

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

Application of Southern California Edison
Company (U338-E) for Approval of Demand
Response Programs, Goals, and Budgets for
2009-2011

Application 08-06-001
(filed June 2, 2008)

Application of San Diego Gas & Electric
Company (U 902M) for Approval of Demand
Response Programs, Goals, and Budgets for
2009-2011

Application 08-06-002
(Filed June 2, 2008)

Application of Pacific Gas and Electric
Company for Approval of the Demand
Response Programs, Goals, and Budgets for
2009-2011 (U 39-E)

Application 08-06-003
(Filed June 2, 2008)

**OPENING BRIEF OF
THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

Dated: January 28, 2008

CALIFORNIA INDEPENDENT SYSTEM
OPERATOR CORPORATION

Baldassaro "Bill" Di Capo, Esq., Counsel
CALIFORNIA INDEPENDENT SYSTEM
OPERATOR CORPORATION
151 Blue Ravine Road
Folsom, CA 95630
Tel. (916) 608-7157
Fax (916) 608-7222
E-mail bdicap@caiso.com

TABLE OF CONTENTS

	Page
I. THE CAISO SUPPORTS THE IOU APPLICATION PILOT PROJECT COMPONENTS AS THE IOUS HAVE PRESENTED THEM IN THEIR AMENDED APPLICATIONS	1
II. THE CAISO DOES NOT SUPPORT TURN’S RECOMMENDATION TO SCALE BACK PG&E’S PILOTS IN PG&E’S APPLICATION	2
1. C&I Intermittent Resource Management Pilot	2
2. The Commission Should Not Eliminate Funding and Approval of the SmartAC™ Ancillary Services Pilot Program	3
3. CAISO Views TURN’s “Simpler Way” Approach as Inconsistent with State and Federal Policy on Demand Response	5
III. THE COMMISSION SHOULD BE CIRCUMSPECT IN GIVING ANY RECOGNITION THAT ANY APPROVED PROGRAM HAS AN AVOIDED T & D BENEFIT	9
IV. CONCLUSI ON.....	12

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

Application of Southern California Edison Company (U338-E) for Approval of Demand Response Programs, Goals, and Budgets for 2009-2011	Application 08-06-001 (filed June 2, 2008)
Application of San Diego Gas & Electric Company (U 902M) for Approval of Demand Response Programs, Goals, and Budgets for 2009-2011	Application 08-06-002 (Filed June 2, 2008)
Application of Pacific Gas and Electric Company for Approval of the Demand Response Programs, Goals, and Budgets for 2009-2011 (U 39-E)	Application 08-06-003 (Filed June 2, 2008)

**OPENING BRIEF OF
THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

The California Independent System Operator Corporation (“CAISO”) submits this Opening Brief pertaining to the California Public Utilities Commission’s (“Commission”) consideration of the Applications of Southern California Edison Company (“SCE”); San Diego Gas & Electric Company (“SDG&E”), and Pacific Gas and Electric Company (“PG&E”).

I. THE CAISO SUPPORTS THE IOU APPLICATION PILOT PROGRAM COMPONENTS AS THE IOUS HAVE PRESENTED THEM IN THEIR AMENDED APPLICATIONS

The CAISO supports the utility application pilot program components set forth in the utility amended applications. CAISO is also appreciative of the comments made by Assigned Commissioner Chong at the outset of the hearings, emphasizing the importance of aligning demand response resources with wholesale markets:

I also wanted to place a high priority on continuing to integrate demand and response into the ISO's market. I have had meetings with the ISO. We have had some discussions about how important this is, and I want to emphasize to the parties here today that their interests need to be met as we consider these programs.¹

II. THE CAISO DOES NOT SUPPORT TURN'S RECOMMENDATION TO SCALE BACK PG&E'S PILOTS IN PG&E'S APPLICATION

1. C&I Intermittent Resource Management Pilot

In the CAISO's view, the Commission should not accept TURN's invitation to scale back the C&I Intermittent Resource Management Pilot. This is a pilot program promoting the integration of intermittent renewable resources. In the direct testimony of TURN Witness Jeffrey Nahigian, Mr. Nahigian testified that the Commission should not authorize funding for PG&E pilots to integrate renewable resources. He argued that:

