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

Order Instituting Rulemaking to Consider	)	
Annual Revisions to Local Procurement	)	R.08-01-025
Obligations and Refinements to the	)	
Resource Adequacy Program	)	
	)	

\_\_\_\_\_

# PHASE 2 JOINT PROPOSALS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION, PACIFIC GAS AND ELECTRIC COMPANY, SAN DIEGO GAS AND ELECTRIC COMPANY AND SOUTHERN CALIFORNIA EDISON COMPANY

\_\_\_\_\_

#### INTRODUCTION AND OVERVIEW

Pursuant to the Administrative Law Judge's October 30, 2008 Ruling Adopting Dates Certain For, And Making Changes To the Phase 2 Schedule, the California Independent System Operator ("CAISO"), Pacific Gas and Electric ("PG&E"), San Diego Gas and Electric ("SDG&E") and Southern California Edison Company ("SCE") -- referred to collectively as Joint Proponents -- hereby submit a joint proposal on the modification of Qualifying Capacity ("QC") counting rules for non-dispatchable Qualifying Facilities ("QFs"). The CAISO, PG&E, and SDG&E also submit herewith a proposal on the extension of the counting rule for new resources that was adopted in the CPUC's Phase 1 decision (D.08-06-031).

For the purpose of developing a joint proposal on modifying the counting rules for non-dispatchable QF resources as part of Phase 2 of the RA proceeding PG&E, SDG&E, SCE and the CAISO held several conference calls and exchanged ideas during the latter part of 2008. The Joint Proponents are

proposing a modification to the current process by which QC values are determined for non-dispatchable QFs. For ease of reference in this document, when the term QF is used it will refer only to those QF resources that are non-dispatchable.

SCE is not taking a position on the counting rule proposed herein for new resources.

### I. QUALIFYING CAPACITY COUNTING RULE FOR QUALIFYING FACITLIES

### A. Background

During Phase 1 of the RA proceeding, the CAISO and PG&E agreed there was a possibility that scheduled outages could be double counted if a QF resource reported a scheduled outage to the CAISO that exceeded the time threshold in the RA program rules. In the Phase 1 final decision, the CPUC recognized the validity of the concern, but also wanted a more thorough analysis performed so that it could better understand the scope of the problem. In addition, the Phase 1 decision (D.08-06-031) adopted a cut-out for calculating QC values for dispatchable QF resources. Thus, this proposal is focused solely on non-dispatchable QFs.

\_

<sup>&</sup>lt;sup>1</sup> As taken from the 2009 RA Guide, page 11, the rule for RA resources with Schedule Outages is:

<sup>1)</sup> May through September – Scheduled outage exceeding 25% of days in the month the resource does not count for RA, for scheduled outages equal to or less than 25% there is no adjustment.

<sup>2)</sup> October through April – Scheduled outages less than 1 week, no adjustment is made to NQC, for scheduled outages 1-2 weeks the NQC is adjusted by the following formula [1 – (days of scheduled outage/days in month) – 0.25] \* NQC For scheduled outages over 2 weeks the resource does not count towards RAR.

#### B. Issue

The concern with the counting rules for QF resources is that there is a possibility that the resource could be "double counted" for scheduled outages. The current CPUC QF counting rule takes an average output of these resources over a three-year period. Thus, the rule picks up any historical scheduled outages when calculating that average number. If a QF also reported a scheduled (not forced) outage to the CAISO during the operating year that was greater than the allowed period identified in footnote one, then the QF resource's QC would be further reduced, thereby in effect "double counting" the scheduled outages. This could subject a Load Serving Entity ("LSE") to additional procurement requirements if it caused the LSE to be deficient in meeting its RA requirement.

Based on discussions, Joint Proponents developed a preferred approach for addressing the issue;

Correct Historical Output – This was the CAISO proposal during Phase 1 of the RA proceeding. Under this proposal, the historic output values for all of the QFs would be adjusted to remove scheduled outages that met the CPUC criteria prior to calculating the QC. This approach maintained the requirement that LSEs would have to "make up" in their RA showings any QF- scheduled outages that reduced or eliminated any QC if such QC reductions caused the applicable LSE to be deficient in meeting its RA obligation. After further review of this proposal, Joint Proponents believe this approach is a valid way to

remove the double counting of scheduled outages, but there are some administrative concerns that need to be addressed.

### C. Analysis Performed

For purposes of assessing the scope of the problem, the CAISO Outage Coordination group pulled outage data from 2007 and 2008 (2008 included all months except December). The CAISO also received a list of the resources that use the historic three-year average method to calculate the QC value from the CPUC. The list of QF resources consisted of 262 resources with a total 2009 NQC of 5194MW. No distinction was made and no analysis was done on whether the QFs were providing system RA or local RA capacity.

Next, the 2007 and 2008 outage data was filtered to include only scheduled outages on the 262 QF resources that met the scheduled outage counting criteria that would have resulted in a reduced RA availability amount. Forced outages were excluded because there is no RA adjustment needed for these outages. The table below reflects the outage MW impact for 2007 and 2008 by month for those QFs that may have had an RA replacement obligation under the CPUC's current rules. Any resource with an outage less than the RA criteria is not included in the table. If an outage extended across two or more months, and it met the minimum criteria for an RA adjustment, then the outage MWs were shown for each month. If a resource had a partial derate, the value reflected in the table below is just the curtailed MW, as long as it did not exceed the QC value.

