

July 14, 2003

Attn: Party of Docket # R.01-10-024

RE: Docket # R.01-10-024, Order Instituting Rulemaking to Establish Policies and Cost Recovery Mechanisms for Generation Procurement and Renewable Resource Development

Dear Party:

Enclosed please find of the Rebuttal Testimony of Phillip Pettingill and Anjali Sheffrin Regarding the Long-Term Procurement Plans of the Investor Owned Utilities on behalf of the California Independent System Operator in Docket # R. 01-10-024.

Thank you.

Sincerely,

Jeanne M. Solé
Regulatory Counsel

Cc: Attached Service List

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

Order Instituting Rulemaking to Establish
Policies and Cost Recovery Mechanisms for
Generation Procurement and Renewable
Resource Development

R.01-10-024

**REBUTTAL TESTIMONY OF PHILIP PETTINGILL AND ANJALI SHEFFRIN
REGARDING THE LONG-TERM PROCUREMENT PLANS OF THE INVESTOR
OWNED UTILITIES ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM
OPERATOR**

Submitted by the California Independent System Operator

July 14, 2003

Jeanne M. Solé, Regulatory Counsel
Charles F. Robinson, Vice President and General
Counsel
California Independent System Operator
151 Blue Ravine Road
Folsom California 95630
Telephone: (916) 351-4400
Facsimile: (916) 608-7296

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

Order Instituting Rulemaking to Establish
Policies and Cost Recovery Mechanisms for
Generation Procurement and Renewable
Resource Development

R.01-10-024

**REBUTTAL TESTIMONY OF PHILIP PETTINGILL AND ANJALI SHEFFRIN
REGARDING THE LONG-TERM PROCUREMENT PLANS OF THE INVESTOR
OWNED UTILITIES ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM
OPERATOR**

Submitted by the California Independent System Operator

Our names are Philip Pettingill, Manager of Policy Development in the Regulatory Policy Department of the California Independent System Operator Corporation (CA ISO), and Anjali Sheffrin, Director of Market Analysis for the CA ISO. Our duties on behalf of the CA ISO and our qualifications were submitted as attachments to our opening testimony in this proceeding. We are submitting this rebuttal testimony on behalf of the CA ISO.

The CA ISO considers that the testimony of other parties in this docket supports the CA ISO's position that it is necessary for the California Public Utilities Commission (CPUC) in this docket to establish a clear resource adequacy obligation along with an effective process to enforce it. The CA ISO reiterates its recommendation that the CPUC establish workshops to allow parties to attempt to agree on the components of a resource adequacy obligation.

A number of important parties have laid out in their testimony approaches for the creation of a resource adequacy obligation. For example, the California Energy Commission (CEC) indicated that it is essential to establish a formal framework for resource adequacy and procurement, and laid out suggestions for doing this, CEC Direct Testimony at 3-8; San Diego Gas and Electric Company (SDG&E) laid out a proposal for a CA ISO-sponsored resource adequacy procurement process, SDG&E Testimony at 5-12; and the Independent Energy Producers Association (IEP) argued that Load Serving Entities (LSEs) should have an obligation

to meet their monthly peak load with dependable capacity and a 17% reserve margin, IEP Testimony at 9. While the recommendations differ in their details, the CA ISO considers that they provide a basis for further discussion among the parties to put into place a well-defined obligation. Moreover, the CA ISO considers that through workshops it may be possible to work out a consensus proposal, or at least a number of alternative proposals, in a manner that is more efficient than litigation at this time. Working together, the parties may be able to address each other's concerns and develop a proposal that has the support of a reasonable range of parties.

As is described more fully in our opening testimony, what the CA ISO believes is required is an enforceable resource adequacy obligation with a clear process for ongoing reporting by the utilities to allow the CPUC to assess whether a utility has procured sufficient capacity to meet its projected monthly peak load plus reserves. As we stated in our opening testimony, the CA ISO supports the initial preparation, review and approval of a twenty-year plan with a special emphasis on the first five years. However, the CA ISO considers that the quarterly advice letter process currently in place is insufficient to provide for the implementation and enforcement of a meaningful resource adequacy obligation on an ongoing basis. Accordingly, the CA ISO recommends on-going annual updates to the utility long-term procurement plans, and monthly compliance reports.