PG&E has had large amounts of wind resources in its system for decades and the ISO is currently already integrating PG&E's existing wind resources into its grid-without demand response.²

It is true that there are ongoing efforts at the CAISO, and elsewhere, to study integration of increasing levels of intermittent resources, like wind. However, this does not mean that devoting additional resources to the subject is unnecessary or cost-ineffective. To the contrary, the efforts in this regard must be expanded, as state policy has now moved the renewable portfolio standard ("RPS") requirement upwards, to 33%. This shift in the RPS standard has been recently memorialized in Governor Schwarzenegger's Executive Order issued November 17, 2008³

The need for concentrated effort to study integration of intermittent renewables is underscored by the fact that the variability of wind generation energy production from a

¹ Opening Comments of Assigned Commissioner Rachelle Chong, Tr at 4-5.

² TURN/Nahigian, Exhibit 418, at 18. The CAISO notes that the Exhibit List for the January 6-9 hearings mistakenly describes Exhibit 418 only as the Errata to Mr. Nahigian's testimony.

³ See the Governor's Executive Order S-14-08, issued November 17, 2008, which creates a 33% renewable target by 2020. The Executive Order can be accessed on the Governor's Web page at <http://gov.ca.gov/executive-order/11072/> (accessed Jan 27, 2008).

relatively small number of units is usually much less than the variability of system load changes. The CAISO is accustomed to dealing with daily load forecast errors, changes in hourly load forecasts and the unpredictability of loads. However, under a 33% RPS requirement, as the amount of wind generation in an area increases, the impact from these intermittent resources will reach a point where the variability of their output is greater than the variability of load. As the installed capacity from wind generation increases, the amount of variability will increase non-linearly. Indeed, the CAISO has reported in our Integration of Renewable Resources Report that “an increase [of the RPS] to 33% could more than double the integration problems and costs.”⁴

We reiterate that this is not the time for the Commission to back off support for pilots that can help inform and resolve the issues inherent in the state’s efforts to integrate far greater amounts of intermittent renewable resources into California’s energy supply portfolio. In the CAISO’s opinion, the cost of taking actions now to resolve the technical issues associated with understanding how the demand-side can contribute to the solution to the greater integration of intermittent renewable resources will be far less than the hefty cost and consequences of the go-slow approach that is implicit in TURN’s recommendations.

2. The Commission Should Not Eliminate Funding and Approval of the SmartAC™ Ancillary Services Pilot Program

TURN also advocates the elimination of PG&E’s SmartAC™ Ancillary Services Pilot, as duplicative of SCE’s Participating Load Pilot Project. The CAISO disagrees on this point as well, and the CAISO supports the approval and funding of the SmartAC™ program.

⁴ See the CAISO’s Integration of Renewable Resources Report, November 20 07, Pg . 14 found at: <http://www.caiso.com/1ca5/1ca5a7a026270.pdf> (accessed Jan. 27, 2009).

TURN addresses the SmartAC™ program in the direct testimony of witness Gayatri Schilberg, who discusses the IOU Participating Load Pilots. Among the summary recommendations listed at the beginning of her written testimony, Ms. Schilberg included, as the first recommendation, elimination of the SmartAC™ program.

PG&E's Smart AC AS Pilot should be denied, as any benefits from this pilot are duplicative of and secondary to Edison's similar residential ancillary services (AS) pilot.⁵

Ms. Schilberg further stated that

In TURN's view, this pilot is similar enough to that undertaken by SCE that the additional information it may provide is not necessary at this time and only of secondary importance.⁶

There was some discussion of the PG&E and SCE pilots in TURN's cross examination of SCE. TURN asked the SCE panel if the panelists were aware of whether coordinating efforts regarding the IOU pilots had occurred with PG&E and the panelists could not answer in the affirmative.⁷ The CAISO imagines that TURN will cite to this cross examination questioning as support for its argument to eliminate SmartAC™.