	2007 Outage MW	2008 Outage MW
January	390.7	311.1
February	344.0	98.8
March	368.6	203.9
April	403.4	125.7
May	274.0	113.6
June	0	0
July	0	0
August	0	0
September	0	0
October	415.5	235.0
November	424.1	317.4
December	232.0	51.0

### D. Joint Proposal for QF Counting Rule

To address the issue whereby a QF resource could have its QC (based on a simple three year average) further reduced due to a scheduled outage, and the LSE could also be required to replace RA capacity resulting from an effective double counting of the scheduled outage -- the Joint Proponents propose a modification to the current CPUC QC counting rule for QF resources.

Under the current CPUC rules for QFs, the QC is calculated by taking the past three years of historical output and generating a monthly average output. Because this data is based on historical output, it inherently takes into account scheduled outages (as well as forced outages). The current rules do not make any adjustment to the historical values; so, it is possible that the QC could have been further reduced during a scheduled outage in the operating year, and the LSE could have been required to procure replacement RA capacity if the scheduled outage met the CPUC criteria for procuring replacement RA capacity.

After reviewing the data and discussing various options, Joint Proponents concluded that the Historical Output Correction approach, described above, provided the best solution to resolving the issue of the double counting of scheduled outages for QFs whose QC is calculated based on three years of historical output. Joint Proponents do not believe that the additional burdens outweigh the benefits of a more accurate counting rule. At this time, the CAISO, CPUC and CEC are discussing the necessary administrative processes to implement this.

Joint Proponents propose that a process be developed to allow the CAISO to provide the CEC with data for the outages that exceed the CPUC threshold, as described in the RA Guide and footnote 1 of this document. This data would include, among other things, the resource ID and start and end dates of the scheduled/planned outage. Joint Proponents envision that this data would come from the CAISO's SLIC outage system. The CAISO and CEC would need to ensure that the necessary process is in place to provide this data to the CEC. From this data the CEC would be able to identify the hourly output data that needs to be adjusted. The parties propose that the hourly output data be replaced with a "proxy QF output" based on the output values for the same dates from the previous two years. The "proxy QF output" would be calculated by averaging the output values in the previous two years. This "proxy QF output" value would then be used as the historical value for the subsequent three-year average calculations. Once all values have been retrieved, the CEC would perform the same QC calculation process as is done under the current process.

The following example illustrates this proposal: Assume there is a QF that had a scheduled outage for the period March 7, 2008 through March 23, 2008. This outage limited the resource's output during the scheduled outage. For the purpose of this example, the table below reflects the output data for one day of the outage, but assumes that there is similar data for each day of the scheduled outage. In Table 1 below, the second to last column shows the 2009 NQC that would be calculated under the current rule, using the reduced output during the scheduled outage period. The current rules do not make any adjustment for the output during the prior year scheduled outage, so the reduced output is included in the average calculation. That initial 2009 NQC value is then subject to a further reduction during the 2009 operating year if the QF resource had a scheduled outage in 2009 identical to its outage in 2008. The last column of the table reflects the 2009 NQC that would be calculated under the proposed rule change. The output recorded during the 2008 scheduled outage period would be removed and replaced with a value derived by taking the hourly output from the previous two years and averaging these two values to come up with a replacement output for the hours of the scheduled outage. This replacement value would then be used in the three-year average calculation, with the new 2009 NQC subject to a reduction in the applicable LSE's RA compliance filing for any scheduled outages in the operating year that meet the CPUC's threshold.

Table 1

QF Counting Rule Example under Current CPUC and New Proposed Rule

Day	HE	2006 Historical Output	2007 Historical Output	2008 Historical Output	Revised 2008 Historical Output	2009 NQC Under Current CPUC Rule	2009 NQC Under Proposed Rule Change
7-Mar	1	50.0	53.0	16.0	51.5	39.7	51.5
7-Mar	2	51.0	54.0	15.0	52.5	40.0	52.5
7-Mar	3	50.0	52.0	17.0	51.0	39.7	51.0
7-Mar	4	52.0	50.0	16.0	51.0	39.3	51.0
7-Mar	5	55.0	53.0	17.0	54.0	41.7	54.0
7-Mar	6	60.0	63.0	18.0	61.5	47.0	61.5
7-Mar	7	70.0	65.0	16.0	67.5	50.3	67.5
7-Mar	8	71.0	70.0	17.0	70.5	52.7	70.5
7-Mar	9	72.0	75.0	18.0	73.5	55.0	73.5
7-Mar	10	72.0	74.0	17.0	73.0	54.3	73.0
7-Mar	11	74.0	72.0	16.0	73.0	54.0	73.0
7-Mar	12	74.0	73.0	20.0	73.5	55.7	73.5
7-Mar	13	75.0	77.0	19.0	76.0	57.0	76.0
7-Mar	14	74.0	76.0	18.0	75.0	56.0	75.0
7-Mar	15	76.0	72.0	19.0	74.0	55.7	74.0
7-Mar	16	75.0	73.0	19.0	74.0	55.7	74.0
7-Mar	17	75.0	78.0	18.0	76.5	57.0	76.5
7-Mar	18	74.0	75.0	20.0	74.5	56.3	74.5
7-Mar	19	70.0	73.0	19.0	71.5	54.0	71.5
7-Mar	20	68.0	69.0	18.0	68.5	51.7	68.5
7-Mar	21	65.0	67.0	19.0	66.0	50.3	66.0
7-Mar	22	63.0	65.0	18.0	64.0	48.7	64.0
7-Mar	23	60.0	62.0	18.0	61.0	46.7	61.0
7-Mar	24	58.0	59.0	18.0	58.5	45.0	58.5

As the example illustrates, the proposed change to the QF counting rules would allow a QF resource to have its QC value adjusted to a value that more closely resembles its historical output, but would still retain the requirement that

LSEs procure the necessary replacement RA capacity should the resource be unavailable and the reduced QC cause the LSE to be deficient in its RA obligation.

