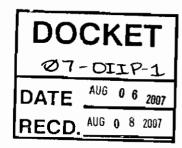
## BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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

R.06-04-009 (Filed April 13, 2006)



COMMENTS OF CALPINE CORPORATION ON
THE MARKET ADVISORY COMMITTEE RECOMMENDATION FOR
DESIGNING A GREENHOUSE GAS CAP-AND-TRADE SYSTEM FOR CALIFORNIA

Avis Kowalewski Director, Western Regulatory Affairs CALPINE CORPORATION 3875 Hopyard Road, Suite 345 Pleasanton, CA 94588

Tel. (925) 479-6640 Fax. (925) 479-7303

Email: kowalewskia@calpine.com

Jeffrey P. Gray DAVIS WRIGHT TREMAINE LLP 505 Montgomery Street, Suite 800 San Francisco, CA 94111 Tel. (415) 276-6500

Fax. (415) 276-6599 Email: jeffgray@dwt.com

Attorneys for Calpine Corporation

Dated: August 6, 2007

## 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	)	R.06-04-009
Emission Standards into Procurement Policies.	)	(Filed April 13, 2006)
	)	
	)	

# COMMENTS OF CALPINE CORPORATION ON THE MARKET ADVISORY COMMITTEE RECOMMENDATION FOR DESIGNING A GREENHOUSE GAS CAP-AND-TRADE SYSTEM FOR CALIFORNIA

Pursuant to the July 19, 2007 ruling of Administrative Law Judges TerkKeurst and Lakritz ("ALJ Ruling"), Calpine Corporation ("Calpine") submits these comments on the Market Advisory Committee ("MAC") recommendation of a "first seller approach" for designing a greenhouse gas ("GHG") cap-and-trade system for California (the "MAC Report"). The MAC's objective is to design a cap-and-trade program that will result in cost effective GHG emissions reductions consistent with the goals of Assembly Bill ("AB") 32. The first seller approach represents an alternative to the load-based approach jointly being studied by the California Public Utilities Commission ("CPUC") and the California Energy Commission ("CEC") for regulating GHG emissions in the electricity sector.

#### I. INTRODUCTION

As Calpine has discussed in previous comments filed in this proceeding, it strongly supports the GHG emission reduction goals established in AB 32 and the efforts of the CPUC, CEC, MAC, and the Air Resources Board ("ARB") to design and implement a fair, workable, market-based approach to meet these goals. Calpine believes both the first seller and load-based approaches have inherent strengths and weaknesses. Whether one approach or the other is

ultimately successful in reducing GHG emissions, however, will depend, in large part, on implementation details yet to be formulated and adopted.

Given current unknowns, Calpine's comments do not take a position as to which approach is superior or should be adopted; but rather, generally address the issue areas identified in the ALJ Ruling.<sup>1</sup> In addressing these issue areas, Calpine focuses on a few "core concepts" that it believes are critical components to a successful cap-and-trade program and should inform the decision making process in general, and consideration of the specific issues raised in the ALJ Ruling in particular. These core concepts include:

- Clear and enforceable emissions caps where emissions are fully verifiable;
- Strong reporting, tracking, and verification mechanisms that will minimize the need for emission proxies;
- An approach to distributing emissions allowances (whether by allocation or auction) that minimizes significant adverse economic impacts and "links" allowances to the entities responsible for GHG emissions compliance; and
- A liquid, transparent and administratively efficient market for emissions allowances that recognizes and rewards early actors and technical innovation.

While these core concepts do not represent a definitive and complete list of components necessary to develop a successful cap-and-trade program, Calpine believes they are integral to achieving the emissions reduction goals set out in AB 32.

#### II. DISCUSSION

### A. Basic Definitions (Questions 1-8)<sup>2</sup>

The description of the first seller approach used in the ALJ Ruling appears to be consistent with the definition used in the MAC Report. Specifically, for in-state resources, the

<sup>&</sup>lt;sup>1</sup> Calpine generally supports the comments being filed by the Western Power Trading Forum ("WPTF"). WPTF provides responses to specific questions contained in the ALJ Ruling.

<sup>&</sup>lt;sup>2</sup> Section headings (including numbering) correspond to section headings in the ALJ Ruling. Calpine has not included section headings for issues in which it is not providing comments.

first seller is the generator in all cases and, for imports, the first seller is the entity that first delivers electricity at a point of delivery within California – in other words, the Purchasing/Selling Entity ("PSE") listed on the NERC E-tag at the first California point of delivery. With respect to imports, this PSE could be the generator, a marketer, or some other entity, such as a retail provider that has taken title to the power out-of-state.

