BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Promote)	
Policy and Program Coordination and)	R.04-04-003
Integration in Electric Utility Resource)	
Planning)	
)	

REPLY BRIEF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR ON LONG-TERM PLANS OF THE INVESTOR OWNED UTILITIES

Charles F. Robinson, General Counsel Anthony J. Ivancovich, Senior Regulatory Counsel Grant A. Rosenblum, Regulatory Counsel California Independent System Operator 151 Blue Ravine Road Folsom, CA 95630

Telephone: 916-351-4400 Facsimile: 916-351-2350

Attorneys for the

California Independent System Operator

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Pursuant to Administrative Law Judge Brown's Ruling Establishing a Briefing Outline and Setting Briefing Schedule ("ALJ Ruling"), dated September 28, 2004, the California Independent System Operator ("CAISO") respectfully submits this reply brief on the long-term procurement plans ("LTPPs") of Southern California Edison ("SCE"), Pacific Gas and Electric Company ("PG&E"), and San Diego Gas & Electric Company ("SDG&E").

I. THE COMMISSION MUST CAREFULLY ASSESS THE NEED FOR ADDITIONAL AGGREGATE RESOURCES AND ACT ACCORDINGLY

As noted in its Opening Brief, the CAISO's focus in this proceeding centers, in large part, on advancing resource adequacy and improving the identification of necessary transmission with sufficient lead-time for orderly construction. Resource adequacy, at its most basic level, seeks to ensure the availability of sufficient resources to reliably meet real-time load demands. It is axiomatic that this fundamental objective can be achieved and sustained over time only where resource investment keeps pace with projected load growth. It is an equally accepted principle that uncertainty impedes necessary investment. The CAISO commends the tremendous progress made by the Commission since the "power crisis" in redefining and clarifying the regulatory environment applicable to those portions of California's energy markets under its jurisdiction.

Notwithstanding the Commission's laudable efforts, not the least of which is the *Interim Opinion Regarding Resource Adequacy* ("*Interim Opinion*") adopted on October 28, 2004, until the culmination of those efforts, some regulatory uncertainty will necessarily linger with regard to the details of resource adequacy implementation and the ultimate effects of community choice aggregation and a core/non-core structure.

The manner in which the utilities account for resource adequacy amid the load uncertainty associated with community choice aggregation and a core/non-core program appropriately constitutes a central concern of this proceeding. The utilities should be permitted to structure their portfolios to minimize the potential for stranded costs caused by prospective load shifts. In dealing with these concerns, however, the Commission should not loose sight of the fact that a shift in who serves the load does nothing to reduce the physical presence of total load. Simply put, the load leaving the IOUs has not left California and it must be served. Thus, it is critical to consider the total load that is expected to ensure that resource adequacy can be achieved.

TURN has recognized that "a policy that minimizes stranded cost risk will not do very much to get new resources built in the State." (TURN Opening Brief at 13.) Moreover, LSEs, other than the IOUs, are also likely to lack sufficient clarity in the identity and quantity of their potential customer base to be in a position to currently proceed with infrastructure investment. Therefore, in the very short-term, there may be barriers to investment over and above those projects expressly articulated, and ultimately approved, in the IOUs' LTPPs. For this reason, the CAISO reiterates that if the Commission believes resources, beyond those proposed by the IOUs to meet the anticipated needs of their bundled customers, must be constructed for aggregate system capacity needs, the IOUs represent the most realistic entities that can currently implement

such an undertaking. Any such undertaking should be accompanied by an equitable method to allocate such resource costs.

Like all forecasts, the timing of any need for additional resources is subject to some degree of imprecision. However, what is clear, is that TURN has overstated that "all credible data submitted in this case ... show that there should be capacity sufficient to meet all customer needs through 2008." (TURN Opening Brief at 4.) The CAISO concurs that the projected "base case" scenario of its "Five-Year Assessment" ("Assessment") anticipates adequate resources will be available through 2008. (See, Exhibit 101.) The daily operation of the grid provides valuable information regarding the prescience of the Assessment's forward projections. In this regard, actual system conditions experienced during the summer of 2004, after preparation of the Five-Year Assessment, suggest that demand conditions may be trending towards the Assessment's "peak" demand forecast. In addition, the California Energy Commission's Electric Demand and Supply Outlook, finds that a "planning reserve of 15% or greater is not maintained beginning in 2007 unless new resources are added." (Exhibit 86 at pg. 8.) Thus, whether the Commission should direct the IOUs to develop or procure new resources as the "interim agents" for resource adequacy policy revolves around the level of "insurance" the Commission deems appropriate given the uncertainties inherent in supply/demand forecasts.

The Border Generation Group ("BGG") further highlighted the appropriateness of the IOUs functioning as de facto "agents" with respect to transmission infrastructure. Citing City of San Diego witness William Monsen, the BGG correctly stated that "whether there is community choice, a core/non-core market structure, or an increase in the level of direct access, these forms of 'departing load' do not necessarily mean that there will be a diminished need for transmission in the San Diego area." (BGG Opening Brief at 11-12.) It follows that unless the community

choice or direct access LSE secures generation within its local boundaries, the LSE will likely be required to rely on the IOUs' transmission assets. Indeed, Strategic Energy and Constellation NewEnergy acknowledge that "[t]o the extent that existing transmission bottlenecks are relieved and potential constraints are addressed before they develop, system reliability will be enhanced and LSEs will have more options in terms of the resources to meet their energy and reserve capacity requirements." (Constellation Opening Brief at 11.) The implications are twofold. First, all IOUs should, as did SDG&E, develop *transmission plans* based on an aggregate forecast of load without consideration of who serves the load. Second, as community choice and core/non-core structures develop, information from those LSEs under the Commission's jurisdiction should be incorporated into the transmission planning aspects of the LTPPs.

II. CERTAIN REQUESTS BY THE IOUS TO MODIFY THEIR AB 57 PROCUREMENT PLANS SHOULD BE GRANTED BUT SUBJECT TO CONDITIONS TO PRESERVE THE EFFICIACY OF THE COMMISSION'S RESOURCE AEQUACY EFFORTS

In their opening briefs, SCE and PG&E request that the Commission modify their existing AB 57 Procurement Plans as well as Decision No. 03-12-062 in a manner consistent with their respective pending Petitions for Modification. (See, SCE Opening Brief at 68-80 and PG&E Opening Brief at 46-48.) Several of the requested modifications interact with resource adequacy and the CAISO's current and/or intended future market designs. The CAISO does not take a position on each of the IOUs' requests for modification, but believes that, as to the following items, the Commission should adopt the proposed changes. However, as discussed below, the CAISO believes that expanding the IOUs' ability to enter into multi-year contracts for nonrenewable resources, while meritorious, must be accomplished in a manner that does not unduly vitiate the effectiveness of the Commission's resource adequacy program.

