BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies and Protocols for Demand Response, Load Impact Estimates, Cost-Effectiveness Methodologies, Megawatt Goals and Alignment with California Independent System Operator Market Design Protocols	Rulemaking R.07-01-041 (January 25, 2007)

REPLY COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR RE ADDITIONAL COST-EFFECTIVENESS ISSUES FOR PHASE 1

I. INTRODUCTION

ALJ's Hecht's Ruling Setting Forth Additional Comment Period on Cost Effectiveness Issues, dated October 15, 2007, set forth 18 questions designed to draw information that would be helpful in developing a final cost-effectiveness methodology for Phase 1 of the proceeding. The California Independent System Operator Corporation ("CAISO") provided responses to certain of the questions in its response, while other parties submitted a proposed cost-effectiveness approach in their filing, *Joint Comments of California Large Energy Consumers Association, Comverge, Inc., Division of Ratepayer Advocates, EnergyConnect, Inc., EnerNOC, Inc., Ice Energy, Inc., Pacific Gas and Electric Company (U 39-M), San Diego Gas & Electric Company (U 902-E), Southern California Edison Company (U 338-E) and the Utility Reform Network Recommending a Demand Response Cost Effectiveness Evaluation Framework* (hereinafter, the "Joint Comments").[1] The California Independent System Operator Corporation ("CAISO") focuses its reply on the Joint Comments.

[1] The CAISO also notes that Kinder Morgan also filed comments in response to the ruling, dated and filed November 19, 2007

The CAISO acknowledges the effort that the joint parties undertook to put together the Joint Comments and the Framework Proposal, and appreciates their ability to reach consensus on a number of challenging issues. The CAISO believes that the Framework Proposal is largely acceptable and should be adopted in large part by the Commission, with certain alterations, which the CAISO discusses in these comments. In this regard, the CAISO raises, for the Commission's consideration, the following concerns and identifies certain areas needing further clarification. We correlate our discussion points to the proposal, "*DR Cost Effectiveness Evaluation Framework Proposal,*" ("Framework Proposal") attached as Attachment A to the Joint Comments.

II. DISCUSSION

Framework Proposal, Section G *Sources of Input Data*

> *The DR Cost Effectiveness Evaluation Framework proposes that each utility will use its most recent, up-to-date estimates of the future annual market value of generation capacity, future electricity prices, as well as the utility's marginal T&D cost(s) and line loss rates."*

Given time constraints, the CAISO recommends that, only for this first demand response program cycle period, 2009-2011, the Commission use utility-specific, stated values for the cost components [i.e., future market values for: generation capacity and electricity prices] that go into determining cost effectiveness for avoided costs of generation. The Commission should be clear, in its decision, that reliance on utility-specific, stated avoided cost values will be permissible only for the interim (i.e. the first program cycle), until a more suitable and transparent process and/or mechanism can be developed.

The CAISO recommends this approach because of the concern that, in the near term, there is no more time to meaningfully evaluate underlying utility data that would be presented as the basis for critical cost effectiveness evaluation metrics. The CAISO would expect that the data used to come up with these estimates would be voluminous (of necessity, in order to be representative and meaningful), and that there would be some lack of transparency in the final estimates and underlying information, given utility concerns for confidentiality and potential inappropriate disclosure of proprietary, market sensitive information.

Turning to future program cycles, beginning in 2012-2014, the CAISO strongly encourages the Commission to work with interested parties through proceeding R.04-04-025[2], or other suitable venue, to formulate and apply, by year 2011, a methodology and agreed-upon assumptions necessary to derive appropriate avoided cost values, based on information publicly available for the 2012-2014 program cycle and applied thereafter, or until a potential transparent capacity market mechanism develops.

<u>Framework Proposal, Subsection B.1 re: *Analytical Approach*</u>

1. *Cost Effectiveness will be evaluated based on a perspective in which DR programs reduce the need for supply-side resources, and are assigned value based on their ability to meet resource adequacy requirements or their ability to reduce system peak loads, …*

The CAISO generally agrees with the approach laid out in Subsection B.1 of the Framework Proposal but would suggest that geographic location be included as a discrete factor in the cost-effectiveness analysis i.e., the added value that DR can provide if it is "sited" and dispatchable within one of the CAISO identified transmission constrained load pockets.[3]

---

[2] R.04-04-025 [[OIR] to Promote Consistency in Methodology and Input Assumptions in Commission Applications of Short Run and Long Run Avoided Costs, Including Pricing for Qualified Facilities].
[3] For further information about transmission constrained local areas, please refer to the CAISO's 2008 Local Capacity Technical Analysis Study found at: http://www.caiso.com/1bb5/1bb5ed3d46430.pdf

Local capacity is a significant component of the CPUC's overall resource adequacy program, and DR resources that can appropriately provide local capacity, and which are counted as local capacity under the CPUC's RA counting rules, should qualify for the additional benefit and value. Attributing local capacity benefit to appropriate DR resources is good policy, as it helps to encourage development of demand response resources in locations where they are most needed, it builds on DR's modularity and flexibility strengths, and it can provide a direct and tangible reliability benefit to the CAISO.