In cases where the PSE is not the actual generator, or the source of the power is not known (*i.e.*, an "unspecified" source), it may be necessary to assign a "proxy" emission level under both the first seller and load-based approaches, notwithstanding the use of E-tags. This would be the case because, in some instances, E-tags only track back to a control area and not the specific generating source, making it nearly impossible to determine actual emission levels for use in determining compliance with an AB 32 cap-and-trade system. In addition, under a load-based approach, greater use of proxies may also be needed for certain in-state power deliveries because, unlike the first seller approach, the point of regulation under a load-based system is not at the generator.

As discussed in more detail below, the widespread use of emission proxies can undermine efforts to achieve long-term emissions reductions. Thus, accurate emissions tracking will be critical to the success of either a first seller or load-based approach. Accordingly, Calpine supports the adoption of strong and accurate reporting and tracking protocols, as well as policies that minimize the use of emission proxies.

#### B. General Policy Issues (Questions 9-16)

Leakage and contract shuffling are a concern under both the first seller and load-based approaches. With respect to leakage, under either approach, the use of emission proxies (or default emission rates) for any out-of-state power provides an opportunity for entities to shift from lower emitting in-state sources to higher emitting out-of-state sources, potentially resulting

in increased emissions associated with California energy use. One possible way to discourage such leakage would be to adopt high emission proxy rates for unspecified sources. Adopting high proxy rates should encourage lower emitting sources to identify and report emissions associated with energy production and help prevent higher emitting sources from gaming the system by marketing their power as "unspecified." Under this approach, actual emission levels can be more accurately tracked and reported for AB 32 compliance purposes.

Contract shuffling is also a problem under either approach. Contract shuffling refers to a situation where an entity "shuffles" contract commitments so that higher emitting resources are used to serve load outside California and cleaner resources are used to serve demand in California. "Shuffling" contracts may provide a way for regulated entities to be "technically" in compliance with California's cap-and-trade program notwithstanding that there would be no "net" reduction in emissions.

In addition, unlike leakage, contract shuffling could become more pervasive as policies result in an increased use of specified sources. Specifically, to maximize the value of their portfolios, power importers will have an incentive to specify low-emitting sources of power for import into California (in order to meet cap-and-trade obligations) and market higher-emitting power in other states. This would be the case because, under a single-state cap-and-trade program, there is no effective way to dictate or regulate the dispatch of out-of-state generation. As a result, contract shuffling can occur whenever power is imported into California and the potential for it will likely exist under any California only approach to emissions reductions.

Irrespective of the approach (first seller or load-based), leakage and contract shuffling are problems inherent in single-state cap-and-trade programs. Both of these problems, however, can be effectively addressed through robust regional or national programs that include strong reporting and tracking requirements.

#### E. Reporting, Tracking, and Verification (Questions 26-31)

Irrespective of whether a first seller or load-based approach is adopted, strong reporting, tracking, and verification mechanisms will be necessary if mandated GHG emissions reduction is to be achieved. AB 32 requires ARB to develop reporting protocols that will "[a]count for greenhouse gas emissions from all electricity consumed in the state." At a minimum, accurate accounting of emissions requires source identification and tracking. Absent initial identification of the source providing power, it will be nearly impossible to determine and verify associated emissions for AB 32 compliance purposes. Given the role played by marketers, title to power can often change hands multiple times before entering the State (which is relevant under a first seller approach) or reaching end-use customers (which is relevant under a load-based approach). Thus, once a source is specified, it is equally important that the power be carefully tracked as new entities acquire title, or it moves across the grid.

Requiring that all sources of electricity be specified would be the most effective and accurate way to account for emissions. Nevertheless, there will likely be a continued need for some unspecified resources to ensure reliability under California's current market structure. As a result, some type of emission proxy will need to be developed.

By their nature, emission proxies are problematic in the context of cap-and-trade programs because they do not directly link a source with its assigned emissions. As a result, if a proxy is lower than the actual emissions of the source to which the proxy is applied, accounting protocols will necessarily understate actual emissions. Moreover, under such circumstances, higher emitting sources will have an incentive to market themselves as unspecified resources to take advantage of the lower emissions proxy level. The net effect is that *actual* emissions may

<sup>&</sup>lt;sup>3</sup> Cal. Health and Safety Code §38530(b)(2).

be higher than reported emissions, notwithstanding that all responsible entities are in compliance with their respective obligations under an AB 32 cap-and-trade program.

To better ensure the goals of AB 32 are met, Calpine supports the adoption of strong reporting, tracking, and verification mechanisms that minimize the need for emissions proxies.

Calpine firmly believes that such mechanisms will be critical to the success of either a first seller or load-based cap-and-trade program.