Several other participants in this rulemaking, including Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and the CEC also support annual reporting regarding progress on and compliance with the utility long-term procurement plans. *See, e.g.*, Supplemental Testimony of PG&E at 5-6; Supplemental Testimony of SCE at 13; and Direct Testimony of CEC at 3. This annual updating process should focus specifically on 1) ensuring that planned elements are still on schedule, 2) considering and addressing changed circumstances, and 3) further developing the requirements for the new final year. The annual updating process would represent an improvement on the current communications process associated with resource adequacy, by providing the CA ISO and other interested parties updated information regarding the utilities' procurement activities.

In addition, as explained in our opening testimony, the CA ISO believes the utilities should be required to provide to the CPUC a monthly compliance report setting forth a calculation of their monthly reliability obligation (based on their monthly peak load, along with the applicable target reserve level), and the resources that the utilities have procured to meet their obligation. This report should also be provided to the CA ISO. The CA ISO does not envision that it will enforce the monthly reliability obligation. However, there should be a process for the CA ISO to inform the CPUC if it identifies problems in the service of the utility load or affecting system reliability so that the CPUC can follow-up as it deems appropriate.

Further, the CA ISO notes the importance of developing standard terms and accounting requirements. While many parties in their testimony address the appropriate reserve level, it is hard to compare and contrast proposals among the parties. This is because there is no consistent use of terms. For example, parties often fail to distinguish between planning reserves and operating reserves.¹ In addition, recommendations are given on the appropriate percentage for a reserve margin without clarity about how the percentage should be applied; for example, based on installed capacity, dependable capacity, or some other measure. The CA ISO believes that standard terms and accounting requirements could best be developed through a workshop process. Moreover, the CA ISO considers that the development of standard terms and reporting requirements is critical to any kind of meaningful review of utility procurement plans, irrespective of the mechanism chosen to establish a resource adequacy obligation.

¹ An example is the discussion in the Prepared Direct Testimony of James A. Ross on behalf of the Cogeneration Association of California and the Energy Producers and Users Coalition (CAC/EPUC) regarding who should procure reserves for cogeneration and self-generation customers. The discussion addresses planning reserves but is unclear about who (if anyone) should be responsible for operating reserves for such customers. As stated in our opening testimony, the CA ISO is not taking a position on who as between utilities and other entities should have an obligation to obtain planning or operating reserves for direct access load, community aggregation load or load served by distributed or self-generation. Instead, the CA ISO is asserting that an obligation to provide such reserves (both planning and operating reserves) must be clearly defined within the scope of an overall program to assure resource adequacy. Moreover, for consistency with CA ISO Tariff requirements, the entity with the obligation to provide operating reserves should be the Scheduling Coordinator for that load. Further, consistent with Western Electricity Coordinating Council Minimum Operating Reserve Criteria (MORC), operating reserves must be provided for all firm load within a control area including direct access load, community aggregation load, and loads served by distributed and self-generation.

Finally, the CA ISO notes that there is little discussion in the testimony of any party about incentives and/or consequences related to a resource adequacy obligation. As explained in our opening testimony, the CA ISO considers incentives and consequences to be an indispensable component of an effective resource adequacy obligation. If there are no incentives for compliance and no consequences for failing to comply, the obligation would be rendered meaningless. Thus, the CA ISO supports the adoption by the CPUC of explicit penalties/sanctions for utilities that fail to meet their monthly reliability obligation. The CA ISO believes utilities (and other LSEs) that fail to procure sufficient capacity on a month-ahead basis should be held accountable in a manner which will adequately deter recurrence of such performance, for example, financial penalties or being designated for first curtailment in the event of a reserve deficiency.

In sum, the CA ISO recommends that the CPUC should establish workshops to develop an effective resource adequacy obligation, along with a clear process to enforce this obligation. Further, in such workshops the CPUC should seek to establish standard terms and reporting requirements so that the utility plans and proposals of different parties can be fairly and consistently assessed and compared. Any final rule established as the result of these workshops should include provisions for annual updates and monthly compliance reports by the utilities to demonstrate progress on and compliance with the approved long-term procurement plans and resource adequacy obligation, as well as concrete penalties and incentives to promote compliance with the plans and obligation.