For the above reasons, the CAISO believes it is worth the Commission's time and effort to further discuss and resolve with the parties how geographic location can be accounted for in the cost-effectiveness methodology. We propose that the IOUs (or other combination of the "joint parties"/"consensus parties") prepare and present a straw proposal for how to value the geographic premium (i.e. the local capacity benefit over system benefit). In the CAISO's initial comments on Cost-effectiveness, the CAISO mentioned an approach that was originally proposed by the IOUs in the CPUC's resource adequacy proceeding (R.05-12-013), which is termed a "Transfer Payment Proposal," from which a proxy value can be effectively derived for the premium value of local capacity over and above system capacity.[4] This Transfer Payment concept could be used as a starting point for discussion and consideration of this important issue.

Framework Proposal Subsection C.1 re: *Avoided Generation Capacity Cost*]

> 1. *The generation capacity costs avoided by a DR program will be based on the annual market price ($/kW-year) of the capacity of a new combustion turbine (CT)… and reduced to reflect expected "gross margins" earned by selling energy ("CT cost"). … The adjusted CT cost will be further adjusted to reflect the ability (if any) of DR programs to avoid procuring CPUC-required reserve margin capacity to reduce line losses.*

[4] See *Response of the CAISO to ALJ Ruling Setting Forth Additional Issues for Further Comment on Cost Effectiveness*, R. 07-01-041, November 19, 2007, at p. 5.

While the CAISO appreciates that the joint parties are proposing a "framework" rather than a fully developed proposal, the CAISO admits to having several point of confusion regarding the above provision.

First, the CAISO does not have a full understanding of what the "proxy CT" is supposed to be. What will its configuration be? For example, is the proxy CT an LM6000 or a GE Frame 7? What about the other underlying attributes, such as the heat rate of the resource? What is the process for vetting and deciding on the properties of the proxy resource (or resources, if there is a different one for each IOU)?

The Framework Proposal recommends use of "utility specific data" and also talks about an apparent standard CT proxy. These concepts seem contradictory or, at minimum, indicate that the parties need to further clarify the Framework proposal on these issues. For instance, would the utilities use a single standard CT as a proxy, or would each utility "construct" a model CT "best suited" to its service territory? What CT attributes or cost components will be a standard value that is the same for all utilities and what CT attributes or cost components will be utility specific?

Finally, the CAISO is unclear as to whether the gross margin revenue will include not only energy revenues, but ancillary service revenues (i.e. non-spinning reserve) as well, given that a CT is generally capable of offering non-spinning reserves.[5]

<u>Framework Proposal, Section D [Avoided Energy Costs]</u>

> 1. *For both event-based and non-event based DR programs, the value of avoided electricity generation may be based on <u>wholesale energy prices</u> averaged over the highest-price hours of an hourly price forecast. …The method that is used to estimate avoided energy costs will be consistent*

[5] We note that, the Framework Proposal does not add ancillary services as a component of value in determining DR <u>benefits</u>, which is the "flip side" of costs [proxy CT costs will be offset by proxy CT revenues to arrive at the gross margin]. In this regard, Subsection F.2 states that "[a]t present, utilities will not make any adjustment (upward or downward) to account for any difference in the ability of a CT and DR to contribute ancillary service value." (Framework Proposal at p.5.)

> *with the method that is used to determine the CT's "gross margins", as described in Section C. ...*(emphasis added.)

The CAISO supports tying the determination of "avoided energy costs" to the CAISO's wholesale electricity market prices because this further supports the notion of bridging the gap between retail and wholesale markets. Moreover, given that the 2009-2011 DR program cycle will fall within the CAISO's MRTU market design (scheduled to commence March 31, 2008), the Commission should seek clarification from the parties as to which set of wholesale energy prices (i.e. which markets under MRTU) it is that the joint parties seek to tie their avoided costs, i.e., do they mean the Day-Ahead ("DA") or the Real-Time ("RT") Market Clearing Prices ("MCP") or both? If both, then when and how would the DA and/or RT MCP be applied? And to what type of DR programs? Moreover, the election of DA price versus RT price, versus both, potentially impacts the basis for determining gross margins of the proxy CT.

Because, under the Framework Proposal, so much of the cost-effectiveness analysis for DR programs is fundamentally tied to the concepts of avoided energy costs and avoided capacity costs, the Commission should ensure it that all parties are clear on what the cost components are and how they form the basis of the costs.