However, TURN's cross-examination of the PG&E panel of witnesses, which occurred on a different hearing day, elicited that inter-IOU coordination did in fact take place. This was explained by PG&E witness Osmund Sezgen, who explained that coordination occurred through regular meetings, and a half-day event that was held on August 20, 2008 at PG&E's offices, a meeting in which most parties and Energy Division staff participated.⁸

In the cross-examination immediately following, the PG&E panel explained that the PG&E pilot would test different communication technologies and different end-use

⁵ TURN/Schilberg, Exhibit 420, at 1.

⁶ TURN/Schilberg, Exhibit 420, at 2.

⁷ Tr at 80, lines 26 to 81, lines 18.

⁸ Tr at 402, line 14 to 403, lines 19.

device thermostats.⁹ This is one reason to maintain the PG&E program along with the SCE residential AS program. However, there is yet another reason. It is not only important to learn the mechanics of how to dispatch DR, but, also, on a deeper level, how dispatch will be accomplished within the unique environments of the distinct IOU's service territories.

It is important to bear in mind that each IOU environment is unique, because each was constructed in the independent, vertically-integrated era, prior to statewide integration of the IOU transmission systems under a single systems operator. Each IOU service territory differs from the other, in that the electrical and information systems of each IOU are based on different architectural underpinnings. Accordingly, it must be the case that PG&E and SCE, respectively, have different customer information systems, built on different legacy systems. Furthermore, the same must be true for their energy management systems, their meter data systems, and their customer billing and settlement systems.

The CAISO contends that, rather than being duplicative, the two pilots can be complementary, and that running the pilots together can serve to identify and highlight the conditions for one IOU environment that are uniquely different from the other, so as to help to identify what aspects of demand response architecture and infrastructure can be standardized across IOUs and what must be customized. If the work is done on a single track, then the risk is greater that IOU-specific conditions may not be identified up front, with the result that the pilot implementation may not be readily transferable to a different utility environment.

3. CAISO Views TURN's "Simpler Way" Approach as Inconsistent with State and Federal Policy on Demand Response

⁹ Id, p. 403, line 20 to 405, line 12.

In the direct testimony of TURN witness Gayatri Schilberg, TURN also advocates postponing utility application activities directed toward evaluating the integration of demand response into ancillary services and residual unit commitment (known as RUC). Ms. Schilberg indicates that, instead, it is best for now to take a simpler approach, one which only uses demand resources as a tool to diminish the load forecast.¹⁰ However, TURN's suggested approach is not in line with either federal or state policy regarding what efforts should be made to develop demand response.

FERC has recently signaled that it is federal policy that organized markets should make concentrated efforts to move demand response toward a condition of comparable treatment for supply side and non-supply side resources in competitive markets. In this regard, in October, the FERC issued its Order 719 which directed RTOs and ISOs to undertake efforts to enable greater direct participation by Aggregators of Retail Customer load in their wholesale markets:

In this Final Rule, the Commission adopts the NOPR proposal to require each RTO or ISO to accept bids from demand response resources, on a basis comparable to any other resources, for ancillary services that are acquired in a competitive bidding process if the demand response resources: (1) are technically capable of providing the ancillary service and meet the necessary technical requirements; and (2) submit a bid under the generally-applicable bidding rules at or below the market-clearing price, unless the laws or regulations of the relevant electric retail regulatory authority do not permit a retail customer to participate. All accepted bids would receive the market-clearing price.¹¹

¹⁰ TURN/Schilberg, Exhibit 420, at.6.

¹¹October 17, 2008 Order, FERC Docket Nos. RM07-19-000 and AD07-7-000 [Wholesale Competition in Regions with Organized Electric Markets], 125 F.E.R.C. P 61,071 [hereafter, "FERC Order 719"] at P 47.

See also Paragraphs 154 and 155 which state that:

154. The Commission adopts in this Final Rule the proposed rule to require RTOs and ISOs to amend their market rules as necessary to permit an ARC to bid demand response on behalf of retail customers directly into the RTO's or ISO's organized markets, unless the laws or regulations of the relevant electric retail regulatory authority do not permit a retail customer to participate. We find that allowing an ARC to act as an intermediary for many small retail loads that cannot individually participate in the organized market would reduce a barrier to demand response.