A. Multi-Year Procurement

The IOUs seek to remove the current prohibition against multi-year contracts for nonrenewable resources that commence delivery beyond 2004. They also seek to eliminate the restriction that contracts for nonrenewable resources commencing after 2004 be limited to one-year terms and begin delivery prior to the fourth quarter of 2005. (SCE Opening Brief at 68; PG&E Opening Brief at 46-47.) The CAISO generally supports the IOUs' request. The CAISO agrees that the present limitations on multi-year contracting potentially hinder the IOUs from procuring the least cost/best fit resources for their portfolios, hedging against market risk, and creating the incentives for new infrastructure development. In addition, PG&E correctly recognizes that multi-year contracting "will help to keep online existing units that do not currently have contracts." (PG&E Opening Brief at 47.)

Nevertheless, the CAISO is concerned that granting the IOUs unfettered authority to enter into five-year contacts may negatively effect the Commission's intended implementation of its resource adequacy program. This concern arises from two aspects of the Commission's *Interim Opinion*. First, the *Interim Opinion* deferred resolution of the treatment of "intra-control area system" contracts to Phase 2 of the resource adequacy process, which is not scheduled to conclude until mid-2005. (*Interim Opinion* [Draft] at 24.) Intra-control area system contracts that do not specify the physical units the supplier intends to rely on to "back" the contract undermine the ability to ensure that capacity is committed to serve California load. Without the specification of a particular resource or resources supporting the contract, there is no way to ensure that the generation capacity is not being double-counted for resource adequacy purposes, i.e., used to supply the energy contract and a separate availability contract to different LSEs.

This gives a false indication of sufficient capacity. Second, although the *Interim Opinion*

specifies that capacity resources must be scheduled or bid into the CAISO's markets, the Commission adopted this policy "going forward." (*Interim Opinion* [Draft] at 43.) Contracts executed after completion of Phase 2 must include provisions to satisfy this forward commitment obligation. It is unclear from the *Interim Opinion* whether contracts executed prior to completion of Phase 2 that do not include comparable provisions will be eligible to qualify as a capacity resource. Thus, by authorizing multi-year contracts in this proceeding, without limitation, the IOUs will have approximately 6 months to *potentially* lock-up a considerable portion of their portfolios through 2008 pursuant to contracts that do not allow for the effective implementation of resource adequacy.

The CAISO recognizes that the Commission delegated to Phase 2 workshops the development of criteria for determining the contract eligibility for resource adequacy purposes. However, this proceeding provides the appropriate forum to coordinate the IOUs' AB 57

Procurement Plans with the resource adequacy process. In this regard, the *Interim Opinion* clarified that "[t]o satisfy the energy needs of their customers, LSEs may acquire, contract with and make use of resources that do not qualify for these resource adequacy requirements."

(*Interim Opinion* [Draft] at 45.) Accordingly, IOUs, and all LSEs, remain free to contract to meet their energy needs. However, the CAISO recommends that the Commission impose a limitation on IOU contracting for meeting resource adequacy purposes, effective until the issuance of a Commission order on Phase 2, that requires all intra-control area system contracts to specify the physical resource(s) supporting the contract and that such nominal resources will be subject to the scheduling protocols for capacity ultimately adopted by the Commission. This approach grants the IOUs contracting flexibility, but also eliminates the double-counting gaming

possibility and permits the supplier to identify the capacity that will be committed to California upon implementation of resource adequacy.

B. Electrical Capacity Limits

The CAISO supports modification of the IOUs electrical capacity position and rate-of-transaction limits for electrical capacity to conform to resource adequacy requirements. (See, SCE Opening Brief at 70-73.)

C. Spot Market Procurement and Operating Reserve Requirements

SCE requests that the Commission "[s]tate specifically that the target guideline for spot market procurement does not apply to procurement of capacity to meet WECC operating reserve requirements." (SCE Opening Brief at 74-75.) In the absence of any guideline, SCE accurately states that "IOUs may self-provide their operating reserves, allow their operating reserve requirements to be served from the ISO's markets on a day-ahead or hour-ahead basis, or utilize a combination of both." (*Id.* at 75.) Accordingly, the CAISO agrees that if the guideline on spot market purchases includes IOU reliance on the CAISO's ancillary services markets, the flexibility needed for the IOUs to efficiently satisfy their operating reserve requirements will be unduly restricted. This is especially true given that common forecast error may itself result in the need to rely on the spot market for balancing energy in an amount of 2-3% on a particular day, imposing a de facto self-provision requirement and limiting the IOUs' ability to utilize the CAISO's ancillary services markets to fully satisfy their approximately 6-7% operating reserves.¹

The fact that the 5% spot market guideline is measured on a monthly basis does not mitigate the impact of this example. The requirement to provide operating reserves is a daily obligation and assuming an LSE seeks to procure one-half of its obligation from the CAISO, the LSE is limited to approximately 2% of its energy purchases in the spot market. While this is a reasonable expectation where the spot market functions solely as a "balancing" market, it does potentially limit the ability of an LSE to optimize its portfolio and will likely do so after resource adequacy is instituted. As the Commission has recognized, "a 100% of requirements (peak demand public 15-17%

That said, however, the CAISO does not believe D.03-12-062 is unclear on the scope of its application. The decision "clarif[ies] that this guideline applies to *energy* procurement in Day-Ahead, Hour-Ahead, and Real-Time markets." (D.03-12-062, mimeo at 10 [emphasis added].) The spot market guideline expressly applies to "energy" procurement, not "capacity" procurement, which encompasses operating reserves. Equally important, the issue raised by SCE remains material only until implementation of the resource adequacy planning reserve obligation on June 1, 2006. In the *Interim Opinion*, the Commission recognized that "[s]o long as LSEs have assured sufficient resources in the forward time frame, they can maximize their opportunities in the spot market while minimizing exposure to high prices and volatility." (*Interim Opinion* [Draft] at 38, fn. 11.) The CAISO agrees. To the extent resource adequacy eligibility is contingent on a particular resource making itself available to the CAISO markets, including ancillary services markets, through LSE scheduling or bidding, then the magnitude of an LSEs reliance on spot markets diminishes in importance from a reliability perspective.

D. Prohibition Against "Arbitrage" Should Be Eliminated Or Clarified

SCE requests that the Commission "delete the sentence which states that a utility should not 'arbitrage' in energy markets. The term 'arbitrage' could apply to many different situations, and could result in a ban of practices the Commission intended to permit." (SCE Opening Brief at 77.) The CAISO agrees that the term "arbitrage" is too vague and may preclude legitimate opportunities for IOUs to optimize their portfolios in the CAISO's markets. Accordingly, to the extent the Commission can clarify its concern, it should do so by specifying the prohibited behavior. However, the CAISO notes that setting the parameters of appropriate behavior of

reserves) month-ahead forward capacity obligation has energy implications. It will tie up the energy associated with the generator's capacity until the point at which the LSE actually schedules its loads in the CAISO Day-Ahead market. CAISO reasons that this will mean that generators have energy that can only be sold in spot markets, likely

market participants in the wholesale energy markets operated by the CAISO properly rests with the CAISO under the jurisdiction of the Federal Energy Regulatory Commission. Market rules have been clearly established in the CAISO Tariff. (See, e.g, *Order Accepting Compliance Filing, Subject to Modification, Instituting Section 206 Proceeding, and Establishing Technical Conference,* 109 FERC ¶ 61,087 (Oct. 28, 2004).) Therefore, without further definition as to the nature of the "arbitrage" prohibited, the sentence referenced by SCE should be eliminated to avoid any regulatory uncertainty and potential inconsistency with the CAISO Tariff.