#### F. GHG Emissions Allowance Allocation Issues (Questions 32-34)

Emissions allowances could be auctioned or directly allocated under either the first seller approach or the load-based approach. If adopted, an auction approach should contemplate a phase-in period that would include the direct allocation of allowances to some sources in order to mitigate potential adverse economic impacts associated with increased capital costs necessary to comply with emission reduction requirements and/or energy contracts that do not contemplate emission reduction costs. Under this approach, allocations should be based on electricity output - that is, based on energy produced or sold - and updated on a regular basis to account for changes in production and contracting. Basing allocations on electricity sales will make it possible to directly allocate allowances to any entity, whether a physical generating source or a marketer selling under energy contracts. In addition, regularly updating allocations should result in the better matching of allowances with allowance requirements, and will create incentives for efficient, lower emitting resources to operate more which will, in turn, reduce overall GHG emissions. This approach to allocation (energy output with regular updating) should also reduce the risk of windfall profits by reducing the chances of over allocation of allowances.

Calpine does not support any allocation scheme that would be limited only to retail providers and require other first sellers to acquire allowances via auction. To the extent allowances are allocated, retail providers should not be treated differently than other entities

subject to the cap-and-trade program. Specifically, allowances should be allocated to all entities who are regulated under the program, whether a generator, marketer, or retail provider.

Allocating allowances in this way provides an incentive for those subject to the cap-and-trade program to reduce emissions.

Furthermore, under the first seller approach, retail providers would be subject to the cap and trade program for only a small fraction of sales, if at all.<sup>4</sup> If these entities are over allocated allowances, they could control a large portion of the allowance market with little incentive to make those allowances available to the market. Giving a retail provider more allowances than which it would otherwise qualify for as the first seller could reduce liquidity in the allowance market and, thus, reduce the ability of the market to find the most cost effective means for achieving the state's emission reduction goals. Liquidity and transparency are critical to an efficient market, and allocating allowances only to retail providers under a first seller approach is counter to that goal.

In addition, since some retail providers also own generation, allocating allowances to them and not other entities subject to the cap-and-trade program raises serious competitive concerns. Under both the first seller and load-based approaches, retail providers will potentially be subject to AB 32 compliance requirements at some level. However, given that they compete in the market with other generators and marketers, it would be patently unfair to allow retail providers to manage the auction or allocation process. Liquidity and transferability should be a fundamental principle of the market. Giving allowances to the retail providers for future allocation to other entities, subject to the cap-and-trade program, may jeopardize this principle.

<sup>&</sup>lt;sup>4</sup> This would be the case because retail providers generally contract for a significant portion of the energy needed to serve their loads.

# H. Relationship to a Multi-State System Such as the Western Regional Climate Action Initiative (Questions 36-39)

Whether there is a risk of double counting the emissions from imported power is dependent on the specific type of cap-and-trade programs involved. For example, should California adopt the first seller approach, the point of regulation for all in-state sources will be the generator. However, if the generator exports power to a state that also employs a first seller or load-based cap-and-trade program, then there is the potential for the emissions associated with the imported power to be double counted – once in California and, then again, when the power is first sold in the other state (if the state employs a first seller approach) or when acquired by a retail provider to serve load (if a load-based approach is used). Given the risks of double counting emissions, it is critical that the most accurate reporting and tracking mechanisms be employed. Accurately reporting and tracking emissions should help identify power that has already been "counted" for compliance purposes in one state so that other states could exempt such power from cap-and-trade compliance requirements.

#### I. Interaction with Potential Federal Regulation (Questions 40-42)

Whether a first seller or load-based approach can be easily "scaled or linked" to a regional or national GHG emissions program will depend, in large part, on the type of regional or national program being contemplated. For instance, the first seller approach functions similar to a source-based program, particularly with respect to in-state sources (*i.e.*, the point of regulation is at the generator/source). Thus, it is reasonable to assume that the first seller approach would be more easily linked than a load-based program to regional or national source-based systems. By the same token, a load-based program should be more easily linked to any regional or national load-based system.

#### III. CONCLUSION

Calpine supports the efforts of the CPUC, CEC, MAC, and ARB to design and implement a fair, workable, and market-based cap-and-trade program that will result in cost effective GHG emissions reductions consistent with the goals of AB 32. To accomplish this goal, it will be critical that strong reporting, tracking, and verification mechanisms be adopted that will minimize the need for emission proxies; emissions allowances be distributed in a way that minimizes adverse economic impacts and links allowances to entities subject to emissions compliance obligations; and a liquid, transparent, and administratively efficient emissions allowance market be established.

Respectfully submitted,

Avis Kowalewski Director, Western Regulatory Affairs CALPINE CORPORATION 3875 Hopyard Road, Suite 345 Pleasanton, CA 94588

Tel. (925) 479-6640

Fax. (925) 479-7303

Email: kowalewskia@calpine.com

Dated: August 6, 2007

/s/ Jeffrey P. Gray

Jeffrey P. Gray
DAVIS WRIGHT TREMAINE LLP,
505 Montgomery Street, Suite 800
San Francisco, California 94111

Tel. (415) 276-6500 Fax. (415) 276-6599

Email: jeffgray@dwt.com

Attorneys for Calpine Corporation

#### **CERTIFICATE OF SERVICE**

I, Judy Pau, certify:

I am employed in the City and County of San Francisco, California, am over eighteen years of age and am not a party to the within entitled cause. My business address is 505 Montgomery Street, Suite 800, San Francisco, California 94111.