In summary, the Joint Proponents are proposing a revised counting method that eliminates the double counting concern but retains the obligation for LSEs to replace capacity under the current CPUC RA program rules. The revised counting method effectively assumes that the QF resource would have operated at the level seen in the previous years if it were not for the scheduled outage. This assumed operational level is then used in the calculation of the three year average output for QF resources to determine their QC.

### II. PROPOSAL TO EXTEND INTERIM COUNTING RULE FOR NEW RESOURCES

In the latter stages of Phase 1, PG&E proposed that new resources should be counted toward local RA obligations in the year-ahead demonstration if the LSE demonstrates local procurement sufficient to cover the obligation in the months preceding the expected commercial operational date ("COD") of the new resource. For example, a LSE could count a new resource with a March COD in its year-ahead demonstration, as long as it could show a short-term contract with an existing unit for the bridge months from January to March. The PG&E approach allows the LSE to substitute a new resource and avoid a long-term contract with an existing unit when the new resource's COD falls after the

October 31st RA filing deadline. Several parties, including SDG&E, WPTF and the CAISO, supported the PG&E approach.

In its Phase 1 Decision (D.08-06-031), the Commission adopted the PG&E approach for counting new resources, with two limitations. First, the Commission required that an LSE who relies on a new resource that is not commercially operational prior to its final annual local RA compliance showing must, in its showing, (a) claim the entire new resource, and (b) specify a single local unit that it will show on every monthly filing to make up the capacity until the new unit has reached commercial operational status. The second limitation the Commission adopted was temporal: the revised methodology for counting new resources only applied to the 2009 reporting year.

Unless a more durable solution emerges during the Phase 2 and workshops, the CAISO, PG&E and SDG&E propose that the Commission adopt the PG&E approach until such time as a better approach is identified and adopted. SCE does not take a position on this proposal. Although it is not a perfect fix, the PG&E approach works a service to ratepayers by avoiding the costly over procurement that invariably occurs when a new resource achieves COD after the annual RA demonstration. Furthermore, because the LSE must acquire sufficient local capacity to meet its local capacity requirement, and maintain that capacity until the new resource comes on line, there is no risk to system reliability or need for the CAISO to engage in backstop procurement.

Because this interim revision saves ratepayers money without having any adverse effects on reliability, Joint Proponents with the exception of SCE, ask the

Commission to accept the amended rule for counting new resources adopted in D.08-06-031 as a permanent amendment to the CPUC's RA counting rules.

### III. CONCLUSION

For the foregoing reasons, the CAISO, PG&E, SDG&E and SCE respectfully request that the Presiding Administrative Law Judge prepare a proposed decision for Commission consideration that incorporates the proposals articulated herein.

Respectfully submitted,

### /s/\_Anthony Ivancovich

Anthony Ivancovich
Assistant General Counsel-Regulatory
Beth Ann Burns
Senior Counsel

Attorneys for CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

151 Blue Ravine Road Folsom California 95630 Tel. (916) 351-4400 Fax. (916) 608-7296

Email: <u>aivancovich@caiso.com</u> bburns@caiso.com

### /s/ Michael A. Backstrom

By: Michael A. Backstrom

Attorney for SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue Post Office Box 800 Rosemead, California 91770 Telephone: (626) 302-6944

Facsimile: (626) 302-3990

E-mail: Michael.Backstrom@sce.com

### /s/ Mark R. Huffman

By: Mark R. Huffman

Attorney for PACIFIC GAS AND ELECTRIC COMPANY

Pacific Gas and Electric Company P.O. Box 7442 San Francisco, CA 94120

Telephone: (415) 973-3842 Facsimile: (415) 973-0516 Email: mrh2@pge.com

### /s/ Don Garber

By: Don Garber

Attorney for SAN DIEGO GAS & ELECTRIC COMPANY

Don Garber 101 Ash Street, HQ 12 San Diego, California 92101-3017

Telephone: (619) 696-4539 Facsimile: (619) 699-5027 E-mail: dgarber@sempra.com

Date: January 9, 2009

### **CERTIFICATE OF SERVICE**

I hereby certify that on January 9, 2009. I served, by electronic mail and United States mail, a copy of Phase II Proposals of the California Independent System Operator Corporation to each party in Docket No. R.08-01-025.

Executed on January 9, 2009 at Folsom, California

ls/ Anna Pascuzzo //

Anna Pascuzzo, An Employee of the California Independent System Operator ANDREW B. BROWN
ELLISON SCHNEIDER & HARRIS, LLP
2600 CAPITOL AVENUE, SUITE 400
SACRAMENTO, CA 95816-5905
abb@eslawfirm.com

ANTHONY IVANCOVICH
CALIFORNIA INDEPENDENT SYSTEM OPER.
CORP
151 BLUE RAVINE ROAD
FOLSOM, CA 95630
aivancovich@caiso.com

BETH ANN BURNS CALIFORNIA ISO 151 BLUE RAVINE ROAD FOLSOM, CA 95630 bburns@caiso.com

BETH VAUGHAN
CALIFORNIA COGENERATION COUNCIL
4391 N. MARSH ELDER COURT
CONCORD, CA 94521
beth@beth411.com

SCOTT BLAISING BRAUN & BLAISING, P.C. 915 L STREET, SUITE 1270 SACRAMENTO, CA 95814 blaising@braunlegal.com

C. ANTHONY BRAUN
BRAUN BLAISING MCLAUGHLIN, P.C.
915 L STREET, SUITE 1270
SACRAMENTO, CA 95814
braun@braunlegal.com

BRIAN THEAKER DYNEGY, INC. 980 NINTH STREET, SUITE 2130 SACRAMENTO, CA 95814 brian.theaker@dynegy.com