III. TRANSMISSION PLANNING IN THE LONG-TERM PLANS REQUIRES FURTHER REFINEMENT

As indicated in its Opening Brief, the CAISO acknowledges the effort made by the IOUs to address local reliability issues in their plans. However, the CAISO also believes the effort is incomplete and further enhancements in the LTPPs are needed to fulfill the Commission's objectives. This is especially true with respect to ensuring that transmission needed in conjunction with supply and demand resource plans are identified in a timely manner. The CAISO, therefore, recommended that the Commission improve the next iteration of the LTPPs by requiring additional scenario analysis and by adoption of interim guidelines for local capacity requirements should the resource adequacy process fail to finalize such requirements prior to the 2006 LTPP submissions.

A statement by PG&E in its Opening Brief characterizes the deficiency: "Until the locations, timing and characteristics of the new resources can be identified and incorporated into the resource mix, it is not possible to definitively identify the transmission needed to accommodate them. Nor is it desirable to plan the transmission based on speculation that certain resources may develop." (PG&E Opening Brief at 31.) Given that generation development

decreasing its price." (Interim Opinion [Draft] at 38-39, fn. 12.) Thus, "short-term markets can be valuable in

timeframes are much shorter than transmission development timeframes, transmission development will always lag generation development if transmission owners and regulators wait for generation to begin development before beginning transmission planning and development. Since generation typically does not develop unless load exists to be served, the LSEs can have influence over generation development. In order to ensure that long-lead time transmission projects are built in time to ensure economic operation of the grid and that all resources needed for resource adequacy purposes are deliverable, LSEs should be required to develop conceptual long-term resource plans that include locational information for all resource additions. This, in turn, will allow the IOUs to identify which scenarios will require additional transmission. Using all publicly announced resource development plans and other available information, LSEs could submit a few scenarios for potential resource additions as part of their LTPPs. Complete resource plans from all LSEs within the region could then be compiled to allow the IOUs to perform long-term transmission planning assessments for the purpose of developing a long-term plan. After a couple of iterations, a long-term coordinated resource and transmission plan for the region could be developed that would provide guidance for transmission expansion.

IV. CONCLUSION

The CAISO respectfully requests that the Commission adopt a decision that incorporates, or is otherwise consistent with, the substance of the arguments set forth above and in the CAISO's Opening Brief.

November 1, 2004

Respectfully Submitted:

By: /s Grant A. Rosenblum

Grant A. Rosenblum
Attorney for

California Independent System Operator

CERTIFICATE OF SERVICE

I hereby certify that I have served, by electronic mail, a copy of the foregoing Reply Brief of The California Independent System Operator Corporation on Long-Term Plans of Investor Owned Utilities to each party in Docket No. R.04-04-003.

Executed on November 1, 2004, at Folsom, California.

/s Charity N. Wilson

Charity N. Wilson
An Employee of the California
Independent System Operator

KEITH MCCREA SUTHERLAND, ASBILL & BRENNAN 1275 PENNSYLVANIA AVENUE, NW WASHINGTON, DC 20004-2415 keith.mccrea@sablaw.com

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

HOWARD CHOY COUNTY OF LOS ANGELES 1100 NORTH EASTERN AVENUE INTERNAL SERVICES DEPARTMENT LOS ANGELES, CA 90063 hchoy@isd.co.la.ca.us

RANDALL W. KEEN
MANATT PHELPS & PHILLIPS, LLP
11355 WEST OLYMPIC BLVD.
LOS ANGELES, CA 90064
pucservice@manatt.com

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

ELIZABETH HULL CITY OF CHULA VISTA 276 FOURTH AVENUE CHULA VISTA, CA 91910 ehull@ci.chula-vista.ca.us

THEODORE ROBERTS SEMPRA ENERGY 101 ASH STREET, HQ 13D SAN DIEGO, CA 92101-3017 troberts@sempra.com

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

MARC D. JOSEPH ADAMS BROADWELL JOSEPH & CARDOZO 651 GATEWAY BOULEVARD, SUITE 900 SOUTH SAN FRANCISCO, CA 94080 mdjoseph@adamsbroadwell.com

OSA ARMI SHUTE MIHALY & WEINBERGER LLP 396 HAYES STREET SAN FRANCISCO, CA 94102 armi@smwlaw.com ROGER A. BERLINER MANATT, PHELPS & PHILLIPS, LLP 1501 M STREET, N.W., SUITE 700 WASHINGTON, DC 20005-1702 rberliner@manatt.com

LISA URICK SAN DIEGO GAS & ELECTRIC COMPANY 555 W. 5TH STREET, SUITE 1400 LOS ANGELES, CA 90013-1011 lurick@sempra.com

DAVID L. HUARD MANATT, PHELPS & PHILLIPS, LLP 11355 WEST OLYMPIC BOULEVARD LOS ANGELES, CA 90064 dhuard@manatt.com

GREGORY S.G. KLATT
DOUGLASS & LIDDELL
411 E. HUNTINGTON DRIVE, SUITE 107-356
ARCADIA, CA 91007
klatt@energyattorney.com

ANNETTE GILLIAM SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVENUE ROSEMEAD, CA 91770 annette.gilliam@sce.com

FREDERICK M. ORTLIEB CITY OF SAN DIEGO 1200 THIRD AVENUE, 11TH FLOOR SAN DIEGO, CA 92101 fortlieb@sandiego.gov

MICHAEL SHAMES
UTILITY CONSUMERS' ACTION NETWORK
3100 FIFTH AVENUE, SUITE B
SAN DIEGO, CA 92103
mshames@ucan.org

KEITH E. FULLER ITRON, INC. 11236 EL CAMINO REAL SAN DEIGO, CA 92130-2650 keith.fuller@itron.com

JOSEPH PETER COMO CITY AND COUNTY OF SAN FRANCISCO 1 DR. CARLTON B. GOODLETT PLACE, RM. 234 CITY HALL, ROOM 234 SAN FRANCISCO, CA 94102 joe.como@sfgov.org

Amy C Yip-Kikugawa
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
LEGAL DIVISION ROOM 5135
SAN FRANCISCO, CA 94102-3214
ayk@cpuc.ca.gov