PROOF OF SERVICE

I hereby certify that on July 14, 2003, I served by electronic and U.S. mail, of the California Independent System Operator Corporation's Rebuttal Testimony of Phillip Pettingill and Anjali Sheffrin Regarding the Long-Term Procurement Plans of the Investor Owned Utilities on behalf of the California Independent System Operator in Docket # R. 01-10-024.

DATED at Folsom, California on July 14, 2003.

Meaghan McGuire
An Employee of the California
Independent System Operator

DANIEL V. GULINO
RIDGEWOOD POWER MANAGEMENT, LLC
947 LINWOOD AVENUE
RIDGEWOOD, NJ 7450

WILLIAM P. SHORT
RIDGEWOOD POWER MANAGEMENT, LLC
947 LINWOOD AVENUE
RIDGEWOOD, NJ 7450

KEITH R. MCCREA
SUTHERLAND, ASBILL & BRENNAN LLP
1275 PENNSYLVANIA AVE., N.W.
SUITE 800
WASHINGTON, DC 20004-2415

ROGER A. BERLINER
MANATT, PHELPS & PHILLIPS, LLP
1501 M STREET, NW, SUITE 700
WASHINGTON, DC 20005

PETER GLASER
SHOOK, HARDY & BACON, L.L.P.
600 14TH STREET, NW, SUITE 800
WASHINGTON, DC 20005-2004

MARTIN PROCTOR
CONSTELLATION POWER SOURCE
111 MARKET PLACE, SUITE 500
BALTIMORE, MD 21202

EDWARD SULLIVAN
SENIOR COUNSEL
PEABODY HOLDING COMPANY, INC.
701 MARKET STREET
ST. LOUIS, MO 63101-1826

LISA URICK
ATTORNEY AT LAW
SAN DIEGO GAS & ELECTRIC COMPANY
555 W. FIFTH STREET, SUITE 1400
LOS ANGELES, CA 90013-1011

RICHARD A. SHORTZ
ESQUIRE
MORGAN, LEWIS & BOCKIUS LLP
300 SOUTH GRAND AVE., 22ND FLOOR
LOS ANGELES, CA 90071-3132

GREGORY KLATT
ATTORNEY AT LAW
LAW OFFICES OF DANIEL W. DOUGLASS
411 E. HUNTINGTON DRIVE, SUITE 107-356
ARCADIA, CA 91006

DANIEL W. DOUGLASS
ATTORNEY AT LAW
LAW OFFICES OF DANIEL W. DOUGLASS
5959 TOPANGA CANYON BLVD., SUITE 244
WOODLAND HILLS, CA 91367

THOMAS D. O'CONNOR
ATTORNEY AT LAW
O'CONNOR CONSULTING SERVICES, INC
5427 FENWOOD AVENUE
WOODLAND HILLS, CA 91367

BETH A. FOX
ATTORNEY AT LAW
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVENUE, RM. 535
ROSEMEAD, CA 91770

JAMES WOODRUFF
ATTORNEY AT LAW
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVENUE, SUITE 342
ROSEMEAD, CA 91770

KELLY M. MORTON
ATTORNEY AT LAW
SEMPRA ENERGY
101 W. ASH STREET, HQ13
SAN DIEGO, CA 92101

FREDERICK M. ORTLIEB
CITY ATTORNEY
CITY OF SAN DIEGO
1200 THIRD AVENUE, 11TH FLOOR
SAN DIEGO, CA 92101-4100

MARK J. SKOWRONSKI
DUKE SOLAR
3501 JAMBOREE ROAD, SUITE 606
NEWPORT BEACH, CA 92660

KATE POOLE
ATTORNEY AT LAW
ADAMS BROADWELL JOSEPH & CARDOZO
651 GATEWAY BOULEVARD, SUITE 900
SOUTH SAN FRANCISCO, CA 94080

MARC D. JOSEPH
ATTORNEY AT LAW
ADAMS BROADWELL JOSEPH & CARDOZO
651 GATEWAY BOULEVARD, SUITE 900
SOUTH SAN FRANCISCO, CA 94080