On August 6, 2007, I caused the following to be served:

# COMMENTS OF CALPINE CORPORATION ON THE MARKET ADVISORY COMMITTEE RECOMMENDATION FOR DESIGNING A GREENHOUSE GAS CAP-AND-TRADE SYSTEM FOR CALIFORNIA

via electronic mail to all parties on the service list R.06-04-009 who have provided the Commission with an electronic mail address and by First class mail on the parties listed as "Appearance" and "State Service" on the attached service list who have not provided an electronic mail address.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that this declaration was executed on the date above at San Francisco, California.

	/s/ Judy Pau	
_		
	Judy Pau	

cc: Commissioner Michael R. Peevey (via U.S. Mail and Email)
ALJ Charlotte TerKeurst (via U.S. Mail and Email)
ALJ Jonathan Lakritz (via U.S. Mail and Email)
ALJ Meg Gottstein (via U.S. Mail and Email)

### CALIFORNIA PUBLIC UTILITIES COMMISSION **Service Lists**

Proceeding: R0604009 - CPUC - PG&E, SDG&E,

Filer: CPUC - PG&E, SDG&E, SOCALGAS, EDISON

List Name: LIST

Last changed: August 3, 2007

### **Appearance**

STEVEN S. SCHLEIMER DIRECTOR, COMPLIANCE & REGULATORY AFFAIRS MORGAN STANLEY CAPITAL GROUP INC. BARCLAYS BANK, PLC 2000 WESTCHESTER AVI 200 PARK AVENUE, FIFTH FLOOR PURCHASE, NY 10577 NEW YORK, NY 10166

STEVEN HUHMAN 2000 WESTCHESTER AVENUE

RICK C. NOGER PRAXAIR PLAINFIELD, INC. 2711 CENTERVILLE ROAD, SUITE 400 WILMINGTON, DE 19808

KEITH R. MCCREA ATTORNEY AT LAW
SUTHERLAND, ASBILL & BRENNAN, LLP
1275 PENNSYLVANIA AVE., N.W. WASHINGTON, DC 20004-2415

ADAM J. KATZ MCDERMOTT WILL & EMERY LLP 600 13TH STREET, NW. WASHINGTON, DC 20005

CATHERINE M. KRUPKA CATHERINE M. KRUPKA MCDERMOTT WILL AND EMERY LLP 600 THIRTEEN STREEET, NW WASHINGTON, DC 20005

LISA M. DECKER CONSTELLATION ENERGY GROUP, INC. 111 MARKET PLACE, SUITE 500 BALTIMORE, MD 21202

CATHY S. WOOLLUMS MIDAMERICAN ENERGY HOLDINGS COMPANY 106 EAST SECOND STREET DAVENPORT, IA 52801

KEVIN BOUDREAUX CALPINE POWER AMERICA-CA, LLC 717 TEXAS AVENUE, SUITE 1000 HOUSTON, TX 77002

.HOMAS DII PRESIDENT LODI ~ THOMAS DILL LODI GAS STORAGE, L.L.C. 1021 MAIN ST STE 1500 HOUSTON, TX 77002-6509

E.J. WRIGHT OCCIDENTAL POWER SERVICES, INC.

PAUL M. SEBY MCKENNA LONG & ALDRIDGE LLP HOUSTON, TX 77046

5 GREENWAY PLAZA, SUITE 110 1875 LAWRENCE STREET, SUITE 200 HOUSTON, TX 77046 DENVER, CO 80202

TIMOTHY R. ODIL

MCKENNA LONG & ALDRIDGE LLP

1875 LAWRENCE STREET, SUITE 200

WESTERN PIPELINES
2 NORTH NEVADA AVE DENVER, CO 80202

STEPHEN G. KOERNER, ESQ. EL PASO CORPORATION 2 NORTH NEVADA AVENUE COLORADO SPRINGS, CO 80903

JENINE SCHENK
APS ENERGY SERVICES APS ENERGY SERVICES
SALMON, LEWIS & WELDON, P.L.C.
400 E. VAN BUREN STREET, SUITE 750
PHOENIX, AZ 85004
SALMON, LEWIS & WELDON, P.L.C.
2850 EAST CAMELBACK ROAD, SUITE 200 PHOENIX, AZ 85004