GARSON KNAPP FPL ENERGY, LLC 770 UNIVERSE BLVD. JUNO BEACH, FL 33408 garson_knapp@fpl.com

JAMES OZENNE SAN DIEGO GAS & ELECTRIC COMPANY 555 W. FIFTH ST., STE. 1400 LOS ANGELES, CA 90013-1034 jozenne@semprautilities.com

MARGARET R. SNOW MANATT, PHELPS & PHILLIPS 11355 W. OLYMPIC BLVD. LOS ANGELES, CA 90064 msnow@manatt.com

KEVIN DUGGAN
CAPSTONE TURBINE CORPORATION
21211 NORDHOFF STREET
CHATSWORTH, CA 91311
kduggan@capstoneturbine.com

BETH A. FOX SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVENUE ROSEMEAD, CA 91770 beth.fox@sce.com

JEFFREY M. PARROTT SAN DIEGO GAS & ELECTRIC COMPANY 101 ASH STREET, HQ 13D SAN DIEGO, CA 92101 jparrott@sempra.com

JOSEPH R. KLOBERDANZ SAN DIEGO GAS & ELECTRIC 8330 CENTURY PARK COURT SAN DIEGO, CA 92123-1530 jkloberdanz@semprautilities.com

CHRIS KING
CALIF. CONSUMER EMPOWERMENT ALLIANCE
ONE TWIN DOLPHIN DRIVE
REDWOOD CITY, CA 94065
chris@emeter.com

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

Noel Obiora CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE LEGAL DIVISION ROOM 4107 SAN FRANCISCO, CA 94102-3214 nao@cpuc.ca.gov DIAN M. GRUENEICH GRUENEICH RESOURCE ADVOCATES 582 MARKET STREET, SUITE 1020 SAN FRANCISCO, CA 94104 dgrueneich@gralegal.com

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

SHERYL CARTER
NATURAL RESOURCES DEFENSE COUNCIL
111 SUTTER STREET, 20/F
SAN FRANCISCO, CA 94104
scarter@nrdc.org

MARY A. GANDESBERY PACIFIC GAS AND ELECTRIC COMPANY 77 BEALE STREET, B30A SAN FRANCISCO, CA 94105 magq@pge.com

JAMES D. SQUERI GOODIN MACBRIDE SQUERI RITCHIE & DAY LLP 505 SANSOME STREET, SUITE 900 SAN FRANCISCO, CA 94111 jsqueri@gmssr.com

STEVEN F. GREENWALD DAVIS WRIGHT TREMAINE, LLP ONE EMBARCADERO CENTER, 6TH FLOOR SAN FRANCISCO, CA 94111 stevegreenwald@dwt.com

LISA A. COTTLE WHITE & CASE LLP 3 EMBARCADERO CENTER, SUITE 2210 SAN FRANCISCO, CA 94111-4050 Icottle@whitecase.com

AVIS CLARK
CALPINE CORPORATION
4160 DUBLIN BLVD.
DUBLIN, CA 94568
aclark@calpine.com

STEVEN S. SCHLEIMER CALPINE CORPORATION 4160 DUBLIN BLVD. DUBLIN, CA 94568 sschleimer@calpine.com

ERIC C. WOYCHIK STRATEGY INTEGRATION LLC 9901 CALODEN LANE OAKLAND, CA 94605 eric@strategyi.com JACK MC GOWAN GRUENEICH RESOURCE ADVOCATES 582 MARKET STREET, SUITE 1020 SAN FRANCISCO, CA 94104 docket-control@gralegal.com

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

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

BRIAN CRAGG GOODIN, MAC BRIDE, SQUERI, RITCHIE & DAY 505 SANSOME STREET, SUITE 900 SAN FRANCISCO, CA 94111 bcragg@gmssr.com

JEANNE B. ARMSTRONG RITCHIE & DAY, LLP 505 SANSOME STREET, SUITE 900 SAN FRANCISCO, CA 94111 jarmstrong@gmssr.com

EDWARD W. O'NEILL DAVIS WRIGHT TREMAINE LLP ONE EMBARCADERO CENTER, SUITE 600 SAN FRANCISCO, CA 94111-3834 edwardoneill@dwt.com

JOHN W. BOGY PACIFIC GAS & ELECTRIC PO BOX 7442 SAN FRANCISCO, CA 94120 i0b5@pge.com

LINDA Y. SHERIF CALPINE CORP. 4160 DUBLIN BOULEVARD DUBLIN, CA 94568 Isherif@calpine.com

JOE DESMOND INFOTILITY, INC. 4847 HOPYARD RD. STE. 4311 PLEASANTON, CA 94588 joe@infotility.com

RAMONA GONZALEZ EAST BAY MUNICIPAL UTILITY DISTRICT 375 ELEVENTH STREET, M/S NO. 205 OAKLAND, CA 94607 ramonag@ebmud.com JODY S. LONDON GRUENEICH RESOURCE ADVOCATES 582 MARKET STREET, SUITE 1020 SAN FRANCISCO, CA 94104 ilondon@gralegal.com

ROD AOKI ALCANTAR & KAHL, LLP 120 MONTGOMERY STREET, SUITE 2200 SAN FRANCISCO, CA 94104 rsa@a-klaw.com

JENNIFER K. POST PACIFIC GAS AND ELECTRIC COMPANY 77 BEALE STREET, ROOM 2496 SAN FRANCISCO, CA 94105 jlkm@pge.com

CHRISTOPHER HILEN DAVIS, WRIGHT TERMAINE, LLP ONE EMBARCADERO CENTER, SUITE 600 SAN FRANCISCO, CA 94111 chrishilen@dwt.com

JOSEPH M. KARP WHITE & CASE LLP 3 EMBARCADERO CENTER, STE 2210 SAN FRANCISCO, CA 94111 jkarp@whitecase.com

JEFFREY GRAY DAVIS WRIGHT TREMAINE ONE EMBARCADERO CENTER, 6TH FLOOR SAN FRANCISCO, CA 94111-3834 jeffgray@dwt.com

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

MARJORIE OXSEN
CALPINE CORPORATION
4160 DUBLIN BOULEVARD
DUBLIN, CA 94568
moxsen@calpine.com

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

REED V. SCHMIDT BARTLE WELLS ASSOCIATES 1889 ALCATRAZ AVENUE BERKELEY, CA 94703 rschmidt@bartlewells.com R. THOMAS BEACH CROSSBORDER ENERGY 2560 NINTH STREET, SUITE 316 BERKELEY, CA 94710 tomb@crossborderenergy.com

JOHN REDDING SILICON VALLEY MANUFACTURING GROUP 31 EUCALYPTUS LANE SAN RAFAEL, CA 94901 johnrredding@earthlink.net

BARRY F. MCCARTHY MCCARTHY & BERLIN, LLP 2005 HAMILTON AVENUE, SUITE 140 SAN JOSE, CA 95125 bmcc@mccarthylaw.com