MATTHEW FREEDMAN
ATTORNEY AT LAW
THE UTILITY REFORM NETWORK
711 VAN NESS AVENUE, SUITE 350
SAN FRANCISCO, CA 94102

MICHEL PETER FLORIO
ATTORNEY AT LAW
THE UTILITY REFORM NETWORK (TURN)
711 VAN NESS AVENUE, SUITE 350
SAN FRANCISCO, CA 94102

OSA ARMI
ATTORNEY AT LAW
SHUTE MIHALY & WEINBERGER LLP
396 HAYES STREET
SAN FRANCISCO, CA 94102

NOEL OBIORA
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
LEGAL DIVISION ROOM 4107
SAN FRANCISCO, CA 94102-3214

RANDOLPH L. WU
ATTORNEY AT LAW
CITY AND COUNTY OF SAN FRANCISCO
1 DR. CARLTON B. GOODLETT PLACE
SAN FRANCISCO, CA 94102-4682

ELIZABETH M. IMHOLZ
DIRECTOR
CONSUMERS UNION
1535 MISSION STREET
SAN FRANCISCO, CA 94103

JODY LONDON
GRUENEICH RESOURCE ADVOCATES
582 MARKET STREET, SUITE 1020
SAN FRANCISCO, CA 94104

MICHAEL MCCORMICK
GRUENEICH RESOURCE ADVOCATES
582 MARKET STREET, SUITE 1020
SAN FRANCISCO, CA 94104

EVELYN C. LEE
ATTORNEY AT LAW
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET, 31ST FLOOR
SAN FRANCISCO, CA 94105

JEANNE MC KINNEY
ATTORNEY AT LAW
THELEN, REID & PRIEST
101 SECOND STREET, SUITE 1800
SAN FRANCISCO, CA 94105

PAUL C. LACOURCIERE
ATTORNEY AT LAW
THELEN REID & PRIEST LLP
101 SECOND STREET, SUITE 1800
SAN FRANCISCO, CA 94105

PETER WEINER
PAUL HASTINGS LLP
55 SECOND STREET, 24TH FLOOR
SAN FRANCISCO, CA 94105

SHERYL CARTER
NATURAL RESOURCES DEFENSE COUNCIL
71 STEVENSON STREET, STE 1825
SAN FRANCISCO, CA 94105

BRIAN T. CRAGG
ATTORNEY AT LAW
GOODIN, MACBRIDE, SQUERI, RITCHIE & DAY
505 SANSOME STREET, SUITE 900
SAN FRANCISCO, CA 94111