<u>Framework Proposal Subsection F.1 re: *Other Benefits*</u>

> *1. Both the new CT used to establish generation capacity value and DR programs are expected to provide ancillary service value. To the extent a non-event-based DR program reduces peak demand and energy requirements, it may reduce the need for procuring ancillary services.*

Ancillary Services (A/S) are critical to the reliable operation of the CAISO-controlled grid. A/S requirements and standards are based on WECC Minimum Operating Reliability Criteria (MORC), NERC and CAISO Controlled Grid reliability requirements.[6] The amount of ancillary services capacity the CAISO must procure to meet the applicable reliability standards is based on the CAISO's forecast of demand.[7] On a daily basis, the CAISO's intent is to procure 100% of its A/S requirements in the Day-ahead market.

The CAISO does not adjust its Day-Ahead load forecast, and therefore, its ancillary service requirements, based upon anticipated "event-based" demand response.[8] The CAISO will follow this same approach under MRTU.[9] Therefore, no intrinsic A/S value can be assigned to demand response resources unless such DR resources are appropriately configured to sell A/S capacity to the CAISO.

However, both generating resources and non-generating resources (like Participating Load), that are appropriately configured and can meet the Ancillary Service requirements, as specified in the CAISO Tariff, comprise the resources that the CAISO is able and willing to procure from the market to meet its Ancillary Service requirements. Under the WECC reliability standards as currently structured, non-generating resources can only provide one type of A/S: non-spinning reserves. In many cases, a simple-cycle combustion Turbine ("CT") can offer non-spinning reserve, and, therefore, demand response resources do not provide incremental value over and above a CT for the provision of non-spinning reserves.

However, in the near future, it is anticipated that the WECC standards will change, and that these changes will provide the opportunity for non-generation resources,

---

[6] Determination of Ancillary Service Standards can be found in CAISO Tariff Section 8.2.1

[7] A commonly misunderstood fact about load forecasts is that the CAISO does not use load forecasts produced by external entities, like the utilities. The CAISO relies on its own, very sophisticated forecasts of load within the CAISO control area.

[8] The CAISO has agreed to a process and procedure to adjust its Residual Unit Commitment procurement target under its MRTU market design. For more information, see documents under the DR Participation Under MRTU Release 1 Working Group and the associated Draft User Guide found at: http://www.caiso.com/1893/1893e350393b0.html

[9] The CAISO is open to discussing this issue further with stakeholders, to determine if it is appropriate to consider price-responsive DR as an adjustment to the CAISO load forecast, and, if so, how and what operational load impact protocols should apply, and what processes and procedures would need to be developed to allow for such an adjustment.

such as DR, to provide other types of A/S, thus expanding the role for DR in A/S markets. The anticipated WECC standards change should allow DR resources to provide such other types Ancillary Services, as spinning reserves, regulation, and possibly new capacity reserve products, such as frequency responsive reserves.

If enabled through revised WECC standards, incremental value (above a CT) could be captured by demand response resources that are appropriately configured to offer spinning reserves, frequency responsive reserves and/or regulation to the CAISO since a CT, as a proxy resource, is typically not configured or operated in a manner to offer these reliability services to the CASIO. Therefore, at this point, no assumptions should be made about expected ancillary service value from demand response resources that are not configured to explicitly offer such services to the CAISO.

The CAISO agrees that non-event based DR programs may reduce peak demand by changing customer behavior, but such programs may also just shift usage and increase non-peak demand. To the degree that the peak demand is reduced due to the persistence of customer behavior, over time, the CAISO's load forecast algorithms will capture this change, and these changes will be reflected in the CAISO's procurement of its A/S requirements in those peak hours. However, if the load is merely "shifting", then there is the possibility that the overall hourly A/S requirements will similarly shift, with no significant overall change in the total A/S capacity procured over a 24-hour period. Furthermore, if overall energy consumption is reduced, due to customer behavior changes as a result of the customer being on one non-event based tariff rather than another[10], then it is unclear to the CAISO whether these savings are really "demand response" or are savings more characterized as energy efficiency.

[10] In contract, the CAISO considers Critical Peak Pricing to be an event-based tariff that provides demand response.

If the Commission were to try to establish a policy that imputes an incremental A/S value for non-event based DR, then the A/S value would have to be based on a baseline of what the load forecast and, therefore, A/S procurement, would have been in each hour, had it not been for the "energy savings" and/or "load shift" (a CAISO-avoided cost of A/S). The CAISO does not recommend that the Commission expend time or effort to determine whether there is A/S value for non-event based DR.