SCOTT T. STEFFEN MODESTO IRRIGATION DISTRICT 1231 ELEVENTH STREET MODESTO, CA 95354 scottst@mid.org

GRANT ROSENBLUM
CAL INDEPENDENT SYSTEM OPERATOR
110 BLUE RAVINE ROAD
FOLSOM, CA 95630
grosenblum@caiso.com

DOUGLAS K. KERNER ELLISON, SCHNEIDER & HARRIS LLP 2015 H STREET SACRAMENTO, CA 95814 dkk@eslawfirm.com

LYNN HAUG ELLISON, SCHNEIDER & HARRIS, LLP 2015 H STREET SACRAMENTO, CA 95814-3109 Imh@eslawfirm.com

MICHAEL ALCANTAR ALCANTAR & KAHL LLP 1300 SW FIFTH AVENUE, SUITE 1750 PORTLAND, OR 97201 mpa@a-klaw.com

ERIC YUSSMAN
FELLON-MCCORD & ASSOCIATES
9960 CORPORATE CAMPUS DRIVE
LOUISVILLE, KY 40223
eyussman@knowledgeinenergy.com

DAVID SAUL SOLEL, INC. 439 PELICAN BAY COURT HENDERSON, NV 89012 dsaul@solel.com BARBARA R. BARKOVICH BARKOVICH AND YAP, INC. 31 EUCALYPTUS LANE SAN RAFAEL, CA 94901 brbarkovich@earthlink.net

JENNIFER HOLMES ITRON INC. 153 WOODCREST PLACE SANTA CRUZ, CA 95065 jennifer.holmes@itron.com

C. SUSIE BERLIN
MC CARTHY & BERLIN, LLP
2005 HAMILTON AVENUE, SUITE 140
SAN JOSE, CA 95125
sberlin@mccarthylaw.com

DAVID KATES
DAVID MARK AND COMPANY
3510 UNOCAL PLACE, SUITE 200
SANTA ROSA, CA 95403-5571
dkates@sonic.net

MATTHEW V. BRADY MATTHEW V. BRADY & ASSOCIATES 2339 GOLD MEADOW WAY GOLD RIVER, CA 95670 matt@bradylawus.com

GREGGORY L. WHEATLAND ELLISON, SCHNEIDER & HARRIS 2015 H STREET SACRAMENTO, CA 95814 glw@eslawfirm.com

DIANA MAHMUD STATE WATER CONTRACTORS 455 CAPITOL MALL, SUITE 20 SACRAMENTO, CA 95814-4409 dmahmud@mwdh2o.com

DONALD W. SCHOENBECK RCS, INC. 900 WASHINGTON STREET, SUITE 780 VANCOUVER, WA 98660 dws@r-s-c-inc.com

GARY HINNERS RELIANT ENERGY, INC. PO BOX 148 HOUSTON, TX 77001-0148 ghinners@reliant.com

CYNTHIA K. MITCHELL ECONOMIC CONSULTING INC. 530 COLGATE COURT RENO, NV 89503 ckmitchell1@sbcglobal.net JOHN R. REDDING ARCTURUS ENERGY CONSULTING 31 EUCALYPTUS LANE SAN RAFAEL, CA 94901 johnrredding@earthlink.net

JUSTIN D. BRADLEY SILICON VALLEY MANUFACTURING GROUP 224 AIRPORT PARKWAY, SUITE 620 SAN JOSE, CA 95110 jbradley@svmg.org

CHRISTOPHER J. MAYER MODESTO IRRIGATION DISTRICT PO BOX 4060 MODESTO, CA 95352-4060 chrism@mid.org

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

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

W. KENT PALMERTON
CONSTELLATION POWER SOURCE
1215 K STREET, SUITE 1700
SACRAMENTO, CA 95814
kent.palmerton@constellation.com

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

CARLO ZORZOLI ENEL NORTH AMERICA, INC. 1 TECH DRIVE, SUITE 220 ANDOVER, MA 1810 carlo.zorzoli@enel.it

JOHN HILKE FEDERAL TRADE COMMISSION 125 SOUTH STATE STREET ROMM 2105 SALT LAKE CITY, UT 84138 jhilke@ftc.gov

KEVIN R. MCSPADDEN
MILBANK, TWEED, HADLEY&MCCLOY LLP
601 SOUTH FIGUEROA STREET, 30TH FLOOR
LOS ANGELES, CA 90017
kmcspadden@milbank.com

CURTIS KEBLER GOLDMAN, SACHS & CO. 2121 AVENUE OF THE STARS LOS ANGELES, CA 90067 curtis.kebler@gs.com

ROGER PELOTE
WILLIAMS POWER COMPANY, INC.
12736 CALIFA STREET
VALLEY VILLAGE, CA 91602
roger.pelote@williams.com

FRANK J. COOLEY SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVENUE RM 345 ROSEMEAD, CA 91770 frank.cooley@sce.com

DANIEL A. KING SEMPRA ENERGY 101 ASH STREET, HQ13 SAN DIEGO, CA 92101 daking@sempra.com

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

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

MARK SHIRILAU ALOHA SYSTEMS, INC. 14801 COMET STREET IRVINE, CA 92604-2464 marks@alohasys.com

LAUREN CASENTINI D & R INTERNATIONAL 711 MAIN STREET HALF MOON BAY, CA 94019 lcasentini@drintl.com

Regina DeAngelis CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE LEGAL DIVISION ROOM 4107 SAN FRANCISCO, CA 94102-3214 rmd@cpuc.ca.gov

DEVRA BACHRACH
NATURAL RESOURCES DEFENSE COUNCIL
111 SUTTER STREET, 20TH FLOOR
SAN FRANCISCO, CA 94104
dbachrach@nrdc.org

NORMAN A. PEDERSEN HANNA AND MORTON LLP 444 SOUTH FLOWER STREET, SUITE 1500 LOS ANGELES, CA 90071-2916 npedersen@hanmor.com

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

LAURA A. LARKS SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVENUE, ROOM 345 ROSEMEAD, CA 91770 laura.larks@sce.com

ROB RUNDLE SANDAG 401 B STREET, SUITE 800 SAN DIEGO, CA 92101 rru@sandag.org

IRENE M. STILLINGS SAN DIEGO REGIONAL ENERGY OFFICE 8520 TECH WAY, SUITE 110 SAN DIEGO, CA 92123 irene.stillings@sdenergy.org

JOSE C. CERVANTES CITY OF SAN DIEGO 9601 RIDGEHAVEN CT., SUITE 120 SAN DIEGO, CA 92123-1636 jcervantes@sandiego.gov

CHARLES R. TOCA UTILITY SAVINGS & REFUND, LLC 1100 QUAIL, SUITE 217 NEWPORT BEACH, CA 92660 ctoca@utility-savings.com