EDWARD W. O'NEILL
ATTORNEY AT LAW
DAVIS WRIGHT TREMAINE LLP
ONE EMBARCADERO CENTER, SUITE 600
SAN FRANCISCO, CA 94111

ENOCH H. CHANG
ATTORNEY AT LAW
WHITE & CASE LLP
THREE EMBARCADERO CENTER, SUITE 2100
SAN FRANCISCO, CA 94111

JOE KARP
ATTORNEY AT LAW
WHITE & CASE, LLP
3 EMBARCADERO CENTER, SUITE 2210
SAN FRANCISCO, CA 94111

JOHN ROSENBAUM
WHITE & CASE LLP
THREE EMBARCADERO CENTER, SUITE 2200
SAN FRANCISCO, CA 94111

LISA A. COTTLE
ATTORNEY AT LAW
WHITE & CASE LLP
3 EMBARCADERO CENTER, SUITE 2210
SAN FRANCISCO, CA 94111

STEVEN F. GREENWALD
ATTORNEY AT LAW
DAVIS WRIGHT TREMAINE, LLP
ONE EMBARCADERO CENTER, SUITE 600
SAN FRANCISCO, CA 94111

LINDSEY HOW- DOWNING
ATTORNEY AT LAW
DAVIS WRIGHT TREMAINE, LLP
ONE EMBARCADERO, SUITE 600
SAN FRANCISCO, CA 94111-3834

JOHN WHITTING BOGY
ATTORNEY AT LAW
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 7442
SAN FRANCISCO, CA 94120

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

JOSEPH M. PAUL
DYNEGY MARKETING & TRADE
5976 WEST LAS POSITAS BLVD., STE. 200
PLEASANTON, CA 94588

WILLIAM H. BOOTH
ATTORNEY AT LAW
LAW OFFICE OF WILLIAM H. BOOTH
1500 NEWELL AVENUE, 5TH FLOOR
WALNUT CREEK, CA 94596

SETH HILTON
ATTORNEY AT LAW
MORRISON & FOERSTER LLP
101 YGNACIO VALLEY ROAD, SUITE 450
WALNUT CREEK, CA 94596-4087

ANDREW J. SKAFF
ATTORNEY AT LAW
LAW OFFICE OF ANDREW J. SKAFF
1999 HARRISON STREET, SUITE 2700
OAKLAND, CA 94612-3572

DANIEL KIRSHNER
ENVIRONMENTAL DEFENSE FUND
5655 COLLEGE AVENUE, SUITE 304
OAKLAND, CA 94618

REED V. SCHMIDT
BARTLE WELLS ASSOCIATES
1889 ALCATRAZ AVENUE
BERKELEY, CA 94703

GREGORY MORRIS
GREEN POWER INSTITUTE
2039 SHATTUCK AVE., SUITE 402
BERKELEY, CA 94704

JULIA LEVIN
UNION OF CONCERNED SCIENTISTS
2397 SHATTUCK AVENUE, SUITE 203
BERKELEY, CA 94704

CHRIS KING
EXECUTIVE DIRECTOR
AMERICAN ENERGY INSTITUTE
842 OXFORD ST.
BERKELEY, CA 94707

NANCY RADER
EXECUTIVE DIRECTOR
CALIFORNIA WIND ENERGY ASSOCIATION
1198 KEITH AVENUE
BERKELEY, CA 94708

PATRICK G. MCGUIRE
CROSSBORDER ENERGY
2560 NINTH STREET, SUITE 316
BERKELEY, CA 94710

MICHAEL GREEN
THE PACIFIC LUMBER COMPANY
PO BOX 37
SCOTIA, CA 95565

MICHAEL THEROUX
THEROUX ENVIRONMENTAL
PO BOX 7838
AUBURN, CA 95604

JEANNE M. SOLE
REGULATORY COUNSEL
CALIFORNIA INDEPENDENT SYSTEM
OPERATOR
151 BLUE RAVINE ROAD
FOLSOM, CA 95630

JAMES WEIL
AGLET CONSUMER ALLIANCE
PO BOX 1599
FORESTHILL, CA 95631

THOMAS TANTON
4390 INDIAN CREEK ROAD
LINCOLN, CA 95648

STEVE PONDER
FPL ENERGY, INC., LLC
3017 DOUGLAS BLVD., SUITE 300
ROSEVILLE, CA 95661

ANDREW B. BROWN
ATTORNEY AT LAW
ELLISON, SCHNEIDER & HARRIS
2015 H STREET
SACRAMENTO, CA 95814

DOUGLAS K. KERNER
ATTORNEY AT LAW
ELLISON, SCHNEIDER & HARRIS
2015 H STREET
SACRAMENTO, CA 95814

EMILIO E. VARANINI III
GENERAL COUNSEL
CALIFORNIA POWER AUTHORITY
901 P STREET, SUITE 142A
SACRAMENTO, CA 95814

LYNN M. HAUG
ATTORNEY AT LAW
ELLISON, SCHNEIDER & HARRIS, LLP
2015 H STREET
SACRAMENTO, CA 95814

ANN L. TROWBRIDGE
ATTORNEY AT LAW
DOWNEY, BRAND, SEYMOUR & ROHWER
555 CAPITOL MALL, 10TH FLOOR
SACRAMENTO, CA 95814-4686

RONALD LIEBERT
ATTORNEY AT LAW
CALIFORNIA FARM BUREAU FEDERATION
2300 RIVER PLAZA DRIVE
SACRAMENTO, CA 95833

DONALD BROOKHYSER
ATTORNEY AT LAW
ALCANTAR & KAHL LLP
1300 S.W. 5TH AVENUE, SUITE 1750
PORTLAND, OR 97201

MICHAEL P. ALCANTAR
ATTORNEY AT LAW
ALCANTAR & KAHL, LLP
1300 SW FIFTH AVENUE, SUITE 1750
PORTLAND, OR 97201

JAMES PAINE
ATTORNEY AT LAW
STOEL RIVES, LLP
900 SW 5TH AVE STE. 2600
PORTLAND, OR 97204-1268

STEVE MUNSON