CASE ADMINISTRATION
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVENUE, ROOM 370
ROSEMEAD, CA 91770
case.admin@sce.com

CAROLYN KEHREIN ENERGY MANAGEMENT SERVICES 2602 CELEBRATION WAY WOODLAND, CA 95776 cmkehrein@ems-ca.com

CYNTHIA A. FONNER
CONSTELLATION ENERGY GROUP INC
500 WEST WASHINGTON ST, STE 300
CHICAGO, IL 60661
Cynthia.A.Fonner@constellation.com

ARTHUR L. HAUBENSTOCK BRIGHTSOURCE ENERGY, INC. 1999 HARRISON STREET, SUITE 2150 OAKLAND, CA 94612 ahaubenstock@brightsourceenergy.com

ANDREA MORRISON STRATEGIC ENERGY 415 DIXSON STREET ARROYO GRANDE, CA 93420 amorrison@strategicenergy.com

BRIAN T. CRAGG GOODIN, MACBRIDE, SQUERI, DAY & LAMPREY 505 SANSOME STREET, SUITE 900 SAN FRANCISCO, CA 94111 bcragg@goodinmacbride.com

BRIAN K. CHERRY
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 770000, MAIL CODE: B10C
SAN FRANCISCO, CA 94177
bkc7@pge.com

BARRY F. MCCARTHY, ESQ.
MCCARTHY & BARRY LLP
100 W. SAN FERNANDO ST., SUITE 501
SAN JOSE, CA 95113
bmcc@mccarthylaw.com

BARBARA R. BARKOVICH BARKOVICH & YAP, INC. PO BOX 11031 OAKLAND, CA 94611 brbarkovich@earthlink.net

BRIAN S. BIERING ELLISON SCHNEIDER & HARRIS, LLP 2600 CAPITOL AVENUE, SUITE 400 SACRAMENTO, CA 95816-5905 bsb@eslawfirm.com

CALIFORNIA ENERGY MARKETS 425 DIVISADERO STREET, STE 303 SAN FRANCISCO, CA 94117 cem@newsdata.com

DOCKET COORDINATOR KEYES & FOX LLP 5727 KEITH ST. OAKLAND, CA 94618 cpucdockets@keyesandfox.com

DANIEL SILVERIA SURPRISE VALLEY ELECTRIC CORP. PO BOX 691 ALTURAS, CA 96101 dansvec@hdo.net ANN HEDRICKSON COMMERCY ENERGY, INC 222 W. LAS COLINAS BLVD., STE. 950-E IRVING, TX 75039 ahendrickson@commerceenergy.com

AUDRA HARTMANN DYNEGY, INC. 980 NINTH STREET, SUITE 2130 SACRAMENTO, CA 95814 Audra.Hartmann@Dynegy.com

RYAN BERNARDO BRAUN BLAISING MCLAUGHLIN, P.C. 915 L STREET, SUITE 1270 SACRAMENTO, CA 95814 bernardo@braunlegal.com

BLAIR JACKSON MODESTO IRRIGATION DISTRICT 1231 ELEVENTH STREET MODESTO, CA 95354 blairj@mid.org

KEVIN BOUDREAUX CALPINE CORPORATION 717 TEXAS AVENUE SUITE 1000 HOUSTON, TX 77002 boudreauxk@calpine.com

BARRY R. FLYNN FLYNN RESOURCE CONSULTANTS, INC. 5440 EDGEVIEW DRIVE DISCOVERY BAY, CA 94514 brflynn@flynnrci.com

CATHIE ALLEN
PACIFICORP
825 NE MULTNOMAH STREET, SUITE 2000
PORTLAND, OR 97232
californiadockets@pacificorp.com

Charlyn A. Hook
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 4107
SAN FRANCISCO, CA 94102-3214
chh@cpuc.ca.gov

CHARLES R. MIDDLEKAUFF PACIFIC GAS & ELECTRIC COMPANY PO BOX 7442 SAN FRANCISCO, CA 94120 CRMD@pge.com

DENNIS L. BECK JR.
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET, MS 14
SACRAMENTO, CA 95814
dbeck@energy.state.ca.us

Donald J. Brooks CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE AREA 4-A SAN FRANCISCO, CA 94102-3214 dbr@cpuc.ca.gov

DENNIS W. DE CUIR A LAW CORPORATION 2999 DOUGLAS BLVD., SUITE 325 ROSEVILLE, CA 95661 dennis@ddecuir.com

DIANE I. FELLMAN
FPL ENERGY PROJECT MANAGEMENT, INC.
234 VAN NESS AVENUE
SAN FRANCISCO, CA 94102
Diane\_Fellman@fpl.com

DAVID ORTH SAN JOAQUIN VALLEY POWER AUTHORITY 4886 EAST JENSEN AVENUE FRESNO, CA 93725 dorth@krcd.org

KEVIN DUGGAN
CALPINE CORPORATION
3875 HOPYARD ROAD, SUITE 345
PLEASANTON, CA 94588
duggank@calpine.com

Elizabeth Dorman CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE ROOM 4300 SAN FRANCISCO, CA 94102-3214 edd@cpuc.ca.gov

ED LUCHA
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 770000, MAIL CODE B9A
SAN FRANCISCO, CA 94177
ELL5@pge.com

KAREN TERRANOVA ALCANTAR & KAHL, LLP 120 MONTGOMERY STREET, STE 2200 SAN FRANCISCO, CA 94104 filings@a-klaw.com

GRANT A. ROSENBLUM CALIFORNIA ISO 151 BLUE RAVINE ROAD FOLSOM, CA 95630 grosenblum@caiso.com