III. CONCLUSION

In conclusion, the CAISO recommends the following alterations and/or refinements to the joint parties' Framework Proposal, for the Commission's consideration:

- Utility-specific stated avoided-cost values should be used only for the 2009-2011 DR program cycle;
- Framework Proposal Subsection B.1 should be modified to include a geographic location factor in the cost-effectiveness analysis i.e., the added value that DR can provide if it is "sited" and dispatchable within a CAISO-designated local capacity area.
- Framework Proposal Subsection C.1 should be expanded upon, to contain a more detailed discussion of the concept of a Proxy CT and the components of "gross margin reserve."
- Subsection F.1 should be modified, to state that DR program resources are unable to provide incremental value over and above a CT for non-spinning reserves, which is currently the only ancillary reserve service/product that appropriately configured DR resources (i.e. Participating Loads) are eligible to provide in the CAISO control area, and that, accordingly, appropriately configured DR resources will be given ancillary service

incremental value, subject to later revision, in light of anticipated WECC changes standards for ancillary services.

Dated: December 7, 2007

Respectfully submitted,

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

/s/ Baldassaro "Bill" Di Capo

Baldassaro "Bill" Di Capo

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
151 Blue Ravine Road
Folsom, CA 95630
Tel. (916) 608-7157
Fax (916) 608-7222
E-mail:bdicapo@caiso.com

CERTIFICATE OF SERVICE

I hereby certify that on December 7, 2007. I served on the parties listed on the Service List for Proceeding R.07-01-041, by electronic mail, a copy of the foregoing Reply Comments of the California Independent System Operator Re: Additional Cost-Effectiveness Issues for Phase 1.

Executed on December 7, 2007 at Folsom, California

--/s/-- Melissa Hicks

Melissa Hicks,
An employee of the California Independent System Operator

BROWN ANDREW B.
ELLISON, SCHNEIDER & HARRIS, LLP
2015 H STREET
SACRAMENTO, CA 95814
abb@eslawfirm.com

BONDS ASHLEE M.
THELEN REID BROWN RAYSMAN&STEINER LLP
101 SECOND STREET
SUITE 1800
SAN FRANCISCO, CA 94105
abonds@thelen.com

BRIONES ADAM
THE GREENLINING INSTITUTE
1918 UNIVERSITY AVENUE, 2ND FLOOR
BERKELEY, CA 94704
adamb@greenlining.org

GARTNER ALAN
ENERGYCONNECT, INC.
51 E. CAMPBELL AVEUNE, 145
CAMPBELL, CA 95008
agartner@energyconnectinc.com

Campbell Andrew
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 5203
SAN FRANCISCO, CA 94102-3214
agc@cpuc.ca.gov

FARUQUI AHMAD
THE BRATTLE GROUP
353 SACRAMENTO STREET, SUITE 1140
SAN FRANCISCO, CA 94111
ahmad.faruqui@brattle.com

HAUBENSTOCK ARTHUR
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET, B30A
SAN FRANCISCO, CA 94105
alhj@pge.com

AMES DOUGLAS A.
TRANSPHASE SYSTEMS, INC.
2117 MAIN ST., 1091
HUNTINGTON BEACH, CA 92648-2463
ames_doug@yahoo.com

HORWATT ANDREA
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVENUE
ROSEMEAD, CA 91770
andrea.horwatt@sce.com

BARRETT LARRY B.
CONSULTING ASSOCIATES, INC.
PO BOX 60429
COLORADO SPRINGS, CO 80960
barrettlarry@comcast.net

BOICE BARB
4309 NORWOOD AVENUE, APT. 160
SACRAMENTO, CA 95838
bboice02@yahoo.com

DI CAPO, ESQ. BALDASSARO
CALIFORNIA ISO
151 BLUE RAVINE ROAD
LEGAL AND REGULATORY DEPARTMENT
FOLSOM, CA 95630
bdicapo@caiso.com

BALDASSARO DI CAPO
CALIFORNIA ISO
151 BLUE RAVINE ROAD
FOLSOM, CA 95630
bdicapo@caiso.com

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

BARKOVICH BARBARA R.
BARKOVICH & YAP, INC.
44810 ROSEWOOD TERRACE
MENDOCINO, CA 95460
brbarkovich@earthlink.net

Kaneshiro Bruce
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
AREA 4-A
SAN FRANCISCO, CA 94102-3214
bsk@cpuc.ca.gov

SILSBEE CARL
SOUTHERN CALIFORNIA EDISON
2244 WALNUT GROVE AVENUE
GO1, RP&A
ROSEMEAD, CA 91770
carl.silsbee@sce.com

ADMINISTRATION CASE
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVENUE
LAW DEPARTMENT
ROSEMEAD, CA 91770
Case.Admin@sce.com

BASKETTE CARMEN
ENERNOC, INC.
594 HOWARD STREET, SUITE 400
SAN FRANCISCO, CA 94105
cbaskette@enernoc.com