FERC Order 719 also requires the ISOs to assess, through pilot projects or other mechanisms, the technical feasibility and value to the market of using ancillary services from small demand response units.¹²

As to state policy, the Commission has acknowledged that the topic of demand response spills over in to related topics areas, such as resource adequacy and scarcity pricing.¹³ On the subject of resource adequacy, the Commission has clearly stated that

155. We are mindful of the comments that allowing ARCs to bid into the wholesale energy market without the relevant electric retail regulatory authority's express permission may have unintended consequences, such as placing an undue burden on the relevant electric retail regulatory authority. In the NOPR, the Commission sought to address the concerns of state and local retail regulatory entities by proposing to require that an ARC may bid retail load reduction into an RTO or ISO regional market unless the laws or regulations of the relevant electric retail regulatory authority do not permit a retail customer to participate in this activity. The Commission's intent was not to interfere with the operation of successful demand response programs, place an undue burden on state and local retail regulatory entities, or to raise new concerns regarding federal and state jurisdiction, as some commenters argue. As described above, we clarify that we will not require a retail electric regulatory authority to make any showing or take any action in compliance with this rule. Rather, this rule requires an RTO or ISO to accept a bid from an ARC, unless the laws or regulations of the relevant electric retail regulatory authority do not permit the customers aggregated in the bid to participate.

FERC Order 719 also directs the RTOs and ISOs to study and report to FERC on whether future reforms are necessary to eliminate barriers to demand response in organized markets. (FERC Order 719 at P 274.)

¹² Paragraph 97:

The Commission will require RTOs and ISOs, in cooperation with their customers and other stakeholders, to perform an assessment, through pilot projects or other mechanisms, of the technical feasibility and value to the market of smaller demand response resources providing ancillary services, within one year from the effective date of the Final Rule, including whether (and how) smaller demand response resources can reliably and economically provide operating reserves and report their findings to the Commission. The choice between either a pilot program or other mechanisms in this assessment is appropriately left to the discretion of the RTO or ISO and its customers and other stakeholders. Additional issues raised here by commenters, such as the need for measurement and verification standards and a definition of what constitutes a "small demand response resource" should be addressed in the assessments.

¹³ For ease of reference, the CAISO offers the following definition for scarcity pricing, taken from the CAISO's Final Proposal on Reserve Scarcity Pricing Design:

Scarcity Pricing is a mechanism that lets the market prices rise automatically, potentially beyond any applicable bid cap, when there is a shortage of supply in the market. Following general practice in other ISO markets, shortage is defined as the inability by the California ISO (CAISO) to procure sufficient regulation or operating reserves through market mechanisms. Properly designed scarcity prices should enhance short-term and long-term market efficiency and reliability because they stimulate Demand Response,

RA is about “laying a foundation for the required infrastructure investment and assuring that capacity is available when and where needed.”¹⁴ This level of precision does not come about if demand response is used merely as a mechanism to lower the forecast; doing this may bring about generalized system’s benefit, but the cause and effect are very attenuated, so using demand response as only a forecast-lowering mechanism promotes resource adequacy only indirectly, at best.

As to the interrelation of demand response and scarcity pricing, the Commission’s position is articulated in a posting on the Commission’s own Web page:

The CPUC is urging CAISO to implement a demand response program that incorporates price responsive demand simultaneously with scarcity pricing. The CPUC rationale is that providing scarcity pricing without permitting demand and resources to mitigate high scarcity prices impedes a primary goal of scarcity pricing: *to allow end users to participate in CAISO markets as energy prices rise*. The CPUC will continue to participate in CAISO’s scarcity pricing design, support changes as fitting, and file comments on CAISO’s scarcity pricing proposal until it is finalized (emphasis added.)¹⁵

While on the surface, choosing a “simpler way” may appear to be a low-cost approach, in the end, it could likely prove costly, if we fail to invest now to try to address and search for solutions to resolve the complex challenges that are part of the work in enabling demand response to serve as a useful resource to meet two critical needs: i) the energy growth need (both the “peakiness” of California’s demand and its growth), and ii) the reliability need, which on the near horizon, requires integrating greater amounts of intermittent renewable resources.

draw supply from outside of the CAISO control area, create incentives for availability of generation during peak load periods, promote long-term contracting, and attract investment in new generation resources.