JOEL M. HVIDSTEN KINDER MORGAN ENERGY FORECASTER 1100 TOWN & COUNTRY ROAD, SUITE 700 ORANGE, CA 92868 hvidstenj@kindermorgan.com DOUG DAVIE
WELLHEAD ELECTRIC COMPANY
650 BERCUT DRIVE, SUITE C
SACRAMENTO, CA 95814
ddavie@wellhead.com

DERIK VINER CONSTELLATION NEWENERGY, INC SOUTH GRAND AVENUE, STE. 3800 LOS ANGELES, CA 90071 derik.viner@constellation.com

WILLIAM F. DIETRICH
DIETRICH LAW
2977 YGNACIO VALLEY ROAD, NO. 613
WALNUT CREEK, CA 94598-3535
dietrichlaw2@earthlink.net

DANIEL W. DOUGLASS DOUGLASS & LIDDELL 21700 OXNARD STREET, SUITE 1030 WOODLAND HILLS, CA 91367 douglass@energyattorney.com

DAVID VIDAVER
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET, MS-20
SACRAMENTO, CA 95814-5512
dvidaver@energy.state.ca.us

EVELYN KAHL ALCANTAR & KAHL, LLP 33 NEW MONTGOMERY STREET, SUITE 1850 SAN FRANCISCO, CA 94015 ek@a-klaw.com

CALIFORNIA ISO 151 BLUE RAVINE ROAD FOLSOM, CA 95630 e-recipient@caiso.com

FRED MOBASHERI ELECTRIC POWER GROUP 201 S. LAKE AVE., SUITE 400 PASADENA, CA 91101 fmobasheri@aol.com

GRETCHEN SCHOTT RELIANT ENERGY, INC. 1000 MAIN STREET HOUSTON, TX 77002 gschott@reliant.com

INGER GOODMAN COMMERCE ENERGY INC 600 ANTON AVE., SUITE 2000 COSTA MESA, CA 92626 igoodman@commerceenergy.com DAVID MORSE
CALIFORNIA AMERICAN WATER CO.
1411 W. COVELL BLVD., STE. 106-292
DAVIS, CA 95616-5934
demorse@omsoft.com

DON P. GARBER SAN DIEGO GAS AND ELECTRIC 101 ASH STREET SAN DIEGO, CA 92101-3017 DGarber@sempra.com

DARYL METZ
CALIFORNIA ENERGY COMMISSION
1516 9TH ST., MS-20
SACRAMENTO, CA 95814
dmetz@energy.state.ca.us

DANIELLE M. SEPERAS CALPINE CORPORATION 1215 K STREET, SUITE 2210 SACRAMENTO, CA 95814 dseperas@calpine.com

ED CHANG
FLYNN RESOURCE CONSULTANTS, INC.
2165 MOONSTONE CIRCLE
EL DORADO HILLS, CA 95762
edchang@flynnrci.com

Elizabeth Stoltzfus
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
AREA 4-A
SAN FRANCISCO, CA 94102-3214
eks@cpuc.ca.gov

VICKI FERGUSON BRAUN & BLAISING, PC 915 L STREET, SUITE 1270 SACRAMENTO, CA 95814 ferguson@braunlegal.com

Farzad Ghazzagh CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE ROOM 4209 SAN FRANCISCO, CA 94102-3214 fxg@cpuc.ca.gov

GRACE LIVINGSTON-NUNLEY
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 770000 MAIL CODE B9A
SAN FRANCISCO, CA 94177
GXL2@pge.com

IRENE K. MOOSEN 53 SANTA YNEZ AVENUE SAN FRANCISCO, CA 94112 irene@igc.org JEANNE ARMSTRONG GOODIN MACBRIDE SQUERI DAY & RITCHIE 505 SANSOME STREET, SUITE 900 SAN FRANCISCO, CA 94111 jarmstrong@goodinmacbride.com

JAMES HENDRY SAN FRANCISCO PUBLIC UTILITIES COMM. 1155 MARKET STREET, FOURTH FLOOR SAN FRANCISCO, CA 94103 jhendry@sfwater.org

JOHN W. LESLIE LUCE, FORWARD, HAMILTON & SCRIPPS, LLP 11988 EL CAMINO REAL, SUITE 200 SAN DIEGO, CA 92130 jleslie@luce.com

JORDAN WHITE
PACIFICORP
825 NE MULTNOMAH STREET, SUITE 1800
PORTLAND, OR 97232
jordan.white@pacificorp.com

JAMES B. WOODRUFF NEXTLIGHT RENEWABLE POWER, LLC 101 CALIFORNIA STREET, STE 2450 SAN FRANCISCO, CA 94111 jwoodruff@nextlightrp.com

KAREN LINDH LINDH & ASSOCIATES 7909 WALERGA ROAD, STE 112, PMB 119 ANTELOPE, CA 95843 karen@klindh.com

KEITH R. MCCREA SUTHERLAND, ASBILL & BRENNAN, LLP 1275 PENNSYLVANIA AVE., N.W. WASHINGTON, DC 20004-2415 keith.mccrea@sablaw.com

KEITH G. JOHNSON 151 BLUE RAVINE ROAD FOLSOM, CA 95682 kjohnson@caiso.com

Laurence Chaset
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 5131
SAN FRANCISCO, CA 94102-3214
lau@cpuc.ca.gov

DONALD C. LIDDELL DOUGLASS & LIDDELL 2928 2ND AVENUE SAN DIEGO, CA 92103 liddell@energyattorney.com JENNIFER CHAMBERLIN STRATEGIC ENERGY, L.L.C. 2633 WELLINGTON CT. CLYDE, CA 94520 jchamberlin@strategicenergy.com