Clay Christopher
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 5138
SAN FRANCISCO, CA 94102-3214
cec@cpuc.ca.gov

CENTRAL FILES
SAN DIEGO GAS & ELECTRIC CO.
8330 CENTURY PARK COURT-CP31E
SAN DIEGO, CA 92123-1530
CentralFiles@semprautilities.com

PENA CARLOS F.
SEMPRA ENERGY LAW DEPARTMENT
101 ASH STREET HQ12
SAN DIEGO, CA 92101
cfpena@sempra.com

KING CHRIS
EMETER CORPORATION
ONE TWIN DOLPHIN DRIVE
REDWOOD CITY, CA 94065
chris@emeter.com

BERNIER CLARK
RLW ANALYTICS
1055 BROADWAY, SUITE G
SONOMA, CA 95476
clark.bernier@rlw.com

PIERCE CLARK E.
LANDIS & GYR
246 WINDING WAY
STRATFORD, NJ 8084
clark.pierce@us.landisgyr.com

LAUFENBERG CLARE
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET, MS 46
SACRAMENTO, CA 95814
claufenb@energy.state.ca.us

PRIJYANONDA JOE
GLOBAL ENERGY PARTNERS, LLC
3569 MT. DIABLE BLVD., SUITE 200
LAFAYETTE, CA 94549
cpjoe@gepllc.com

FILE ROOM LAW DEPARTMENT
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 7442
SAN FRANCISCO, CA 94120-7442
cpuccases@pge.com

MIDDLEKAUFF CHARLES
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET
SAN FRANCISCO, CA 94105
crmd@pge.com

Villarreal Christopher R
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 5119
SAN FRANCISCO, CA 94102-3214
crv@cpuc.ca.gov

HANNA DAVE
ITRON INC
11236 EL CAMINO REAL
SAN DEIGO, CA 92130-2650
Dave.Hanna@itron.com

REED DAVID
SOUTHERN CALIFORNIA EDISON
6060 IRWINDALE AVE., STE. J
IRWINDALE, CA 91702
david.reed@sce.com

NEMTZOW DAVID
1254 9TH STREET, NO. 6
SANTA MONICA, CA 90401
david@nemtzow.com

BARKER DAVID
SAN DIEGO GAS & ELECTRIC COMPANY
8306 CENTURY PARK COURT
SAN DIEGO, CA 92123
dbarker@semprautilities.com

ENGEL DANIEL C.
FREEMAN, SULLIVAN & CO.
101 MONTGOMERY STREET, 15TH FLOOR
SAN FRANCISCO, CA 94104
dcengel@fscgroup.com

MORSE DAVID
1411 W, COVELL BLVD., SUITE 106-292
DAVIS, CA 95616-5934
demorse@omsoft.com

HUNGERFORD DAVID
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET, MS-22
DEMAND ANALYSIS OFFICE
SACRAMENTO, CA 95814
dhungerf@energy.state.ca.us

Lam Dorris
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
AREA 4-A
SAN FRANCISCO, CA 94102-3214
dnl@cpuc.ca.gov

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

VIOLETTE DANIEL M.
SUMMIT BLUE CONSULTING
1722 14TH STREET, SUITE 230
BOULDER, CO 80302
dviolette@summitblue.com

WOOD DON
PACIFIC ENERGY POLICY CENTER
4539 LEE AVENUE
LA MESA, CA 91941
dwood8@cox.net

WYLIE, PE DAVID M.
ASW ENGINEERING
2512 CHAMBERS ROAD, SUITE 103
TUSTIN, CA 92780
dwylie@aswengineering.com

VINE EDWARD
LAWRENCE BERKELEY NATIONAL LABORATORY
BUILDING 90R4000
BERKELEY, CA 94720
elvine@lbl.gov

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

WOYCHIK ERIC C.
STRATEGY INTEGRATION LLC
9901 CALODEN LANE
OAKLAND, CA 94605
eric@strategyi.com

KURZ EDWARD V.
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET
SAN FRANCISCO, CA 94105
evk1@pge.com

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

GARWACRD RUSS
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE
ROSEMEAD, CA 91770
garwacrd@sce.com

SCHILBERG GAYATRI
JBS ENERGY
311 D STREET, SUITE A
WEST SACRAMENTO, CA 95605
gayatri@jbsenergy.com

AYRES GEOFF
THE ENERGY COALITION
15615 ALTON PARKWAY, SUITE 245
IRVINE, CA 92618
gayres@energycoalition.org