DIANE I. FELLMAN LAW OFFICES OF DIANE I. FELLMAN 234 VAN NESS AVENUE SAN FRANCISCO, CA 94102 difellman@fellmanlaw.com

SEAN CASEY SAN FRANCISCO PUBLIC UTILITIES COMMISSIO 1155 MARKET STREET, 4TH FLOOR SAN FRANCISCO, CA 94103 scasey@sfwater.org

CHRIS ANN DICKERSON, PHD FREEMAN, SULLIVAN & CO. 100 SPEAR ST., 17/F SAN FRANCISCO, CA 94105 dickerson05@fscgroup.com COLIN M. LONG
PACIFIC ECONOMICS GROUP
201 SOUTH LAKE AVENUE, SUITE 400
PASADENA, CA 91101
cmlong@earthlink.net

BERJ K. PARSEGHIAN SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVENUE ROSEMEAD, CA 91770 berj.parseghian@sce.com

LAURA GENAO SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVENUE ROSEMEAD, CA 91770 laura.genao@sce.com

THOMAS CORR SEMPRA ENERGY 101 ASH STREET, HQ 15G SAN DIEGO, CA 92101 tcorr@sempra.com

SCOTT J. ANDERS SAN DIEGO REGIONAL ENERGY OFFICE 8520 TECH WAY - SUITE 110 SAN DIEGO, CA 92123 scott.anders@sdenergy.org

KURT J. KAMMERER SAN DIEGO REGIONAL ENERGY OFFICE PO BOX 60738 SAN DIEGO, CA 92166-8738 kjk@kjkammerer.com

MARK J. SKOWRONSKI SOLARGENIX AT INLAND ENERGY GROUP 3501 JAMBOREE ROAD, SUITE 606 NEWPORT BEACH, CA 92660 mjskowronski@inlandenergy.com

MATTHEW FREEDMAN
THE UTILITY REFORM NETWORK
711 VAN NESS AVENUE, SUITE 350
SAN FRANCISCO, CA 94102
freedman@turn.org

SEAN CASEY SAN FRANCISCO PUBLIC UTILITIES COMMISSIO 1155 MARKET STREET, 4TH FLOOR SAN FRANCISCO, CA 94103 scasey@sfwater.org

GRACE LIVINGSTON-NUNLEY
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET, MAIL CODE B9A
SAN FRANCISCO, CA 94105
gxl2@pge.com

VALERIE J. WINN PACIFIC GAS AND ELECTRIC COMPANY 77 BEALE STREET, B9A SAN FRANCISCO, CA 94105 vjw3@pge.com

JAMES A. BOOTHE HOLLAND & KNIGHT LLP 50 CALIFORNIA STREET, 28TH FLOOR SAN FRANCISCO, CA 94111 james.boothe@hklaw.com

LISA WEINZIMER
CALIFORNIA ENERGY CIRCUIT
695 NINTH AVENUE, NO. 2
SAN FRANCISCO, CA 94118
lisaweinzimer@sbcglobal.net

SEBASTIEN CSAPO
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 770000
MAIL CODE B9A
SAN FRANCISCO, CA 94177
sscb@pge.com

KEITH WHITE 931 CONTRA COSTA DRIVE EL CERRITO, CA 94530 keithwhite@earthlink.net

GREGORY T. BLUE DYNEGY INC. 5976 WEST LAS POSITAS BLVD., NO. 200 PLEASANTON, CA 94588 greg.blue@dynegy.com

STANLEY I. ANDERSON POWER VALUE INCORPORATED 964 MOJAVE CT WALNUT CREEK, CA 94598 sia2@pwrval.com

MRW & ASSOCIATES, INC. 1999 HARRISON STREET, SUITE 1440 OAKLAND, CA 94612 mrw@mrwassoc.com

JOHN GALLOWAY UNION OF CONCERNED SCIENTISTS 2397 SHATTUCK AVENUE, SUITE 203 BERKELEY, CA 94704 jgalloway@ucsusa.org

EDWARD VINE LAWRENCE BERKELEY NATIIONAL LAB BUILDING 90-4000 BERKELEY, CA 94720 elvine@lbl.gov PETER BRAY
PETER BRAY AND ASSOCIATES
3566 17TH STREET, SUITE 2
SAN FRANCISCO, CA 94110-1093
petertbray@yahoo.com

LINDSEY HOW-DOWNING DAVIS WRIGHT TREMAINE LLP ONE EMBARCADERO CENTER, SUITE 600 SAN FRANCISCO, CA 94111-3834 lindseyhowdowning@dwt.com

MARGARET D. BROWN
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 7442
SAN FRANCISCO, CA 94120-7442
mdbk@pge.com

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

JAY BHALLA INTERGY CORPORATION 4713 FIRST STREET, SUITE 235 PLEASANTON, CA 94566 jay.bhalla@intergycorp.com

WILLIAM H. CHEN
CONSTELLATION NEW ENERGY, INC.
2175 N. CALIFORNIA BLVD., SUITE 300
WALNUT CREEK, CA 94596
bill.chen@constellation.com

TED POPE COHEN VENTURES, INC./ENERGY SOLUTIONS 1738 EXCELSIOR AVENUE OAKLAND, CA 94602 ted@energy-solution.com

DAVID MARCUS PO BOX 1287 BERKELEY, CA 94701 dmarcus2@mindspring.com

CRAIG TYLER TYLER & ASSOCIATES 2760 SHASTA ROAD BERKELEY, CA 94708 craigtyler@comcast.net

RYAN WISER BERKELEY LAB ONE CYCLOTRON ROAD MS-90-4000 BERKELEY, CA 94720 rhwiser@lbl.gov CALIFORNIA ENERGY MARKETS 517-B POTRERO AVE. SAN FRANCISCO, CA 94110-1431 cem@newsdata.com

DANIEL W. FESSLER HOLLAND & KNIGHT LLP 50 CALIFORNIA STREET, SUITE 2800 SAN FRANCISCO, CA 94111-4726 daniel.fessler@hklaw.com

ED LUCHA
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 770000, MAIL CODE: B9A
SAN FRANCISCO, CA 94177
ell5@pge.com

MICHAEL ROCHMAN SCHOOL PROJECT UTILITY RATE REDUCTION 1430 WILLOW PASS ROAD, SUITE 240 CONCORD, CA 94520 RochmanM@spurr.org

KENNETH ABREU CALPINE CORPORATION 4160 DUBLIN BLVD. DUBLIN, CA 94568 kena@calpine.com

PHILIPPE AUCLAIR
MIRANT CORPORATION
1350 TREAT BLVD., SUITE 500
WALNUT CREEK, CA 94597
philippe.auclair@mirant.com

CATHERINE E. YAP BARKOVICH & YAP, INC. PO BOX 11031 OAKLAND, CA 94611 ceyap@earthlink.net