CAISO Final Proposal on Reserve Scarcity Pricing Design, dated July 15, 2008, Executive Summary, at p. 4 (This document can be found at <http://www.aiso.com/2005/2005b86d5690.pdf> (accessed Jan. 27, 2009).)

¹⁴ R.05-12-013, ALJ Ruling on Track 2 Proposals, February 29, 2007, p.4 (emphasis added.)

¹⁵ CPUC Web Page at http://www.cpuc.ca.gov/PUC/energy/wholesale/01a_cawholesale/MRTU/04_scarcity.htm (accessed Jan. 27, 2009).

For these reasons, the Commission should not adopt TURN's recommendation to disallow authorization for funding of activities intended to evaluate the integration of demand response into ancillary services and RUC in favor of TURN's further recommendation that it is best for now simply to use demand resources as a tool to diminish the load forecast.

III. THE COMMISSION SHOULD BE CIRCUMSPECT IN GIVING ANY RECOGNITION THAT ANY APPROVED PROGRAM HAS AN AVOIDED T & D BENEFIT

Finally, the CAISO wishes to point out certain items in the record pertaining to the right place, right certainty criteria of the Cost Effectiveness Consensus Framework to show that the concept and the reality application are missing each other. We point this out not to ask the Commission to disallow a particular line item or feature of the utility demand response applications to be decided upon in these consolidated proceedings, but, rather, to highlight, for purposes of refinement, the cost effectiveness work to be completed in R07-01-041 and future efforts.

We note that PG&E did not seek, any "credit" for avoided T&D costs in its application. Had PG&E done so, it is likely that the CAISO would have objected, given the tenuousness arguments that would need to be made to demonstrate that the utility has realized avoided T&D costs through a particular demand response program resource.¹⁶

The CAISO believes that the fact that PG &E did not undertake the "big effort" to articulate avoided T&D costs in its application is an indication of the fact that the "right place, right certainty" criteria cannot easily be met, given the current state and

¹⁶ SDG&E's testimony provides perspective and details on avoided T&D costs and additional background on the "right time, right size, right place and physical assurance" criteria. (Direct Testimony of Kevin C. McKinley, pp 7-9 [Section B. Transmission and Distribution Avoided Costs], Volume VI, Chapter IV of Testimony of SDG&E.

configuration of demand and response resources.¹⁷ In the CAISO's view, the criteria still suffers from two vulnerabilities:

- 1) There is no "feedback loop" between a) the theoretical T & D cost avoidance effect which a utility may claim when the utility makes its case that the program is cost effective and ii) the actual deferral/avoidance of some actual investment by the utility that would have been undertaken but for the demand and response resource which the utility has now integrated into its transmission and distribution solutions; and
- 2) Even if the utility is able to demonstrate that the demand response resource is situated in a desirable area (i.e. in a transmission-constrained local capacity area), in the majority of cases, the utility cannot demonstrate that it has a mechanism to dispatch this resource to affect a resolution of a particular constraint;

Thus the CAISO respectfully refers the Commission back to a point it made at the onset of this proceeding, in the CAISO's September 29, 2008 Response to the utilities' amended applications. The CAISO noted that the Commission should insist that avoided costs be real. We urged that cost should only be considered as "Avoided T&D costs" if the utility could demonstrate that the MW quantities associated with specific DR programs were explicitly incorporated into utility grid/distribution planning studies, and investments in transformers or other grid/distribution related equipment can actually be "deferred" as a result of a DR program's MW contribution. As we noted, this treats the

¹⁷ The CAISO is referring to this discussion by PG&E Witness Dennis Keane, answering ALJ Hecht's question about why PG&E did not claim avoided costs or apply the right place, right certainty criteria, and he explained that the activities that would be necessary to accomplish this would be a "big effort." (Tr at 539-540.)