SMITH GLEN E.
ENERGY CURTAILMENT SPECIALISTS, INC.
3735 GENESEE STREET
BUFFALO, NY 14225
gesmith@ecsny.com

BARBOSE GALEN
LAWRENCE BERKELEY NATIONAL LAB
1 CYCLOTRON RD.
MS 90-4000
BERKELEY, CA 94720
GLBarbose@LBL.gov

HVIDSTEN JOEL M.
KINDER MORGAN ENERGY PARTNERS
1100 TOWN & COUNTRY ROAD, SUITE 700
ORANGE, CA 92868
hvidstenj@kindermorgan.com

BOOTHE JAMES
THE ENERGY COALITION
9 REBELO LANE
NOVATO, CA 94947
ja_boothe@yahoo.com

COMBS JANET
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVENUE
ROSEMEAD, CA 91770
janet.combs@sce.com

REID L. JAN
COAST ECONOMIC CONSULTING
3185 GROSS ROAD
SANTA CRUZ, CA 95062
janreid@coastecon.com

BRADLEY JUSTIN
SILICON VALLEY LEADERSHIP GROUP
224 AIRPORT PARKWAY, SUITE 620
SAN JOSE, CA 95110
jbradley@svlg.net

LUBOFF JAY
JAY LUBOFF CONSULTING SERVICES
7 ANNIE LANE
MILL VALLEY, CA 94941
jcluboff@lmi.net

NAHIGIAN JEFF
JBS ENERGY, INC.
311 D STREET
WEST SACRAMENTO, CA 95605
jeff@jbsenergy.com

GRAY JEFFREY P.
DAVIS WRIGHT TREMAINE, LLP
505 MONTGOMERY STREET, SUITE 800
SAN FRANCISCO, CA 94111-6533
jeffgray@dwt.com

ELLIS JACK
RESERO CONSULTING
490 RAQUEL COURT
LOS ALTOS, CA 94022
jellis@resero.com

GOODIN JOHN
CALIFORNIA ISO
151 BLUE RAVINE RD.
MARKET & PRODUCT DEVELOPMENT
FOLSOM, CA 95630
jgoodin@caiso.com

Hecht Jessica T.
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 5113
SAN FRANCISCO, CA 94102-3214
jhe@cpuc.ca.gov

Salmi Klotz Jason R.
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
AREA 4-A
SAN FRANCISCO, CA 94102-3214
jk1@cpuc.ca.gov

LAUN JOHN
APOGEE INTERACTIVE, INC.
1220 ROSECRANS ST., SUITE 308
SAN DIEGO, CA 92106
jlaun@apogee.net

Como Joe
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 5033
SAN FRANCISCO, CA 94102-3214
joc@cpuc.ca.gov

LONDON JODY S.
JODY LONDON CONSULTING
PO BOX 3629
OAKLAND, CA 94609
jody_london_consulting@earthlink.net

LEUNG JOYCE
SOUTHERN CALIFORNIA EDISON COMPANY
6060 J IRWINDALE AVE.
IRWINDALE, CA 91702
joyce.leung@sce.com

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

SHIELDS JEFF
SOUTH SAN JOAQUIN IRRIGATION DISTRICT
11011 E. HWY 120
MANTECA, CA 95336
jshields@ssjid.com

WEIL JAMES
AGLET CONSUMER ALLIANCE
PO BOX 37
COOL, CA 95614
jweil@aglet.org

WU JOSEPHINE
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 770000, MAIL CODE B9A
SAN FRANCISCO, CA 94177
jwwd@pge.com

YAMAGATA JOY C.
SAN DIEGO GAS & ELECTRIC/SOCALGAS
8330 CENTURY PARK COURT
SAN DIEGO, CA 91910
jyamagata@semprautilities.com

Morgenstern Joy
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
AREA 4-A
SAN FRANCISCO, CA 94102-3214
jym@cpuc.ca.gov

LINDH KAREN
LINDH & ASSOCIATES
7909 WALERGA ROAD, NO. 112, PMB 119
ANTELOPE, CA 95843
karen@klindh.com

POON KA-WING MAGGIE
2244 WALNUT GROVE AVE.
GO1, QUAD 2B
ROSEMEAD, CA 91770
ka-wing.poon@sce.com

COONEY KEVIN
SUMMIT BLUE CORPORATION
1722 14TH STREET
BOULDER, CO 80302
kcooney@summitblue.com

ABREN KEN
245 MARKET STREET
SAN FRANCISCO, CA 94105
kea3@pge.com

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

KLATT GREGORY
DOUGLASS & LIDDELL
411 E. HUNTINGTON DRIVE, STE. 107-356
ARCADIA, CA 91006
klatt@energyattorney.com

MILLS KAREN N.
CALIFORNIA FARM BUREAU FEDERATION
2300 RIVER PLAZA DRIVE
SACRAMENTO, CA 95833
kmills@cfbf.com

SMITH KATHRYN
SAN DIEGO GAS AND ELECTRIC COMPANY
8306 CENTURY PARK COURT
SAN DIEGO, CA 92123
ksmith2@semprautilities.com