GREGG MORRIS GREEN POWER INSTITUTE 2039 SHATTUCK AVE., SUITE 402 BERKELEY, CA 94704 gmorris@emf.net

NANCY RADER CALIFORNIA WIND ENERGY ASSOCIATION 1198 KEITH AVENUE BERKELEY, CA 94708 nrader@calwea.org

KAREN NOTSUND
UC ENERGY INSTITUTE
2547 CHANNING WAY
BERKELEY, CA 94720-5180
knotsund@uclink.berkeley.edu

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

CAROLYN M. KEHREIN ENERGY MANAGEMENT SERVICES 1505 DUNLAP COURT DIXON, CA 95620-4208 cmkehrein@ems-ca.com

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

DAVID LA PORTE NAVIGANT CONSULTING 3100 ZINFANDEL DR. RANCHO CORDOVA, CA 95670

BRUCE MCLAUGHLIN BRAUN & BLAISING P.C. 915 L STREET, SUITE 1460 SACRAMENTO, CA 95814 mclaughlin@braunlegal.com

LOREN KAYE
POLIS GROUP
1115 11TH STREET, SUITE 100
SACRAMENTO, CA 95814
lkaye@ka-pow.com

TERRY A. GERMAN LIVINGSTON & MATTESICH LAW CORPORATION 1201 K STREET, SUITE 1100 SACRAMENTO, CA 95814-3938 tgerman@lmlaw.net

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

DON WINSLOW PPM ENERGY 1125 N.W. COUCH, SUITE 700 PORTLAND, OR 97209 don.winslow@ppmenergy.com

Maxine Harrison
CALIF PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET SUITE 500
EXECUTIVE DIVISION
LOS ANGELES, CA 90013
omh@cpuc.ca.gov

WILLIAM B. MARCUS JBS ENERGY, INC. 311 D STREET, SUITE A WEST SACRAMENTO, CA 95605 bill@jbsenergy.com.

SCOTT BLAISING BRAUN & BLAISING, P.C. 8980 MOONEY ROAD ELK GROVE, CA 95624 blaising@braunlegal.com

ROBERT SPARKS CALIFORNIA ISO 151 BLUE RAVINE ROAD FOLSOM, CA 95630 rsparks@caiso.com

VICTORIA P. FLEMING NAVIGANT CONSULTING, INC. 3100 ZINFANDEL DRIVE, SUITE 600 RANCHO CORDOVA, CA 95670-6026 vfleming@navigantconsulting.com

DAN GEIS AGRICULTURAL ENERGY CONSUMERS ASSO. 925 L STREET, SUITE 800 SACRAMENTO, CA 95814 dgeis@dolphingroup.org

MELANIE GILLETTE DUKE ENERGY NORTH AMERICA 980 NINTH STREET, SUITE 1420 SACRAMENTO, CA 95814 mlgillette@duke-energy.com

GREG BROWNELL SACRAMENTO MUNICIPAL UTILITY DISTRICT 6201 S STREET, M.S. B306 SACRAMENTO, CA 95817-1899 gbrowne@smud.org

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

G. ALAN COMNES DYNEGY POWER CORP. 3934 SE ASH STREET PORTLAND, OR 97214 alan.comnes@dynegy.com

Amy Chan
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ELECTRIC INDUSTRY & FINANCE AREA 4-A
SAN FRANCISCO, CA 94102-3214
amy@cpuc.ca.gov

VIKKI WOOD SACRAMENTO MUNICIPAL UTILITY DISTRICT 6301 S STREET, MS A103 SACRAMENTO, CA 95618-1899 vwood@smud.org

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

JAMES WEIL AGLET CONSUMER ALLIANCE PO BOX 1599 FORESTHILL, CA 95631 jweil@aglet.org

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

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

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

CAROLYN A. BAKER 7456 DELTAWIND DRIVE SACRAMENTO, CA 95831 cabaker906@sbcglobal.net

NATHAN TOYAMA SACRAMENTO MUNICIPAL UTILITY DISTRICT 6201 S STREET RATES DEPARTMENT, MS 44 SACRAMENTO, CA 95852-1830 ntoyama@smud.org

LAURA J. SCOTT
LANDS ENERGY CONSULTING INC.
2366 EASTLAKE AVENUE EAST
SUITE 311
SEATTLE, WA 98102-3399
Iscott@landsenergy.com

Bradford Wetstone
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ELECTRIC INDUSTRY & FINANCE AREA 4-A
SAN FRANCISCO, CA 94102-3214
bxw@cpuc.ca.gov

Brian D. Schumacher CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE ENGINEERING, ENVIRONMENTAL STUDIES, CUSTOMER

SERVICE AREA 4-A

SAN FRANCISCO, CA 94102-3214

bds@cpuc.ca.gov

Clayton K. Tang CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE

ELECTRIC INDUSTRY & FINANCE AREA 4-A SAN FRANCISCO, CA 94102-3214

ckt@cpuc.ca.gov

Eugene Cadenasso

CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE NATURAL GAS, ENERGY EFFICIENCY AND RESOURCE ADVISORY AREA 4-A

SAN FRANCISCO, CA 94102-3214

cpe@cpuc.ca.gov

Jay Luboff

CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE NATURAL GAS, ENERGY EFFICIENCY AND RESOURCE ADVISORY AREA 4-A

SAN FRANCISCO, CA 94102-3214

icl@cpuc.ca.gov

Karen M Shea

CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE **ELECTRIC INDUSTRY & FINANCE AREA 4-A**

