREW HOERNER hoemer@redefiningprogress.org	JENNIFER PORTER jennifer.porter@energycenter.org
Donald R. Smith dsh@cpuc.ca.gov	FARROKH ALBUYEH farrokh.albuyeh@oati.net	Henry Stern hs1@cpuc.ca.gov	GERALD L. LAHR JerryL@abag.ca.gov
DARRELL SOYARS dsoyars@sppc.com	FIJI GEORGE fiji.george@elpaso.com	CAROL J. HURLOCK hurlock@water.ca.gov	JESUS ARREDONDO jesus.arredondo@nrgenergy.com
DEAN R. TIBBS dtibbs@aes4u.com	KAREN TERRANOVA filings@a-klaw.com	HUGH YAO HYao@SempraUtilities.com	Julie A. Fitch jf2@cpuc.ca.gov
	THE PART OF THE PA		

JULIE GILL jgill@caiso.com	JAMES D. SQUERI jsqueri@gmssr.com	KASSANDRA GOUGH kgough@calpine.com	LYNELLE LUND llund@commerceenergy.com
JOSEPH GRECO jgreco@caithnessenergy.com	Jeorge S. Tagnipes jst@cpuc.ca.gov	KRISTIN GRENFELL kgrenfell@nrdc.org	LYNN HAUG lmh@eslawfirm.com
JEFFREY L. HAHN jhahn@covantaenergy.com	Joel T. Perlstein jtp@cpuc.ca.gov	KAREN GRIFFIN kgriffin@energy.state.ca.us	LORRAINE PASKETT Lorraine.Paskett@ladwp.com
JAMES ROSS jimross@r-c-s-inc.com	JULIE L. MARTIN julie.martin@bp.com	KENNETH C. JOHNSON kjinnovation@earthlink.net	LAURIE PARK lpark@navigantconsulting.com
JJ PRUCNAL jj.prucnal@swgas.com	JOSEPH F. WIEDMAN jwiedman@goodinmacbride.com	KEVIN J. SIMONSEN kjsimonsen@ems-ca.com	LEONARD DEVANNA lrdevanna- rf@cleanenergysystems.com
JOHN JENSEN jjensen@kirkwood.com	JAMES W. TARNAGHAN jwmctarnaghan@duanemorris.com	KHURSHID KHOJA kkhoja@thelenreid.com	Lainie Motamedi
Jason R. Salmi Klotz	JASMIN ANSAR	GREGORY KLATT	Goparisango
jk1@cpuc.ca.gov	jxa2@pge.com	klatt@energyattorney.com	STEVE RAHON lschavrien@semprautilities.com
JOSEPH M. KARP	KAREN LINDH	KAREN NORENE MILLS	-
jkarp@winston.com	karen@klindh.com	kmills@cfbf.com	LAURIE TEN HOPE ltenhope@energy.state.ca.us
JOSEPH R. KLOBERDANZ	KARLA DAILEY	KIM KIENER	I T
jkloberdanz@semprautilities.com	karla.dailey@cityofpaloalto.org	kmkiener@fox.net	Lana Tran ltt@cpuc.ca.gov
JOHN LAUN	KATHRYN WIG	AVIS KOWALEWSKI	Geparise.ge
jlaun@apogee.net	Kathryn.Wig@nrgenergy.com	kowalewskia@calpine.com	MARCEL HAWIGER marcel@turn.org
JOHN W. LESLIE	KAREN BOWEN	Kristin Ralff Douglas	
jleslie@luce.com	kbowen@winston.com	krd@cpuc.ca.gov	MARCIE MILNER marcie.milner@shell.com
JANE E. LUCKHARDT	KENNETH A. COLBURN	KYLE L. DAVIS	A A B A A A B A C A B A C A C A C A C A
jluckhardt@downeybrand.com	kcolburn@symbioticstrategies.com	kyle.i.davis@pacificorp.com	MARY LYNCH mary.lynch@constellation.com
Jaclyn Marks	KIRBY DUSEL	KYLE SILON	mary.ryncingconscination.com
jm3@cpuc.ca.gov	kdusel@navigantconsulting.com	kyle.silon@ecosecurities.com	BRUCE MCLAUGHLIN mclaughlin@braunlegal.com
Jacqueline Greig	KEVIN WOODRUFF	KYLE D. BOUDREAUX	
jnm@cpuc.ca.gov	kdw@woodruff-expert- services.com	kyle_boudreaux@fpl.com	MARC D. JOSEPH mdjoseph@adamsbroadwell.com
JODY S. LONDON jody_london_consulting@earthlink	VEITH D MCCDEA	LARS KVALE lars@resource-solutions.org	MICHEL FLORIO
.net	keith.mccrea@sablaw.com	· ·	mflorio@turn.org
IOCERU BALII	WELL TE OLIMPIT	LAURA I. GENAO	MICHELLE GARCIA
JOSEPH PAUL Joe.paul@dynegy.com	KELLIE SMITH kellie.smith@sen.ca.gov	Laura.Genao@sce.com	mgarcia@arb.ca.gov
JOHN P. HUGHES	KELLY BARR	LISA A. COTTLE lcottle@winston.com	MELANIE GILLETTE
john.hughes@sce.com	kelly.barr@srpnet.com	icocic@#msor.com	mgillette@enernoc.com
		LISA DECARLO	•
JOHN R. REDDING johnrredding@earthlink.net	BILL LOCKYER ken.alex@doj.ca.gov	ldecarlo@energy.state.ca.us	MICHAEL A. HYAMS mhyams@sfwater.org
* a * a * a	WEST AT EST	LEILANI JOHNSON KOWAL	MERCHANONE
Jonathan Lakritz jol@cpuc.ca.gov	KEN ALEX ken_alex@doj.ca.gov	leilani.johnson@ladwp.com	MIKE LAMOND Mike@alpinenaturalgas.com
JOSEPH HENRI	KENNY SWAIN	DONALD C. LIDDELL, P.C. liddell@energyattorney.com	Matthew Deal
josephhenri@hotmail.com	kenneth.swain@navigantconsulting	LISA SCHWARTZ	mjd@cpuc.ca.gov
JOY A. WARREN	.com	lisa.c.schwartz@state.or.us	MARTIN A. MATTES
joyw@mid.org	KERRY HATTEVIK		mmattes@nossaman.com
	kerry.hattevik@mirant.com	LISA WEINZIMER	
JUDITH B. SANDERS		lisa_weinzimer@platts.com	MICHAEL MAZUR
jsanders@caiso.com	KEVIN BOUDREAUX	LADYORENIA	mmazur@3phasesRenewables.com
TANDRET COANCADELL	kevin.boudreaux@calpine.com	LAD LORENZ	MONICA A SCHUEBS ESO
JANINE L. SCANCARELLI jscancarelli@flk.com	KEVIN FOX	llorenz@semprautilities.com	MONICA A. SCHWEBS, ESQ. monica.schwebs@bingham.com
J	kfox@wsgr.com		
	J		