JAMES ROSS RCS, INC. 500 CHESTERFIELD CENTER, SUITE 320 CHESTERFIELD, MO 63017 jimross@r-c-s-inc.com

JAMES MCCLAIN
CALIFORNIA INDEPENDENT SYSTEM
OPERATOR
151 BLUE RAVINE ROAD
FOLSOM, CA 95630
jmcclain@caiso.com

JOY A. WARREN MODESTO IRRIGATION DISTRICT 1231 11TH STREET MODESTO, CA 95354 joyw@mid.org

JAMES WOODWARD
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET MS-20
SACRAMENTO, CA 95814
jwoodwar@energy.state.ca.us

Kevin R. Dudney
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
AREA 4-A
SAN FRANCISCO, CA 94102-3214
kd1@cpuc.ca.gov
KERRY EDEN
CITY OF CORONA DEPT. OF WATER &
POWER
730 CORPORATION YARD WAY
CORONA, CA 92880
kerry.eden@ci.corona.ca.us

GREGORY KLATT DOUGLASS & LIDDELL 21700 OXNARD STREET, SUITE 1030 WOODLAND HILLS, CA 91367-8102 klatt@energyattorney.com

LISA COTTLE WINSTON & STRAWN LLP 101 CALIFORNIA STREET, 39TH FLOOR SAN FRANCISCO, CA 94111 lcottle@winston.com

LINDA Y. SHERIF CALPINE CORPORATION 3875 HOPYARD ROAD, SUITE 345 PLEASANTON, CA 94588 linda.sherif@calpine.com JENNIFER CHAMBERLIN STRATEGIC ENERGY, LLC 2633 WELLINGTON CT. CLYDE, CA 94520 jchamberlin@strategicenergy.com

JEDEDIAH J. GIBSON ELLISON SCHNEIDER & HARRIS LLP 2600 CAPITOL AVENUE, SUITE 400 SACRAMENTO, CA 95816-5905 jjg@eslawfirm.com

JESSICA NELSON
PLUMAS SIERRA RURAL ELECTRIC COOP.
(908)
73233 STATE ROUTE 70
PORTOLA, CA 96122-7069
jnelson@psrec.coop
JOE LAWLOR
PACIFIC GAS & ELECTRIC COMPANY

KAREN LEE SOUTHERN CALIFORNIA EDISON 2244 WALNUT GROVE AVE. PO BOX 800 ROSEMEAD, CA 91770 karen.lee@sce.com

PO BOX 770000 MAIL CODE N12G

SAN FRANCISCO, CA 94177

JTL5@pge.com

KEVIN WOODRUFF WOODRUFF EXPERT SERVICES 1100 K STREET, SUITE 204 SACRAMENTO, CA 95814 kdw@woodruff-expert-services.com

KERRY HATTEVIK NRG ENERGY 829 ARLINGTON BLVD. EL CERRITO, CA 94530 kerry.hattevik@nrgenergy.com

KARLEEN O'CONNOR WINSTON & STRAWN LLP 101 CALIFORNIA STREET 39TH FLR SAN FRANCISCO, CA 94111 koconnor@winston.com

DONALD C. LIDDELL DOUGLASS & LIDDELL 2928 2ND AVENUE SAN DIEGO, CA 92103 liddell@energyattorney.com

LYNN MARSHALL CALIFORNIA ENERGY COMMISSION 1516 NINTH STREET, MS-22 SACRAMENTO, CA 95814 Imarshal@energy.state.ca.us Lana Tran CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE AREA 2-D SAN FRANCISCO, CA 94102-3214 Itt@cpuc.ca.gov

MICHEL P. FLORIO THE UTILITY REFORM NETWORK (TURN) 711 VAN NESS AVENUE, SUITE.350 SAN FRANCISCO, CA 94102 mflorio@turn.org

MICHAEL A. BACKSTROM SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVENUE ROSEMEAD, CA 91770 michael.backstrom@sce.com

Matthew Deal
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 5215
SAN FRANCISCO, CA 94102-3214
mjd@cpuc.ca.gov

MANUEL RAMIREZ CITY AND COUNTY OF SAN FRANCISCO 1155 MARKET STREET, 4TH FLOOR SAN FRANCISCO, CA 94103 mramirez@sfwater.org

MRW & ASSOCIATES, INC. 1814 FRANKLIN STREET, SUITE 720 OAKLAND, CA 94612 mrw@mrwassoc.com

NANCY RADER CALIFORNIA WIND ENERGY ASSOCIATION 2560 NINTH STREET, SUITE 213A BERKELEY, CA 94710 nrader@calwea.org

PHILIPPE AUCLAIR 11 RUSSELL COURT WALNUT CREEK, CA 94598 phil@auclairconsulting.com

PAUL D. MAXWELL
NAVIGANT CONSULTING, INC.
3100 ZINFANDEL DRIVE, SUITE 600
RANCHO CORDOVA, CA 95670-6078
pmaxwell@navigantconsulting.com

REGINA COSTA
THE UTILITY REFORM NETWORK
711 VAN NESS AVENUE, SUITE 350
SAN FRANCISCO, CA 94102
rcosta@turn.org

MARCIE A. MILNER CORAL POWER, LLC 4445 EASTGATE MALL, SUITE 100 SAN DIEGO, CA 92121 marcie.milner@shell.com

MARK FRAZEE
CITY OF ANAHEIM PUBLIC UTILITIES DEPT.
201 S. ANAHEIM BLVD., SUITE 802
ANAHEIM, CA 92805
mfrazee@anaheim.net