SAN FRANCISCO, CA 94102-3214

kms@cpuc.ca.gov

Lisa Paulo

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

NATURAL GAS, ENERGY EFFICIENCY AND RESOURCE ADVISORY AREA 4-A

SAN FRANCISCO, CA 94102-3214

lp1@cpuc.ca.gov

Marshal B. Enderby CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

ENERGY COST OF SERVICE BRANCH ROOM 4205

SAN FRANCISCO, CA 94102-3214

mbe@cpuc.ca.gov

Moises Chavez

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

NATURAL GAS, ENERGY EFFICIENCY AND RESOURCE ADVISORY AREA 4-A

SAN FRANCISCO, CA 94102-3214

mcv@cpuc.ca.gov

Robert Elliott

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

ENGINEERING, ENVIRONMENTAL STUDIES, CUSTOMER

SERVICE AREA 4-A

SAN FRANCISCO, CA 94102-3214

rae@cpuc.ca.gov

Stephen St. Marie

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

ELECTRIC INDUSTRY & FINANCE AREA SAN FRANCISCO, CA 94102-3214

sst@cpuc.ca.gov

Bruce Kaneshiro

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

NATURAL GAS, ENERGY EFFICIENCY AND RESOURCE

ADVISORY AREA 4-A

SAN FRANCISCO, CA 94102-3214

bsk@cpuc.ca.gov

Donald R Smith

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

ELECTRICITY RESOURCES AND PRICING, ROOM 4209

SAN FRANCISCO, CA 94102-3214

dsh@cpuc.ca.gov

Jack Fulcher

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

ELECTRIC INDUSTRY & FINANCE AREA 4-A

SAN FRANCISCO, CA 94102-3214

jef@cpuc.ca.gov

Jeanette Lo

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

NATURAL GAS, ENERGY EFFICIENCY AND RESOURCE

ADVISORY ROOM 4006

SAN FRANCISCO, CA 94102-3214

ilo@cpuc.ca.gov

Kenneth Lewis

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

ENGINEERING, ENVIRONMENTAL STUDIES, CUSTOMER

SERVICE ROOM 4002

SAN FRANCISCO, CA 94102-3214

kl1@cpuc.ca.gov

Louis M Irwin

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

ELECTRICITY RESOURCES AND PRICING, ROOM 4209

SAN FRANCISCO, CA 94102-3214

lmi@cpuc.ca.gov

Marvam Ebke

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

DIVISION OF STRATEGIC PLANNING ROOM 5119

SAN FRANCISCO, CA 94102-3214

meb@cpuc.ca.gov

Nilgun Atamturk

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

NATURAL GAS, ENERGY EFFICIENCY AND RESOURCE

ADVISORY AREA 4-A

SAN FRANCISCO, CA 94102-3214

nil@cpuc.ca.gov

Scott Logan

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

ELECTRICITY RESOURCES AND PRICING, 4209

SAN FRANCISCO, CA 94102-3214

sjl@cpuc.ca.gov

Trina Horner

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

EXECUTIVE DIVISION ROOM 5217

SAN FRANCISCO, CA 94102-3214

tah@cpuc.ca.gov

Carol A Brown

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE ALJ DIVISION, ROOM 5103

SAN FRANCISCO, CA 94102-3214

cab@cpuc.ca.gov

Donna J Hines

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

ELECTRICITY RESOURCES AND PRICING, ROOM 4102

SAN FRANCISCO, CA 94102-3214

djh@cpuc.ca.gov

Jan Reid

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

ELECTRICITY RESOURCES AND PRICING, ROOM 4209

SAN FRANCISCO, CA 94102-3214

ljr@cpuc.ca.gov

Julie A Fitch

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

EXECUTIVE DIVISION ROOM 5203

SAN FRANCISCO, CA 94102-3214

jf2@cpuc.ca.gov

Lainie Motamedi

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

DIVISION OF STRATEGIC PLANNING ROOM 5119

SAN FRANCISCO, CA 94102-3214

Irm@cpuc.ca.gov

Mark S. Wetzell CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

ALJ DIVISION, ROOM 5009

SAN FRANCISCO, CA 94102-3214 msw@cpuc.ca.gov

Meg Gottstein

CALIF PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE

ALJ DIVISION, ROOM 5044

SAN FRANCISCO, CA 94102-3214 meg@cpuc.ca.gov

Paul Douglas

CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE **ELECTRIC INDUSTRY & FINANCE AREA 4-A**

SAN FRANCISCO, CA 94102-3214

psd@cpuc.ca.gov

Shannon Eddy CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

EXECUTIVE DIVISION ROOM 4102 SAN FRANCISCO, CA 94102-3214

sed@cpuc.ca.gov

Valerie Beck CALIF PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

NATURAL GAS, ENERGY EFFICIENCY AND RESOURCE

ADVISORY AREA 4-A SAN FRANCISCO, CA 94102-3214

vib@cpuc.ca.gov

Zenaida G. Tapawan-Conway
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
NATURAL GAS, ENERGY EFFICIENCY AND RESOURCE
ADVISORY AREA 4-A
SAN FRANCISCO, CA 94102-3214
ztc@cpuc.ca.gov

CLARE LAUFENBERG CALIFORNIA ENERGY COMMISSION 1516 9TH ST., MS 46 SACRAMENTO, CA 95814 claufenb@energy.state.ca.us

ERIN R. KOCH-GOODMAN
CALIFORNIA ELECTRICITY OVERSIGHT BOARD
770 L STREET, SUITE 1250
SACRAMENTO, CA 95814
ekg@eob.ca.gov

MICHAEL JASKE CALIFORNIA ENERGY COMMISSION 1516 9TH STREET, MS-500 SACRAMENTO, CA 95814 mjaske@energy.state.ca.us

TOM GLAVIANO
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET, MS-14
SACRAMENTO, CA 95814
tglaviano@energy.state.ca.us

FERNANDO DE LEON
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET, MS-14
SACRAMENTO, CA 95814-5512
fdeleon@energy.state.ca.us

RON WETHERALL CALIFORNIA ENERGY COMMISSION 1516 9TH STREET MS 20 SACRAMENTO, CA 96814-5512 rwethera@energy.state.ca.us MARGARET TOBIAS 460 PENNSYLVANIA AVENUE SAN FRANCISCO, CA 94107 marg@simpsonpartners.com

CONNIE LENI CALIFORNIA ENERGY COMMISSION 1516 9TH STREET SACRAMENTO, CA 95814 cleni@energy.state.ca.us

JENNIFER TACHERA CALIFORNIA ENERGY COMMISSION 1516 - 9TH STREET SACRAMENTO, CA 95814 jtachera@energy.state.ca.us

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

Wade McCartney
CALIF PUBLIC UTILITIES COMMISSION
770 L STREET, SUITE 1050
NATURAL GAS, ENERGY EFFICIENCY AND RESOURCE
ADVISORY
SACRAMENTO, CA 95814
wsm@cpuc.ca.qov

HELEN SABET
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET
SACRAMENTO, CA 95814-5512
hsabet@energy.state.ca.us

ROSS A. MILLER
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET MS 20
SACRAMENTO, CA 96814-5512
rmiller@energy.state.ca.us

ANDREW ULMER SIMPSON PARTNERS LLP 900 FRONT STREET, SUITE 300 SAN FRANCISCO, CA 94111 andrew@simpsonpartners.com

DARCIE L. HOUCK
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET, MS 34
SACRAMENTO, CA 95814
dhouck@energy.state.ca.us

KAREN GRIFFIN
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET, MS 39
SACRAMENTO, CA 95814
kgriffin@energy.state.ca.us

THOMAS FLYNN
CALIFORNIA PUBLIC UTILITIES COMMISSION
770 L STREET, SUITE 1050
SACRAMENTO, CA 95814
trf@cpuc.ca.gov

PEGGY BERNARDY
CALIFORNIA DEPARTMENT OF WATER RESOURCES
1416 9TH ST.
OFFICE OF THE CHIEF COUNSEL, ROOM 1118
SACRAMENTO, CA 95814-4409
dsandino@water.ca.gov

ARLEN ORCHARD SACRAMENTO MUNICIPAL UTILITY DISTRICT 6201 S STREET, M.S. B406 SACRAMENTO, CA 95817-1899 aorchar@smud.org