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 philm@scdenergy.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 abeatty@cwclaw.com
Nancy Ryan ner@cpuc.ca.gov	PAUL DELANEY pssed@adelphia.net	Rahmon Momoh rmm@cpuc.ca.gov	C. SUSIE BERLIN sberlin@mccarthylaw.com
NORA SHERIFF	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 Weilner 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 rreinhard@mofo.com	SHAUN ELLIS sellis@fypower.org
OBADIAH BARTHOLOMY obartho@smud.org	RANDY S. HOWARD randy.howard@ladwp.com	ROBERT R. TAYLOR rtaylor@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@bartlewells.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
PAM BURMICH pburmich@arb.ca.gov	RICHARD HELGESON rhelgeson@scppa.org	REID A. WINTHROP rwinthrop@pilotpowergroup.com	SEEMA SRINIVASAN sls@a-klaw.com
PIERRE H. DUVAIR pduvair@energy.state.ca.us	RAYMOND HUNG RHHJ@pge.com	RYAN FLYNN ryan.flynn@pacificorp.com	STEVEN S. MICHEL smichel@westernresources.org
JAN PEPPER pepper@cleanpowermarkets.com	RYAN WISER rhwiser@lbl.gov	STEPHANIE LA SHAWN S1L7@pge.com	SAMARA MINDEL smindel@knowledgeinenergy.com
PETER W. HANSCHEN phanschen@mofo.com	RICHARD SMITH richards@mid.org	SAEED FARROKHPAY saeed.farrokhpay@ferc.gov	Sara M. Kamins smk@cpuc.ca.gov