VULCAN POWER CO.
1183 NW WALL STREET, SUITE G
BEND, OR 97701

CHUCK GILFOY
TRANSALTA ENERGY MARKETING US
4609 N.W. ASHLEY HEIGHTS DRIVE
VANCOUVER, WA 98685

AARON J JOHNSON
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
EXECUTIVE DIVISION ROOM 5205
SAN FRANCISCO, CA 94102-3214

BRADFORD WETSTONE
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ELECTRIC INDUSTRY & FINANCE
AREA 4-A
SAN FRANCISCO, CA 94102-3214

CHRISTINE M. WALWYN
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
DIVISION OF ADMINISTRATIVE LAW JUDGES
ROOM 5117
SAN FRANCISCO, CA 94102-3214

CLAYTON K. TANG
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ELECTRIC INDUSTRY & FINANCE
AREA 4-A
SAN FRANCISCO, CA 94102-3214

DAN ADLER
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
DIVISION OF STRATEGIC PLANNING
ROOM 5119
SAN FRANCISCO, CA 94102-3214

DAVID M. GAMSON
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
EXECUTIVE DIVISION ROOM 5214
SAN FRANCISCO, CA 94102-3214

DONNA J HINES
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ELECTRIC INDUSTRY & FINANCE AREA 4-A
SAN FRANCISCO, CA 94102-3214

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

FARZAD GHAZZAGH
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ELECTRICITY RESOURCES AND PRICING
BRANCH ROOM 4209
SAN FRANCISCO, CA 94102-3214

JAMES LOEWEN
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ELECTRIC INDUSTRY & FINANCE AREA 4-A
SAN FRANCISCO, CA 94102-3214

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

JULIE A FITCH
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
EXECUTIVE DIVISION ROOM 5203
SAN FRANCISCO, CA 94102-3214

JULIE HALLIGAN
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
DIVISION OF ADMINISTRATIVE LAW JUDGES
ROOM 5101
SAN FRANCISCO, CA 94102-3214

KAREN M SHEA
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ELECTRIC INDUSTRY & FINANCE AREA 4-A
SAN FRANCISCO, CA 94102-3214

KAYODE KAJOPAIYE
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ELECTRIC INDUSTRY & FINANCE AREA 4-A
SAN FRANCISCO, CA 94102-3214

LAINIE MOTAMEDI
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
DIVISION OF STRATEGIC PLANNING
ROOM 5119
SAN FRANCISCO, CA 94102-3214

LAURA L. KRANNAWITTER
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
EXECUTIVE DIVISION ROOM 5210
SAN FRANCISCO, CA 94102-3214

LISA PAULO
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
PUBLIC PROGRAMS BRANCH AREA 3-E
SAN FRANCISCO, CA 94102-3214

LYNNE MCGHEE
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
EXECUTIVE DIVISION ROOM 5306
SAN FRANCISCO, CA 94102-3214

MANUEL RAMIREZ
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
EXECUTIVE DIVISION AREA 4-A
SAN FRANCISCO, CA 94102-3214

MARYAM EBKE
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
DIVISION OF STRATEGIC PLANNING
ROOM 5119
SAN FRANCISCO, CA 94102-3214

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

PETER V. ALLEN
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
DIVISION OF ADMINISTRATIVE LAW JUDGES
ROOM 5022
SAN FRANCISCO, CA 94102-3214

REGINA DEANGELIS
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
LEGAL DIVISION ROOM 4107
SAN FRANCISCO, CA 94102-3214

RICHARD A. MYERS
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
NATURAL GAS, ENERGY EFFICIENCY AND
RESOURCE ADVISORY AREA 4-A
SAN FRANCISCO, CA 94102-3214

ROBERT KINOSIAN
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
EXECUTIVE DIVISION ROOM 4205
SAN FRANCISCO, CA 94102-3214