JOHN B. WELDON, JR. PHOENIX, AZ 85016

KELLY BARR MANAGER, REGULATORY AFFAIRS & CONTRACTS WESTERN RESOURCE ADVOCATES SALT RIVER PROJECT PO BOX 52025, PAB 221 PHOENIX, AZ 85072-2025

STEVEN S. MICHEL 2025 SENDA DE ANDRES SANTA FE, NM 87501

ROGER C. MONTGOMERY VICE PRESIDENT, PRICING SOUTHWEST GAS CORPORATION PO BOX 98510 LAS VEGAS, NV 89193-8510

RONALD F. DEATON LOS ANGELES DEPARTMENT OF WATER & 111 NORTH HOPE STREET, ROOM 1550 LOS ANGELES, CA 90012

SID NEWSOME TARIFF MANAGER SOUTHERN CALIFORNIA GAS COMPANY MANATT, PHELPS & PHILLIPS, LLP GT 14 D6 11355 WEST OLYMPIC BOULEVARD 555 WEST 5TH STREET LOS ANGELES, CA 90051

DAVID L. HUARD ATTORNEY AT LAW LOS ANGELES, CA 90064

CURTIS L. KEBLER J. ARON & COMPANY SUITE 2600 GRAHAM 2121 AVENUE OF THE STARS LOS ANGELES, CA 90067

ATTORNEY AT LAW KIRKPATRICK & LOCKHART NICHOLSON

10100 SANTA MONICA BLVD., 7TH FLOOR LOS ANGELES, CA 90067

GREGORY KOISER

NORMAN A. PEDERSEN

DENNIS M.P. EHLING

CONSTELLATION NEW ENERGY, INC. ATTORNEY AT LAW
350 SOUTH GRAND AVENUE, SUITE 3800 HANNA AND MORTON, LLP LOS ANGELES, CA 90071

444 SOUTH FLOWER STREET, NO. 1500 LOS ANGELES, CA 90071

MICHAEL MAZUR

CHIEF TECHNICAL OFFICER

3 PHASES ENERGY SERVICES, LLC

2100 SEPULVEDA BLVD., SUITE 38

MANHATTAN BEACH, CA 90266

TIFFANY RAU

POLICY AND COMMUNICATIONS MANAGER

CARSON HYDROGEN POWER PROJECT LLC

ONE WORLD TRADE CENTER, SUITE 1600

LONG BEACH, CA 90831-1600

GREGORY KLATT ATTORNEY AT LAW DOUGLASS & LIDDELL 411 E. HUNTINGTON DRIVE, STE. 107-356 PASADENA, CA 91101 ARCADIA, CA 91006

MAUREEN LENNON CALIFORNIA COGENERATION COUNCIL 595 EAST COLORADO BLVD., SUITE 623

RICHARD HELGESON SOUTHERN CALIFORNIA PUBLIC POWER AUTHORI ATTORNEY AT LAW 225 S. LAKE AVE., SUITE 1250 DOUGLASS & LIDDELL PASADENA, CA 91101

DANIEL W. DOUGLASS 21700 OXNARD STREET, SUITE 1030 WOODLAND HILLS, CA 91367

PAUL DELANEY AMERICAN UTILITY NETWORK (A.U.N.) 10705 DEER CANYON DRIVE ALTA LOMA, CA 91737

AKBAR JAZAYEIRI DIRECTOR OF REVENUE & TARRIFFS SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVE. ROOM 390 ROSEMEAD, CA 91770

ANNETTE GILLIAM ATTORNEY AT LAW ATTORNEY AT LAW

SOUTHERN CALIFORNIA EDISON COMPANY

2244 WALNUT GROVE AVE.

ROSEMEAD, CA 91770 ROSEMEAD, CA 91770

CATHY A. KARLSTAD SOUTHERN CALIFORNIA EDISON COMPANY

LAURA I. GENAO ATTORNEY ELECTRIC SOUTHERN CALIFORNIA EDISON 2244 WALNUT GROVE AVENUE ROSEMEAD, CA 91770

RONALD MOORE GOLDEN STATE WATER/BEAR VALLEY 630 EAST FOOTHILL BOULEVARD SAN DIMAS, CA 91773

DON WOOD

. AIMEE M. SMITH

PACIFIC ENERGY POLICY CENTER ATTORNEY AT LAW 4539 LEE AVENUE LA MESA, CA 91941

SEMPRA ENERGY 101 ASH STREET HQ13 SAN DIEGO, CA 92101

ALLEN K. TRIAL SDGE&SCG HO-13 101 ASH STREET SAN DIEGO, CA 92101

ALVIN PAK SEMPRA GLOBAL ENTERPRISES 101 ASH STREET SAN DIEGO, CA 92101

DAN HECHT SEMPRA ENERGY 101 ASH STREET SAN DIEGO, CA 92101

DANIEL A. KING SEMPRA ENERGY 101 ASH STREET, HQ 12 SAN DIEGO, CA 92101

SYMONE VONGDEUANE SEMPRA ENERGY SOLUTIONS
101 ASH STREET, HQ09
SAN DIEGO, CA 92101-3017

THEODORE ROBERTS ATTORNEY AT LAW SEMPRA GLOBAL 101 ASH STREET, HQ 13D SAN DIEGO, CA 92101-3017

DONALD C. LIDDELL, P.C. DOUGLASS & LIDDELL 2928 2ND AVENUE SAN DIEGO, CA 92103

MARCIE MILNER DIRECTOR - REGULATORY AFFAIRS SHELL TRADING GAS & POWER COMPANY 4445 EASTGATE MALL, SUITE 100 SAN DIEGO, CA 92121