“right place”, “right certainty” criteria¹⁸ as a screening device to determine if the asserted avoidance cost is a real benefit, or not. This is a logical step in the evolution of demand response resources as a non-generation supply resource. If we applied the demand response right place, right certainty criteria to a generation asset, that asset would meet the criteria handily even if it were greatly underutilized. When analyzing a generation solution, the generation asset is considered to have limited avoided T&D value, unless the utility can demonstrate that the resource meaningfully displaces, defers, or reinforces a particular segment of the transmission/distribution system.

In this light, we turn to the record. When PG&E presented its witnesses on January 9 in support of PG&E’s application, ALJ Hecht questioned PG&E witness Dennis Keane about the appropriateness of applying the transmission and distribution avoided cost to any particular demand response program and noted that PG&E had in fact only provided a sensitivity analysis for this component, unlike SCE and SDG&E.¹⁹ Witness Keane responded that PG&E took this approach because PG&E did not have sufficient geographically-specific load information to apply the right place, right certainty criteria.²⁰ Witness Keane testified that “...given the time constraints in putting it together, we [PG&E] could come up with the data [at a later date in time]. It would require knowing where each DR program participant is located. And I’m assuming we [PG&E] have that data. It’s just a pretty big effort”²¹

The CAISO agrees with statement by PG&E’s witness that applying the “right place” and “right certainty” criteria²² would be difficult in PG&E’s case, especially given

¹⁸ SDG&E’s testimony provides perspective and details on avoided T&D costs and additional background on the “right time, right size, right place and physical assurance” criteria. (Direct Testimony of Kevin C. McKinley, pp 7-9 [Section B. Transmission and Distribution Avoided Costs], Volume VI, Chapter IV of Testimony of SDG&E.

¹⁹ The testimony of PG&E witness Keane is in Section F (1)(c)(4)(j) of PG&E’s Amended Application (Exhibit 201), at page 3-29.

²⁰ RT, Vol. 4 (January 9 hearing date), at p. 539 line 5 to line 19.

²¹ RT, Vol. 4 (January 9 hearing date), at p. 539 line 20 to line 24

²² R.07-01-041, Attachment A, April 4, 2008- Draft Demand Response Cost Effectiveness Protocols, Section 2.E.b Avoided costs of supplying electricity

that the criterion requires the utility to identify demand response program resources located in areas where the specific DR program is capable of addressing local delivery capacity need. As a point of fact, seven out of ten CAISO identified local capacity areas are within PG&E's service territory.²³ This differs from SCE, which has two local capacity areas and SDG&E, for which the service territory and local capacity area are one in the same.

In sum, the recognition of an avoided T&D cost benefit may be justifiable, but not until demand response program impacts can be mapped and relied upon, down at the premise, circuit, feeder and/or substation level.

IV. CONCLUSION

The CAISO supports the IOU pilot project components that are set forth in the utilities' respective amended applications. The CAISO does not support the modifications recommended by TURN, which are to eliminate the PG &E SmartACTM ancillary services pilot and to adopt a "simpler" approach to demand response, which uses demand response only to diminish the load forecast.

The criteria "right place" and "right certainty" are intended to limit the application of the avoided T&D costs to programs that (1) are located in areas where load growth would result in a need for additional delivery infrastructure but for demand-side potential; (2) are located in areas where the specific DR program is capable of addressing local delivery capacity needs; (3) have sufficient certainty of providing long-term reduction that the risk of incurring after-the-fact retrofit/replacement costs is modest, and (4) can be relied upon for local T&D equipment loading relief.

²³ The CAISO's Local Capacity 2009 LOCAL CAPACITY TECHNICAL ANALYSIS FINAL REPORT AND STUDY RESULTS can be found at: <http://www.caiso.com/fba/fbace9b2d170.pdf>.