SID NEWSOM snewsom@semprautilities.com

SHERIDAN J. PAUKER spauker@wsgr.com

SEBASTIEN CSAPO sscb@pge.com

SARA STECK MYERS ssmyers@att.net

STEPHEN G. KOERNER, ESQ. steve.koerner@elpaso.com

STEVEN SCHILLER steve@schiller.com

STEVE KROMER stevek@kromer.com

STEVEN HUHMAN steven.huhman@morganstanley.co trdill@westernhubs.com

STEVEN S. SCHLEIMER steven.schleimer@barclayscapital.c

STEVEN KELLY steven@iepa.com

STEVEN A. LIPMAN steven@lipmanconsulting.com

STEVEN MOSS steven@moss.net

Sean A. Simon svn@cpuc.ca.gov

SYMONE VONGDEUANE svongdeuane@semprasolutions.co

SOUMYA SASTRY svs6@pge.com

Christine S. Tam

tam@cpuc.ca.gov

THERESA BURKE tburke@sfwater.org

TRENT A. CARLSON tcarlson@reliant.com

Theresa Cho tcx@cpuc.ca.gov

THOMAS DARTON tdarton@pilotpowergroup.com

TREVOR DILLARD tdillard@sierrapacific.com

TOM HAMILTON THAMILTONS@CHARTER.NET

TAMLYN M. HUNT thunt@cecmail.org

TIFFANY RAU tiffany.rau@bp.com

TIM HEMIG tim.hemig@nrgenergy.com

TIMOTHY R. ODIL todil@mckennalong.com

THOMAS ELGIE Tom.Elgie@powerex.com

R. THOMAS BEACH tomb@crossborderenergy.com

THOMAS S. KIMBALL tomk@mid.org

THOMAS DILL

THEODORE ROBERTS troberts@sempra.com

UDI HELMAN UHelman@caiso.com

VERONIQUE BUGNION vb@pointcarbon.com

VITALY LEE vitaly.lee@aes.com

VALERIE J. WINN vjw3@pge.com

VIDHYA PRABHAKARAN vprabhakaran@goodinmacbride.co

VIRGIL WELCH vwelch@environmentaldefense.org

WILLIAM H. BOOTH wbooth@booth-law.com

RAYMOND J. CZAHAR, C.P.A. westgas@aol.com

WAYNE TOMLINSON william.tomlinson@elpaso.com

Wade McCartney wsm@cpuc.ca.gov

WEBSTER TASAT wtasat@arb.ca.gov

WILLIAM W. WESTERFIELD,

111

www@eslawfirm.com

JUSTIN C. WYNNE wynne@braunlegal.com

YVONNE GROSS ygross@sempraglobal.com JEANNE ZAIONTZ zaiontj@bp.com

DOWNEY BRAND DOWNEY BRAND Sacramento Municipal 555 CAPITOL MALL, 10TH FLOOR **SACRAMENTO, CA 95814-4686** 

MATTHEW MOST

EDISON MISSION MARKETING & TRADING, INC. 160 FEDERAL STREET BOSTON, MA 02110-1776

THOMAS MCCABE EDISON MISSION ENERGY 18101 VON KARMAN AVE., **SUITE 1700 IRVINE, CA 92612** 

KAREN EDSON 151 BLUE RAVINE ROAD FOLSOM, CA 95630

MARY MCDONALD **DIRECTOR OF STATE AFFAIRS** CALIFORNIA INDEPENDENT SYSTEM OPERATOR CAISO 151 BLUE RAVINE ROAD FOLSOM, CA 95630

PUC/X95250.v1