PILOT POWER GROUP, INC. PILOT POWER GROUP, INC.

8910 UNIVERSITY CENTER LANE, SUITE 520
SAN DIEGO, CA 92122
PILOT POWER GROUP, INC.
9320 CHESAPEAKE DRIVE, SUITE 112
SAN DIEGO, CA 92123

THOMAS DARTON

STEVE RAHON DIRECTOR, TARIFF & REGULATORY ACCOUNTS ANZA ELECTRIC COOPERATIVE, INC. SAN DIEGO GAS & ELECTRIC COMPANY 8330 CENTURY PARK COURT, CP32C SAN DIEGO, CA 92123-1548

GLORIA BRITTON 58470 HWY 371 PO BOX 391909 ANZA, CA 92539

LYNELLE LUND COMMERCE ENERGY, INC.

TAMLYN M. HUNT ENERGY PROGRAM DIRECTOR

SFO 370922v1 0041036-000286

600 ANTON BLVD., SUITE 2000 COMMUNITY ENVIRONMENTAL COUNCIL COSTA MESA, CA 92626 26 W. ANAPAMU ST., 2/F SANTA BARBARA, CA 93101

JEANNE M. SOLE DEPUTY CITY ATTORNEY DEPUTY CITY ATTORNEY MANAGER, REGULATORY AFFAIRS
CITY AND COUNTY OF SAN FRANCISCO SOUTHERN CALIFORNIA EDISON COMPANY 1 DR. CARLTON B. GOODLETT PLACE, RM. 234 601 VAN NESS AVENUE, STE. 2040 SAN FRANCISCO, CA 94102

JOHN P. HUGHES SAN FRANCISCO, CA 94102

LAD LORENZ LAD LORENZ

V.P. REGULATORY AFFAIRS

SOUTHERN CALIFORNIA GAS COMPANY

601 VAN NESS AVENUE, SUITE 2060

SAN FRANCISCO, CA 94102 SAN FRANCISCO, CA 94102

MARCEL HAWIGER

NINA SUETAKE ATTORNEY AT LAW

THE UTILITY REFORM NETWORK

711 VAN NESS AVE., STE 350

SAN FRANCISCO, CA 94102

CALIF FORM

ROOM 4300

SON FRANCISCO, CA 94102

SON FRANCISCO, CA 9

DIANA L. LEE CALIF PUBLIC UTILITIES COMMISSION SAN FRANCISCO, CA 94102-3214

F. JACKSON STODDARD CALIF PUBLIC UTILITIES COMMISSION LEGAL DIVISION ROOM 5125 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

AUDREY CHANG STAFF SCIENTIST NATURAL RESOURCES DEFENSE COUNCIL 111 SUTTER STREET, 20TH FLOOR SAN FRANCISCO, CA 94104

EVELYN KAHL

MICHAEL P. ALCANTAR ATTORNEY AT LAW
ALCANTAR & KAHL, LLP
ALCANTAR & KAHL, LLP
ALCANTAR & KAHL, LLP
120 MONTGOMERY STREET, SUITE 2200
SAN FRANCISCO, CA 94104

PICHAEL F. ALCANTAR
ATTORNEY AT LAW
ALCANTAR & KAHL, LLP
120 MONTGOMERY STREET, SUITE 2200
SAN FRANCISCO, CA 94104

SEEMA SRINIVASAN SEEMA SRINIVASAN

ATTORNEY AT LAW

CONSTELLATION NEW ENERGY,
ALCANTAR & KAHL, LLP

120 MONTGOMERY STREET, SUITE 2200

SAN FRANCISCO, CA 94104

WILLIAM H. CHEN

CONSTELLATION NEW ENERGY,
SPEAR TOWER, 36TH FLOOR
ONE MARKET STREET

SAN FRANCISCO, CA 94105

WILLIAM H. CHEN CONSTELLATION NEW ENERGY, INC.