MIKE EVANS CORAL POWER, LLC 4445 EASTGATE MALL, SUITE 100 SAN DIEGO, CA 92121 michael.evans@shell.com

MICHAEL MAZUR 3 PHASES RENEWABLES LLC 2100 SEPULVEDA BLVD, SUITE 37 MANHATTAN BEACH, CA 90266 mmazur@3PhasesRenewables.com

MARK HUFFMAN
PACIFIC GAS AND ELECTRIC COMPANY
MC B30A PO BOX 770000
SAN FRANCISCO, CA 94177
mrh2@pge.com

MICHAEL SHAMES UCAN 3100 FIFTH AVENUE, SUITE B SAN DIEGO, CA 92103 mshames@ucan.org

NUO TANG SAN DIEGO GAS & ELECTRIC 8315 CENTURY PARK COURT, CP21D SAN DIEGO, CA 92123 ntang@semprautilities.com

PHILLIP J. MULLER SCD ENERGY SOLUTIONS 436 NOVA ALBION WAY SAN RAFAEL, CA 94903 philm@scdenergy.com

PHILIP D. PETTINGILL CALIFORNIA INDEPENDENT SYSTEM OPERATOR 151 BLUE RAVINE ROAD FOLSOM, CA 95630 ppettingill@caiso.com

RICHARD H. COUNIHAN ENERNOC, INC. 594 HOWARD ST., SUITE 400 SAN FRANCISCO, CA 94105 rcounihan@enernoc.com MARY LYNCH
CONSTELLATION ENERGY COMMODITIES
GRP
2377 GOLD MEDAL WAY, SUITE 100
GOLD RIVER, CA 95670
mary.lynch@constellation.com
MELANIE GILLETTE
ENERNOC, INC.
115 HAZELMERE DRIVE
FOLSOM, CA 95630
mgillette@enernoc.com

MICHAEL JASKE
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET, MS-39
SACRAMENTO, CA 95814
mjaske@energy.state.ca.us

MICHAEL P. ALCANTAR ALCANTAR & KAHL, LLP 33 NEW MONTGOMERY STREET, SUITE 1850 SAN FRANCISCO, CA 94015 mpa@a-klaw.com

MIKE RINGER
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET, MS-20
SACRAMENTO, CA 95814-5512
mringer@energy.state.ca.us

Mark S. Wetzell
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 5009
SAN FRANCISCO, CA 94102-3214
msw@cpuc.ca.gov

PETER T. PEARSON BEAR VALLEY ELECTRIC SERVICE 42020 GARSTIN ROAD BIG BEAR LAKE, CA 92315 peter.pearson@bves.com

Peter Spencer
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
AREA 2-E
SAN FRANCISCO, CA 94102-3214
phs@cpuc.ca.gov

RACHEL MCMAHON CEERT 1100 11TH STREET, SUITE 311 SACRAMENTO, CA 95814 rachel@ceert.org

RICK C. NOGER
PRAXAIR PLAINFIELD, INC.
2711 CENTERVILLE ROAD, SUITE 400
WILMINGTON, DE 19808
rick\_noger@praxair.com

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

RANDY NICHOLSON SAN DIEGO GAS & ELECTRIC 8330 CENTURY PARK COURT, CP32H

SAN DIEGO, CA 92123

rkmoore@gswater.com

RNicholson@Semprautilities.com

REED V. SCHMIDT
BARTLE WELLS ASSOCIATES
1889 ALCATRAZ AVENUE
BERKELEY, CA 94703-2714
rschmidt@bartlewells.com

SARA O'NEILL CONSTELLATION NEWENERGY, INC. ONE MARKET STREET, SPEAR TOWER, 36TH FR. SAN FRANCISCO, CA 94105 sara.oneill@constellation.com

SHAUN HALVERSON
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 770000
SAN FRANCISCO, CA 94177
SEHC@pge.com

STEPHEN HESS EDISON MISSION MARKETING & TRADING INC. 18101 VON KARMAN AVE, STE. 1700 IRVINE, CA 92612-1046

SUSAN M. O'BRIEN MCCARTHY & BERLIN, LLP 100 W. SAN FERNANDO ST., SUITE 501 SAN JOSE, CA 95113 sobrien@mccarthylaw.com

SEBASTIEN CSAPO PG&E PROJECT MGR. PO BOX 770000 SAN FRANCISCO, CA 94177 sscb@pge.com

shess@edisonmission.com

SUE MARA RTO ADVISORS, LLC. 164 SPRINGDALE WAY REDWOOD CITY, CA 94062 sue.mara@rtoadvisors.com

TOM CORR SEMPRA GLOBAL 101 ASH STREET, 8TH FL. SAN DIEGO, CA 92101-3017 tcorr@sempraglobal.com Robert L. Strauss CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE AREA 4-A SAN FRANCISCO, CA 94102-3214

rls@cpuc.ca.gov ROGER VAN HOY

MODESTO IRRIGATION DISTRICT 1231 11TH STREET MODESTO, CA 95354 rogerv@mid.org

REID A. WINTHROP
PILOT POWER GROUP, INC.
8910 UNIVERSITY CENTER LANE, SUITE 520
SAN DIEGO, CA 92122
rwinthrop@pilotpowergroup.com

SUSIE BERLIN MC CARTHY & BERLIN, LLP 100 W SAN FERNANDO ST., STE 501 SAN JOSE, CA 95113 sberlin@mccarthylaw.com