Dated: January 28, 2009

Respectfully submitted,

CALIFORNIA INDEPENDENT
SYSTEM OPERATOR CORPORATION

By: /s/ **Baldassaro “Bill” Di Capo**

Baldassaro “Bill” Di Capo, Esq., Counsel
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 January 28, 2009, I served, on the Service List for Consolidated Proceedings A08-06-001, A08-06-002 and A08-06-003, by electronic mail, a copy of the foregoing

OPENING BRIEF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION

Executed on January 28, 2009 at Folsom,
California
Anna

/s/ Anna Pascuzzo/

Pascuzzo,
An employee of the California Independent
System Operator

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

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

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

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

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

B.MARIE PIENIAZEK
CPOWER, INC.
17 STATE STREET
NEW YORK, NY 10004
marie.pieniazek@cpowered.com

GLEN SMITH
ENERGY CURTAILMENT SPECIALISTS
4455 GENESEE STREET
BUFFALO, NY 14225
gesmith@ecsny.com

KEVIN J. SIMONSEN
ENERGY MANAGEMENT SERVICES
646 EAST THIRD AVENUE
DURANGO, CO 81301
kjsimonsen@ems-ca.com

CASE ADMINISTRATION
2244 WALNUT GROVE AVENUE
ROSEMEAD, CA 91770
case.admin@sce.com

JOY C. YAMAGATA
SAN DIEGO GAS & ELECTRIC COMPANY
8330 CENTURY PARK COURT, CP 32 D
SAN DIEGO, CA 92123
jyamagata@semprautilities.com

DANIEL W. DOUGLASS
DOUGLASS & LIDDELL
21700 OXNARD STREET, SUITE 1030
WOODLAND HILLS, CA 91367-8102
douglass@energyattorney.com

DOUGLAS A. AMES
TRANSPHASE COMPANY
4971 LOS PATOS AVE.
HUNTINGTON BEACH, CA 92649
ames_doug@yahoo.com

MARY A. GANDESBERY
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET
SAN FRANCISCO, CA 94105
magq@pge.com

SALLE YOO
DAVIS WRIGHT TREMAINE LLP
505 MONTGOMERY STREET, SUITE 800
SAN FRANCISCO, CA 94111
salleyoo@dwt.com

BALDASSARO DI CAPO
CALIFORNIA INDEPENDENT SYSTEM
OPERATOR
151 BLUE RAVINE ROAD
FOLSOM, CA 95630
bdi capo@caiso.com

DARA BILTEKOFF
ENERGY CURTAILMENT SPECIALISTS
4455 GENESEE STREET
BUFFALO, NY 14225
dara@ecsgird.com

PAUL TYNO
ENERGY CURTAILMENT SPECIALISTS
4455 GENESEE STREET
BUFFALO, NY 14225
ptyno@ecsny.com

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

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

LINDA WRAZEN
SAN DIEGO GAS & ELECTRIC COMPANY
8330 CENTURY PARK COURT, CP32D
SAN DIEGO, CA 92123
LWrazen@semprautilities.com

STACIE SCHAFER
SOUTHERN CALIFORNIA EDISON
2244 WALNUT GROVE AVE.
ROSEMEAD, CA 91770
Stacie.Schaffer@sce.com

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

EDWARD G. POOLE
ANDERSON & POOLE
601 CALIFORNIA STREET, SUITE 1300
SAN FRANCISCO, CA 94108
epoole@adplaw.com

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

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

DENISE SERIO
ENERGY CURTAILMENT SPECIALISTS, INC.
4455 GENESEE STREET, BLDG. 6
NEW YORK, NY 14225
dserio@ecsgird.com

PAM MELTON
ENERGY CONNECT, INC.
4141 N. HENDERSON RD., NO. 211
ARLINGTON, VA 22203
pmelton@energyconnect.com

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

JENNIFER SHIGEKAWA
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVENUE
ROSEMEAD, CA 91770
Jennifer.Shigekawa@sce.com

NANCY PRIVITT
SDG&E
8306 CENTURY PARK COURT, CP42K
SAN DIEGO, CA 92123-1530
nprivitt@semprautilities.com

JERRY MELCHER
ENERNEX
4623 TORREY CIRCLE, APT Q303
SAN DIEGO, CA 92130
jerry@enernex.com

MONA TIERNEY-LLOYD
ENERNOC, INC.
PO BOX 378
CAYUCOS, CA 93430
mtierney-lloyd@enernoc.com