BRIAN K. CHERRY DIRECTOR REGULATORY RELATIONS PACIFIC GAS AND ELECTRIC COMPANY

EDWARD G POOLE ANDERSON DONOVAN & POOLE 601 CALIFORNIA STREET SUITE 1300 77 BEALE STREET, B10C SAN FRANCISCO, CA 94106

SAN FRANCISCO, CA 94108

ANN G. GRIMALDI MCKENNA LONG & ALDRIDGE LLP 101 CALIFORNIA STREET, 41ST FLOOR ANN G. GRIMALDI SAN FRANCISCO, CA 94111

BRIAN T. CRAGG ATTORNEY AT LAW GOODIN, MACBRIDE, SQUERI, RITCHIE &

505 SANSOME STREET, SUITE 900 SAN FRANCISCO, CA 94111

JAMES D. SOUERI ATTORNEY AT LAW GOODIN MACBRIDE SQUERI RITCHIE & DAY LLP GOODIN MACBRIDE SQUERI RITCHIE & 505 SANSOME STREET, STE 900 SAN FRANCISCO, CA 94111

JEANNE B. ARMSTRONG ATTORNEY AT LAW

505 SANSOME STREET, SUITE 900 SAN FRANCISCO, CA 94111

KAREN BOWEN

LISA A. COTTLE ATTORNEY AT LAW
WINSTON & STRAWN LLP
WINSTON & STRAWN LLP
101 CALIFORNIA STREET
SAN FRANCISCO, CA 94111
LISA A. COTTLE
ATTORNEY AT LAW
WINSTON & STRAWN LLP
101 CALIFORNIA STREET, 39TH FLOOR
SAN FRANCISCO, CA 94111

SEAN P. BEATTY

ATTORNEY AT LAW

COOPER, WHITE & COOPER, LLP

201 CALIFORNIA ST., 17TH FLOOR
SAN FRANCISCO, CA 94111

SAN FRANCISCO, CA 94111

JOSEPH M. KARP
ATTORNEY AT LAW
WINSTON & STRAWN LLP
101 CALIFORNIA STREET
SAN FRANCISCO, CA 94111

SAN FRANCISCO, CA 94111

JEFFREY P. GRAY

DAVIS WRIGHT TREMAINE, LLP

505 MONTGOMERY STREET, SUITE 800

SAN FRANCISCO, CA 94111-6533

CHRISTOPHER J. WARNER

PACIFIC GAS AND ELECTRIC COMPANY

77 BEALE STREET, PO BOX 7442

SAN FRANCISCO, CA 94120-7442 CHRISTOPHER J. WARNER

SARA STECK MYERS ATTORNEY AT LAW 122 28TH AVENUE SAN FRANCISCO, CA 94121

LARS KVALE CENTER FOR RESOURCE SOLUTIONS PRESIDIO BUILDIING 97 PO BOX 39512 SAN FRANCISCO, CA 94129

ANDREA WELLER STRATEGIC ENERGY JENNIFER CHAMBERLIN STRATEGIC ENERGY, LLC

SFO 370922v1 0041036-000286

3130 D BALFOUR RD., SUITE 290 2633 WELLINGTON CT. BRENTWOOD, CA 94513 CLYDE, CA 94520 BRENTWOOD, CA 94513

BETH VAUGHAN BETH VAUGHAN
CALIFORNIA COGENERATION COUNCIL 4391 N. MARSH ELDER COURT CONCORD, CA 94521

KERRY HATTEVIK MIRANT CORPORATION 696 WEST 10TH STREET PITTSBURG, CA 94565

AVIS KOWALEWSKI

WILLIAM H. BOOTH AVIS KOWALEWSKI WILLIAM H. BOOTH
CALPINE CORPORATION ATTORNEY AT LAW
3875 HOPYARD ROAD, SUITE 345 LAW OFFICES OF WILLIAM H. BOOTH
PLEASANTON, CA 94588 1500 NEWELL AVENUE, 5TH FLOOR WALNUT CREEK, CA 94596

J. ANDREW HOERNER REDEFINING PROGRESS 1904 FRANKLIN STREET OFFICE OAKLAND, CA 94612

JANILL RICHARDS DEPUTY ATTORNEY GENERAL CALIFORNIA ATTORNEY GENERAL'S

1515 CLAY STREET, 20TH FLOOR OAKLAND, CA 94702

CLIFF CHEN UNION OF CONCERNED SCIENTIST

2397 SHATTUCK AVENUE, STE 203

GREEN POWER INSTITUTE BERKELEY, CA 94704

GREGG MORRIS 2039 SHATTUCK AVENUE, STE 402 BERKELEY, CA 94704

R. THOMAS BEACH

CROSSBORDER ENERGY

2560 NINTH STREET, SUITE 213A

BERKELEY, CA 94710-2557

BERKELEY, CA 94710-2557 SAN JOSE, CA 95113

C. SUSIE BERLIN ATTORNEY AT LAW LLC
MC CARTHY & BERLIN, LLP
PO BOX 550
100 PARK CENTER PLAZA, SUITE 501
VALLEY SPRINGS, CA 95252 SAN JOSE, CA 95113