SCOTT LOGAN
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ELECTRICITY RESOURCES AND PRICING
BRANCH ROOM 4209
SAN FRANCISCO, CA 94102-3214

STEPHEN ST. MARIE
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ELECTRIC INDUSTRY & FINANCE AREA
SAN FRANCISCO, CA 94102-3214

STEVEN C ROSS
CALIF PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
ELECTRICITY RESOURCES AND PRICING
BRANCH ROOM 4209
SAN FRANCISCO, CA 94102-3214

ANDREW ULMER
ATTORNEY AT LAW
SIMPSON PARTNERS LLP
900 FRONT STREET, SUITE 300
SAN FRANCISCO, CA 94111

KAREN GRIFFIN
MANAGER, ELECTRICITY ANALYSIS
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET MS-20
SACRAMENTO, CA 95184

ROSS MILLER
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET MS-20
SACRAMENTO, CA 95184

JAMES MCMAHON
SENIOR ENGAGEMENT MANAGER
NAVIGANT CONSULTING, INC.
3100 ZINFANDEL DRIVE, SUITE 600
RANCHO CORDOVA, CA 95670

CHIEF COUNSEL'S OFFICE
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET, MS 14
SACRAMENTO, CA 95814

ALAN LOFASO
CALIF PUBLIC UTILITIES COMMISSION
770 L STREET, SUITE 1050
EXECUTIVE DIVISION
SACRAMENTO, CA 95814

ANNE W. PREMO
CALIF PUBLIC UTILITIES COMMISSION
770 L STREET, SUITE 1050
ELECTRIC INDUSTRY & FINANCE
SACRAMENTO, CA 95814

CARLOS A MACHADO
CALIF PUBLIC UTILITIES COMMISSION
770 L STREET, SUITE 1050
EXECUTIVE DIVISION
SACRAMENTO, CA 95814

CONSTANCE LENI
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET MS-20
SACRAMENTO, CA 95814

DAVID HUNGERFORD
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET, MS-22
SACRAMENTO, CA 95814

DON SCHULTZ
CALIF PUBLIC UTILITIES COMMISSION
770 L STREET, SUITE 1050
ELECTRICITY RESOURCES AND PRICING
BRANCH
SACRAMENTO, CA 95814

HEATHER RAITT
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET, MS 45
SACRAMENTO, CA 95814

JENNIFER TACHERA
CALIFORNIA ENERGY COMMISSION
1516 - 9TH STREET
SACRAMENTO, CA 95814

JONATHAN TEAGUE
CALIFORNIA DEPT. OF GENERAL SERVICES
717 K STREET, SUITE 409
SACRAMENTO, CA 95814

KIP LIPPER
SENATOR BYRON SHER
STATE CAPITOL, ROOM 2082
SACRAMENTO, CA 95814

MIKE JASKE
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET, MS-22
SACRAMENTO, CA 95814

RUBEN TAVARES
ELECTRICITY ANALYSIS OFFICE
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET, MS 20
SACRAMENTO, CA 95814

TARA M. DUNN
901 P STREET, SUITE 142A
SACRAMENTO, CA 95814

WADE MCCARTNEY
REGULATORY ANALYST IV
PUBLIC UTILITIES COMMISSION
770 L STREET, SUITE 1050
ENERGY DIVISION
SACRAMENTO, CA 95814

FERNANDO DE LEON
ATTORNEY AT LAW
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET, MS-14
SACRAMENTO, CA 95814-5512

GLORIA BELL
CALIFORNIA DEPARTMENT OF WATER
RESOURCES
3310 EL CAMINO AVENUE, SUITE 120
SACRAMENTO, CA 95821

JEANNIE S. LEE
CALIFORNIA ENERGY RESOURCES
SCHEDULING
CALIFORNIA DEPARTMENT OF WATER
RESOURCES
3310 EL CAMINO AVENUE, ROOM 120
SACRAMENTO, CA 95821

JOHN PACHECO
CALIFORNIA ENERGY RESOURCES
SCHEDULING
CALIFORNIA DEPARTMENT OF WATER
RESOURCES
3310 EL CAMINO AVENUE, ROOM 120
SACRAMENTO, CA 95821