PETER MALTBECK
CPOWER, INC.
1185 ELENA PRIVADA
MOUNTAIN VIEW, CA 94040
peter.maltbaek@cpowered.com

JOSEPHINE WU
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET, MC B9A
SAN FRANCISCO, CA 94105
jwwd@pge.com

STEVEN MOSS
SAN FRANCISCO COMMUNITY POWER
2325 THIRD STREET, STE 344
SAN FRANCISCO, CA 94107
4010@pacbell.net

CALIFORNIA ENERGY MARKETS
425 DIVISADERO ST. SUITE 303
SAN FRANCISCO, CA 94117-2242
cem@newsdata.com

ERIC WOYCHIK
COMVERGE, INC.
9901 CALODEN LANE, STE 1
OAKLAND, CA 94605
ewoychik@comverge.com

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

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

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

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

PAUL KERKORIAN
UTILITY COST MANAGEMENT LLC
6475 N. PALM AVENUE, SUITE 105
FRESNO, CA 93704
pk@utilitycostmanagement.com

THERESA BURKE
SAN FRANCISCO PUC
1155 MARKET STREET, 4TH FLOOR
SAN FRANCISCO, CA 94103
tburke@sfwater.org

RICHARD H. COUNIHAN
ENERNOC, INC.
500 HOWARD STREET, STE. 400
SAN FRANCISCO, CA 94105
rcounihan@enernoc.com

VIDHYA PRABHAKARAN
GOODIN MACBRIDE SQUERI DAY &
LAMPREY LLP
505 SANSOME STREET, SUITE 900
SAN FRANCISCO, CA 94111
vprabhakaran@goodinmacbride.com

SHIRLEY A. WOO
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 7442
SAN FRANCISCO, CA 94120
saw0@pge.com

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

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

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

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

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

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

HELEN ARRICK
BUSINESS ENERGY COALITION
77 BEALE STREET, RM 1848E
SAN FRANCISCO, CA 94105
hxag@pge.com

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

JUDY PAU
DAVIS WRIGHT TREMAINE LLP
505 MONTGOMERY STREET, SUITE 800
SAN FRANCISCO, CA 94111-6533
judypau@dwt.com

PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 770000; MC B9A
SAN FRANCISCO, CA 94177
regrelcpuccases@pge.com

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

THOMAS S. KIMBALL
MODESTO IRRIGATION DISTRICT
1231 11TH STREET
MODESTO, CA 95352
tomk@mid.org

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

MELANIE GILLETTE
ENERNOC, INC.
115 HAZELMERE DRIVE
FOLSOM, CA 95630
mgillette@enernoc.com

ROBERT EMMERT
CAISO
151 BLUE RAVINE RD.
FOLSOM, CA 95630
remmert@caiso.com

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

TYLER J. BERGAN
POWERIT SOLUTIONS
114 ALASKAN WAY SOUTH 201
SEATTLE, WA 98104
tylerb@poweritsolutions.com

David Peck
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 4103
SAN FRANCISCO, CA 94102-3214
dbp@cpuc.ca.gov

Jennifer Caron
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
AREA 4-A
SAN FRANCISCO, CA 94102-3214
jc8@cpuc.ca.gov

Yuliya Shmidt
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ROOM 4104
SAN FRANCISCO, CA 94102-3214
ys2@cpuc.ca.gov

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

RONALD LIEBERT
CALIFORNIA FARM BUREAU FEDERATION
2300 RIVER PLAZA DRIVE
SACRAMENTO, CA 95833
rliebert@cfbf.com

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

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

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

ROBERT M. BREMAULT
AXIS RESOURCE LLC
1901 PLACER GOLD COURT
GOLD RIVER, CA 95670
rbremault@comcast.net

BENJAMIN SCHUMAN
PACIFIC CREST SECURITIES
111 SW 5TH AVE, 42ND FLR
PORTLAND, OR 97204
bschuman@pacific-crest.com

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

Hazlyn Fortune
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
AREA 4-A
SAN FRANCISCO, CA 94102-3214
hcf@cpuc.ca.gov

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