BROWN LYNNE
CALIFORNIANS FOR RENEWABLE ENERGY, INC.
24 HARBOR ROAD
SAN FRANCISCO, CA 94124
l_brown369@yahoo.com

COPE LARRY R.
SOUTHERN CALIFORNIA EDISON
PO BOX 800 2244 WALNUT GROVE AVENUE
ROSEMEAD, CA 91770
larry.cope@sce.com

TOUGAS LUKE
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET, B9A
SAN FRANCISCO, CA 94105
LATc@pge.com

TAKEUCHI LISA
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET
SAN FRANCISCO, CA 94105
latd@pge.com

ROOKE LAURA
PORTLAND GENERAL ELECTRIC
121 SW SALMON ST.,
PORTLAND, OR 97204
laura.rooke@pgn.com

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

Salvacion Lisa-Marie
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 4107
SAN FRANCISCO, CA 94102-3214
lms@cpuc.ca.gov

WILLOUGHBY LESLIE
SAN DIEGO GAS AND ELECTRIC COMPANY
8305 CENTURY PARK CT.
SAN DIEGO, CA 92123
lwilloughby@semprautilities.com

HAWIGER MARCEL
THE UTILITY REFORM NETWORK
711 VAN NESS AVENUE, SUITE 350
SAN FRANCISCO, CA 94102
marcel@turn.org

BROWN MARIAN
SOUTHERN CALIFORNIA EDISON
6040A IRWINDALE AVE.
IRWINDALE, CA 91702
marian.brown@sce.com

MARTINEZ MARK S.
SOUTHERN CALIFORNIA EDISON
6060J IRWINDALE AVE., SUITE J
IRWINDALE, CA 91702
mark.s.martinez@sce.com

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

MESSENGER MIKE
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET
SACRAMENTO, CA 95814
mmesseng@energy.state.ca.us

PIENIAZEK B. MARIE
ENERGY CURTAILMENT SPECIALIST, INC.
650 FRANKLIN ST., SUITE 202
SCHENECTADY, NY 12305
mpieniazek@ecsny.com

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

SHERIDAN MARGARET
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET, MS-22
DEMAND ANALYSIS OFFICE
SACRAMENTO, CA 95814
msherida@energy.state.ca.us

SHERIFF NORA
ALCANTAR & KAHL, LLP
120 MONTGOMERY STREET, SUITE 2200
SAN FRANCISCO, CA 94104
nes@a-klaw.com

PLANSON NICK
ANCILLARY SERVICES COALITION
547 APOLLO STREET, SUITE F
BREA, CA 92821
nplanson@ascoalition.com

KARR PAUL
TRILLIANT NETWORKS, INC.
1100 ISLAND DRIVE, SUITE 103
REDWOOD CITY, CA 94065
Paul.karr@trilliantnetworks.com

AUCLAIR PHILIPPE
11 RUSSELL COURT
WALNUT CREEK, CA 94598
philha@astound.net

THOMPSON PATRICIA
SUMMIT BLUE CONSULTING
2920 CAMINO DIABLO, SUITE 210
WALNUT CREEK, CA 94597
pthompson@summitblue.com

OUBORG PETER
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET, B30A
SAN FRANCISCO, CA 94105
pxo2@pge.com

COUNIHAN RICHARD H.
ENERNOC, INC.
45 FREMONT STREET, SUITE 1400
SAN FRANCISCO, CA 94105
rcounihan@enernoc.com

MCCANN RICHARD
M.CUBED
2655 PORTAGE BAY ROAD, SUITE 3
DAVIS, CA 95616
rmccann@umich.edu

MCMAHILL ROSEMARY
CURRENT GROUP LLC
2500 STECK AVE. NO. 35
AUSTIN, TX 78757
rmcmahill@currentgroup.com

PELOTE ROGER
WILLIAMS POWER COMPANY
12736 CALIFA STREET
VALLEY VILLAGE, CA 91607
roger.pelote@williams.com

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

QUATTRINI RICH
ENERGYCONNECT, INC.
51 E. CAMPBELL AVENUE, SUITE 145
CAMPBELL, CA 95008
rquattrini@energyconnectinc.com

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

WALTHER, PH.D. ROBIN J.
1380 OAK CREEK DRIVE., 316
PALO ALTO, CA 94305
rwalther@pacbell.net

STANGE ANNIE
ALCANTAR & KAHL
1300 SW FIFTH AVE., SUITE 1750
PORTLAND, OR 97201
sas@a-klaw.com

WOO SHIRLEY
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET, B30A
SAN FRANCISCO, CA 94105
saw0@pge.com