MIKE LAMOND ALPINE NATURAL GAS OPERATING CO. #1

JOY A. WARREN

BALDASSARO DI CAPO

SFO 370922v1 0041036-000286

ATTORNEY AT LAW MODESTO IRRIGATION DISTRICT 1231 11TH STREET MODESTO, CA 95354

151 BLUE RAVINE ROAD FOLSOM, CA 95630

GOLD RIVER, CA 95670

JOHN JENSEN PRESIDENT AFFAIRS MOUNTAIN UTILITIES PO BOX 205 KIRKWOOD, CA 95646

MARY LYNCH VP - REGULATORY AND LEGISLATIVE CONSTELLATION ENERGY COMMODITIES 2377 GOLD MEDAL WAY, SUITE 100

LEONARD DEVANNA
EXECUTIVE VICE PRESIDENT
CLEAN ENERGY SYSTEMS, INC.
11330 SUNCO DRIVE, SUITE A
PANCHO CORDOVA, CA 95742 LEONARD DEVANNA

ANDREW BROWN ATTORNEY AT LAW ELLISON, SCHNEIDER & HARRIS, LLP 2015 H STREET SACRAMENTO, CA 95811

BRUCE MCLAUGHLIN BRAUN & BLAISING, P.C. 915 L STREET, SUITE 1270 SACRAMENTO, CA 95814

GREGGORY L. WHEATLAND ATTORNEY AT LAW ELLISON, SCHNEIDER & HARRIS, LLP 2015 H STREET SACRAMENTO, CA 95814

JANE E. LUCKHARDT ATTORNEY AT LAW

DOWNEY BRAND LLP

555 CAPITOL MALL, 10TH FLOOR

CACCAMENTO CA SACRAMENTO, CA 95814

JEFFERY D. HARRIS ATTORNEY AT LAW ELLISON, SCHNEIDER & HARRIS LLP SACRAMENTO, CA 95814

VIRGIL WELCH CLIMATE CAMPAIGN COORDINATOR ATTORNEY AT LAW ENVIRONMENTAL DEFENSE ELLISON, SCHNEID 1107 9TH STREET, SUITE 540 SACRAMENTO, CA 95814

WILLIAM W. WESTERFIELD, 111 ELLISON, SCHNEIDER & HARRIS L.L.P. 2015 H STREET SACRAMENTO, CA 95814

DOWNEY BRAND JANE E. LUCKHARDT

555 CAPITOL MALL, 10TH FLOOR
SACRAMENTO, CA 95814-4686

RAYMOND J. CZAHAR, C.P.A. CHIEF FINANCIAL OFFICER WEST COAST GAS COMPANY 9203 BEATTY DRIVE SACRAMENTO, CA 95826

STEVEN M. COHN
ASSISTANT GENERAL COUNSEL
SACRAMENTO MUNICIPAL UTILITY DISTRICT
PO BOX 15830
205
SACRAMENTO, CA 95852-1830

ANN L. TROWBRIDGE
ATTORNEY AT LAW
DAY CARTER & MURPHY, LLP
3620 AMERICAN RIVER DRIVE, SUITE
SACRAMENTO, CA 95864

DAN SILVERIA
SURPRISE VALLEY ELECTRIC CORPORATION
PO BOX 691
ALTURAS, CA 96101

JESSICA NELSON
PLUMAS-SIERRA RURAL ELECTRIC CO-OP
73233 STATE ROUTE 70, STE A
PORTOLA, CA 96122-7064

DONALD BROOKHYSER
ALCANTAR & KAHL
1300 SW FIFTH AVE., SUITE 1750
PORTLAND, OR 97210

CYNTHIA SCHULTZ
REGULATORY FILING COORDINATOR
PACIFIC POWER AND LIGHT COMPANY
825 N.E. MULTNOMAH
PORTLAND, OR 97232

KYLE L. DAVIS
PACIFICORP
825 NE MULTNOMAH,
PORTLAND, OR 97232

RYAN FLYNN
PACIFICORP
825 NE MULTNOMAH STREET, 18TH FLOOR
PORTLAND, OR 97232

TARA KNOX
AVISTA CORPORATION
PO BOX 3727
ASSN.
SPOKANE, WA 99220

IAN CARTER
POLICY COORDINATOR-NORTH AMERICA
INTERNATIONAL EMISSIONS TRADING

JASON DUBCHAK
ASSOCIATE GENERAL COUNSEL
WILD GOOSE STORAGE, LLC
1200 855 2ND STREET, S.W.
CALGARY, AB T2P 4Z5
CANADA

350 SPARKS STREET, STE. 809 OTTAWA, ON K1R 7S8 CANADA