STACIE FORD CALIFORNIA ISO 151 BLUE RAVINE ROAD FOLSOM, CA 95630 sford@caiso.com

SHUCHENG LIU CALIF. INDEPENDENT SYSTEM OPERATOR 151 BLUE REVINE ROAD FOLSOM, CA 95630 SLiu@caiso.com

STEVE RAHON SAN DIEGO GAS & ELECTRIC COMPANY (902) 8330 CENTURY PARK COURT, CP32C SAN DIEGO, CA 92123-1548 srahon@semprautilities.com

SARA STECK MYERS LAW OFFICES OF SARA STECK MYERS 122 28TH AVE. SAN FRANCISCO, CA 94121 ssmyers@att.net

TOM JARMAN
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 770000, MAIL CODE B9A
SAN FRANCISCO, CA 94105-1814
taj8@pge.com

THOMAS R. DARTON
PILOT POWER SERVICES, INC.
8910 UNIVERSITY CENTER LANE, SUITE 520
SAN DIEGO, CA 92122
tdarton@pilotpowergroup.com

JAMES R. METTLING BLUE POINT ENERGY 1190 SUNCAST LANE, STE 2 EL DORADO HILLS, CA 95762 rmettling@bluepointenergy.com

RONALD M CERNIGLIA DIRECT ENERGY SERVICES, LLC 40 COLUMBINE DRIVE GLENMONT, NY 12077-2966 ron.cerniglia@directenergy.com

SAEED FARROKHPAY
FEDERAL ENERGY REGULATORY
COMMISSION
110 BLUE RAVINE RD., SUITE 107
FOLSOM, CA 95630
saeed.farrokhpay@ferc.gov

SEAN P. BEATTY MIRANT CALIFORNIA, LLC PO BOX 192 PITTSBURG, CA 94565 sean.beatty@mirant.com

SHAWN COX
KINDER MORGAN ENERGY FORECASTER
1100 TOWN & COUNTRY ROAD, SUITE 700
ORANGE, CA 92868
shawn\_cox@kindermorgan.com

SEEMA SRINIVASAN ALCANTAR & KAHL, LLP 33 NEW MONTGOMERY STREET, SUITE 1850 SAN FRANCISCO, CA 94105 sls@a-klaw.com

SANDRA ROVETTI SAN FRANCISCO PUC 1155 MARKET STREET, 4TH FLOOR SAN FRANCISCO, CA 94103 srovetti@sfwater.org

STEVEN KELLY INDEPENDENT ENERGY PRODUCERS ASSOCIATION 1215 K STREET, SUITE 900 SACRAMENTO, CA 95814 steven@iepa.com

TRENT CARLSON RELIANT ENERGY, INC. 1000 MAIN STREET HOUSTON, TX 77002 tcarlson@reliant.com

THERESA MUELLER
CITY AND COUNTY OF SAN FRANCISCO
CITY HALL, ROOM 234
SAN FRANCISCO, CA 94102
theresa.mueller@sfgov.org

R. THOMAS BEACH CROSSBORDER ENERGY 2560 NINTH STREET, SUITE 213A BERKELEY, CA 94710-2557 tomb@crossborderenergy.com

THEODORE ROBERTS SEMPRA GLOBAL 101 ASH STREET, HQ 12B SAN DIEGO, CA 92101-3017 troberts@sempra.com

WILLIAM H. BOOTH LAW OFFICE OF WILLIAM H. BOOTH 67 CARR DRIVE MORAGA, CA 94556 wbooth@booth-law.com

ARAM SHUMAVON
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 4300
SAN FRANCISCO, CA 94102-3214
sap@cpuc.ca.gov

STRATEGIC ENERGY LLC 2030 MAIN STREET, SUITE 1030 IRVINE, CA 92614

MOUNTAIN UTILITIES PO BOX 205 KIRKWOOD, CA 95646 TRACEY L. DRABANT
BEAR VALLEY ELECTRIC SERVICE
PO BOX 1547
BIG BEAR LAKE, CA 92315
traceydrabant@bves.com

Valerie Beck

CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE AREA 2-D SAN FRANCISCO, CA 94102-3214 vjb@cpuc.ca.gov JUSTIN C. WYNNE BRAUN BLAISING MCLAUGHLIN, P.C. 915 L STREET, SUITE 1270 SACRAMENTO, CA 95814 wynne@braunlegal.com

DIANA ANNUNZIATO AMERICAN UTILITY NETWORK 10705 DEER CANYON DRIVE ALTA LOMA, CA 91737

PAUL OSHIDERI AOL UTILITY CORP. 12752 BARRETT LANE SANTA ANA, CA 92705

ROB GRAMLICH AMERICAN WIND ENERGY ASSOCIATION 1101 14TH STREET NW, 12TH FLOOR WASHINGTON, DC 20005 TRACY MARTIN
CITY OF CORONA, DEPT OF WATER &
POWER
755 CORPORATION YARD WAY
CORONA, CA 92880
tracy.martin@ci.corona.ca.us
VIDHYA PRABHAKARAN
GOODIN MACBRIDE SQUERI DAY &
LAMPREY LLP
505 SANSOME STREET, SUITE 900
SAN FRANCISCO, CA 94111
vprabhakaran@goodinmacbride.com

CINDY MORROW VALLEY ELECTRIC ASSOCIATION 800 E. HWY 372 PAHRUMP, NV 89048

DAVID J. COYLE ANZA ELECTRIC CO-OPERATIVE, INC (909) PO BOX 391908 / 58470 HWY 371 ANZA, CA 92539-1909

LIBERTY POWER HOLDINGS LLC (1371) 131-A STONEY CIRCLE 500 SANTA ROSA, CA 95401

3 PHASES RENEWABLES LLC 2100 SEPULVEDA, SUITE 37 MANHATTAN BEACH, CA 90266