DEBROFF SCOTT H.
SMIGEL, ANDERSON & SACKS
4431 NORTH FRONT STREET
RIVER CHASE OFFICE CENTER
HARRISBURG, PA 17110
sdebroff@sasllp.com

MCNEILL SUSAN
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 770000, B8M
SAN FRANCISCO, CA 94177-0001
sem4@pge.com

ROCHMAN MICHAEL
SPURR
1430 WILLOW PASS ROAD, SUITE 240
CONCORD, CA 94520
Service@spurr.org

TALBOTT SHARON
EMETER CORPORATION
ONE TWIN DOLPHIN DRIVE
REDWOOD CITY, CA 94065
sharon@emeter.com

SHERIF LINDA Y.
CALPINE CORPORATION
3875 HOPYARD ROAD, SUITE 345
PLEASANTON, CA 94588
sherifl@calpine.com

Gokhale Sudheer
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 4209
SAN FRANCISCO, CA 94102-3214
skg@cpuc.ca.gov

PRICE SNULLER
ENERGY AND ENVIRONMENTAL ECONOMICS
101 MONTGOMERY, SUITE 1600
SAN FRANCISCO, CA 94104
snuller@ethree.com

PATRICK STEVEN D.
SOUTHERN CALIFORNIA GAS COMPANY
555 WEST FIFTH STREET GT14E7
LOS ANGELES, CA 90013-1011
spatrick@sempra.com

HAERTLE STEVEN R.
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET, MC B9A
SAN FRANCISCO, CA 94105
SRH1@pge.com

SCHARE STUART
SUMMIT BLUE CONSULTING
1722, 14TH STEET, SUIET 230
BOULDER, CO 80302
sschare@summitblue.com

MYERS SARA STECK
122 28TH AVENUE
SAN FRANCISCO, CA 94121
ssmyers@att.net

BAKER STEPHEN D.
FELLON-MCCORD AND ASSOCIATES
9960 CORPORATE CAMPUS DRIVE, STE. 2000
CONSTELLATION NEW ENERGY-GAS DIVISION
LOUISVILLE, KY 40223
stephen.baker@constellation.com

GEORGE STEVE
GSC GROUP
101 MONTGOMERY STREET, 15TH FLOOR
SAN FRANCISCO, CA 94104
stephengeorge@fccgroup.com

KROMER STEVE
3110 COLLEGE AVENUE, APT 12
BERKELEY, CA 94705
stevek@kromer.com

CARLSON TRENT A.
RELIANT ENERGY
1000 MAIN STREET
HOUSTON, TX 77001
tcarlson@reliant.com

POPE TED
ENERGY SOLUTIONS
1738 EXCELSIOR AVE.
OAKLAND, CA 94602
ted@energy-solution.com

KIMBALL THOMAS
MODESTO IRRIGATION DISTRICT
1231 11TH STREET
MODESTO, CA 95354
tomk@mid.org

RICH TERRY
ANCILLARY SERVICES COALITION
547 APOLLO STREET, SUITE F
BREA, CA 92821
trich@ascoalition.com

THOMPSON VICKI L.
SAN DIEGO GAS & ELECTRIC COMPANY
101 ASH STREET
SAN DIEGO, CA 92101
vthompson@sempra.com

WOOD VIKKI
SACRAMENTO MUNICIPAL UTILITY DISTRICT
6301 S STREET, MS A204
SACRAMENTO, CA 95817-1899
vwood@smud.org

BOOTH WILLIAM H.
LAW OFFICES OF WILLIAM H. BOOTH
1500 NEWELL AVENUE, 5TH FLOOR
WALNUT CREEK, CA 94596
wbooth@booth-law.com

MITCHELL WARREN
THE ENERGY COALITION
15615 ALTON PARKWAY, SUITE 245
IRVINE, CA 92618
wmitchellrunner@socal.rr.com

Tsai-Wei Lee Rebecca
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 4209
SAN FRANCISCO, CA 94102-3214
wtr@cpuc.ca.gov

SKINNER KEN
INTEGRAL ANALYTICS, INC
312 WALNUT STREET, SUITE 1600
CINCINNATI, OH 45202

HEFFNER GRAYSON
15525 AMBIANCE DRIVE
N. POTOMAC, MD 20878

IMUNGI MWIRIGI
THE ENERGY COALITION
15615 ALTON PARKWAY, SUITE 245
IRVINE, CA 92618

PERLSTEIN BRUCE
PACIFIC GAS AND ELECTRIC COMPANY
245 MARKET STREET
SAN FRANCISCO, CA 94105

CALIFORNIA ISO
151 BLUE RAVINE ROAD
FOLSOM, CA 95630