

Exhibit No.: _____
Commissioner: Geoffrey F. Brown
Administrative Law Judge: Carol A Brown
Witness: Irina Green

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

In the Matter of the San Diego Gas
and Electric Company for a
Certificate of Public Convenience
and Necessity Authorizing the
Construction of the for the Otay
Mesa Power Purchase Agreement
Transmission Project

Application 04-03-008

REPLY TESTIMONY OF IRINA GREEN

ON BEHALF OF

THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

Submitted by the California Independent System Operator Corporation

March 4, 2005

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

1 A. Yes. The ORA testimony correctly acknowledges that the CEC approval of
2 the Generation Project was based on input from the CAISO. As noted in
3 my opening testimony, when evaluating a generation interconnection
4 project, the CAISO identifies two potential categories of system
5 upgrades: 1) Reliability Upgrades that are needed to avoid customer
6 outage or damage to the equipment caused by the new generation project
7 and 2) Deliverability Upgrades that are needed to deliver full output
8 of the generation project. In the approval of a project, the CAISO
9 specifies which upgrades, if any, are needed for reliability (usually,
10 replacement of circuit breakers that may become overstressed due to
11 addition of the new generation project) and which upgrades, if any, are
12 needed to deliver all or part of the output of the project. Generation
13 sponsors must fund Reliability Upgrades. Deliverability Upgrades need
14 not be pursued by the generation sponsor, but rather are discretionary.
15 With respect to the interconnection process leading to CEC approval,
16 the CAISO identified that the output of the Generation Project would be
17 subject to significant congestion. As noted by ORA, in the initial
18 interconnection process for the Generation Project, Calpine elected not
19 to fund Deliverability Upgrades. Instead, it chose to use congestion
20 management, but this was nevertheless a "reliable" means of
21 interconnecting. Accordingly, the CAISO approval for interconnecting a
22 generation project does not ensure deliverability of the resource.
23
24 In contrast, deliverability of generation is an essential element of any
25 resource adequacy requirement. If generation cannot be delivered to
load when needed, this generation will not have value as a resource

1 satisfying resource adequacy requirements or meeting local reliability
2 needs. For this reason, the Report is misleading when it states that in
3 approving the "CPCN [the Commission] is requiring the Otay Mesa
4 generating facility to meet reliability standards above and beyond the
5 current CAISO Grid Planning Standards." The new transmission lines are
6 needed to provide for the deliverability of the Generation Project. Due
7 to the high load growth and possible retirement of older inefficient
8 generating units, it is likely to be difficult to replace reduction in
9 Generation Project output caused by congestion because the SDG&E import
10 capability is limited and all the internal generation is likely to
11 already be utilized for RMR. Therefore, the CAISO considers the Project
12 necessary for system reliability given the Commission's decision to rely
13 on the Generation Project to meet future resource adequacy and local
14 generation needs.

15 Q. The Report states that the CAISO's opening testimony "does not appear
16 to be the result of the CAISO transmission planning process, but rather
17 a staff review and analysis of SDG&E's studies, performed in the
18 context of Commission findings in D.04-06-011." Do you believe this is
19 an accurate statement?

20 A. No. The CAISO transmission planning process is extremely flexible in a
21 sense that projects can be generated from variety of sources including
22 transmission owners, generation developers, or the CAISO itself. The
23 projects developed through the CAISO planning process include those for
24 facilitating interconnection of new generation to the grid. This is
25 typically accomplished through system impact and facilities studies
that are designed, in large part, through collaboration between the

1 CAISO and relevant transmission owner. That is what was done here. As
2 such, the development and approval of the Project was no different than
3 development and approval of other interconnection projects. Thus,
4 contrary to the ORA statement, the Project approval is within the
5 CAISO's normal transmission planning process.

6 Q. Has the CAISO Board of Governors approved the Project?

7 A. No.

8 Q. Do you anticipate that the Project will be presented to the CAISO Board
9 of Governors?

10 A. Yes. Under the CAISO's transmission planning process, the CAISO Board
11 of Governors approves transmission projects with a cost of more than
12 \$20 million. The fact that the CAISO Board of Governors has not yet
13 approved the Project is just an issue of timing. Submission of the
14 Project has been deferred because of the large number of transmission
15 projects with costs over \$20 million that recently have been reviewed
16 by the CAISO, including the Palo Verde-Devers#2 500 kV line. CAISO
17 staff prefers that the Board of Governors have ample opportunity to
18 thoroughly review the transmission proposals and, therefore, has
19 staggered the presentations for the various projects. Nevertheless,
20 CAISO management has approved the Project and anticipates submitting
21 the Project to the Board of Governors within the next two months.

22 Q. Do you agree with ORA's recommendation that the Commission consider a
23 "staged approach" to implementation of the Project's full plan of
24 service? (Report at 6:25-34.)

25 A. No. The Report cited the CAISO testimony that power delivery may start
under Scenario 1, then continue under Scenario 2 with only the Miguel-

1 Sycamore Canyon line in service, and then eventually move to the final
2 Scenario 3, which has both the Miguel-Sycamore and Miguel-Old Town
3 transmission lines in service. ORA suggested implementing the full
4 plan of service only if, and when, necessary to meet the full delivery
5 requirement. The CAISO considered the staged approach only because of
6 the timing of construction of the new transmission lines. The Miguel-
7 Old Town line will have a significant amount of undergrounding that may
8 extend the construction time beyond that associated with the Miguel-
9 Sycamore line. In the CAISO testimony, it was clearly stated that the
10 full benefits of the Generation Project would not be achievable until
11 the final phase of the Project is constructed. With only Miguel-
12 Sycamore transmission line in service, not more than 190 MW of the
13 Generation Project can be integrated, which limits the ability of the
14 Generation Project to satisfy resource adequacy requirements as well as
15 displace existing, more costly Reliability-Must-Run generation.

16 Q. The Report claims that the CAISO did not address the cost-effectiveness
17 of the transmission project. (Report at 5:7-8.) Do you agree?

18 A. No. As noted in my opening testimony,

19 In evaluating the Transmission Project for purposes of
20 this testimony, the CAISO necessarily considers SDG&E's
21 application for a CPCN within the context the
22 Commission's final opinion in D.04-06-011. That
23 Decision "determined that SDG&E does ... need Otay Mesa."
24 (D.04-06-011 at 54.) The finding of "need" rested on the
25 reasoning that approving Otay Mesa was "the provident and
prudent thing" for the Commission to do given the

1 critical reliance on aging resources to meet SDG&E's
2 local reliability requirements and the goal of the
3 State's Energy Action Plan to encourage "new, cleaner,
4 efficient power sources to meet anticipated demand
5 growth, replace aging, less efficient and dirty power
6 plants both permanently and as part of RMR contract
7 obligations so as to reduce SDG&E's RMR costs." (*Id.* at
8 55.) The conclusion I draw from this outcome is that the
9 Commission has selected Otay Mesa to provide SDG&E with
10 local capacity to meet SDG&E's anticipated grid
11 reliability needs resulting from future load growth.
12 Further, this finding was made with the recognition that
13 without some transmission upgrades, Otay Mesa cannot be
14 utilized to serve load in the San Diego local reliability
15 area because of congestion or, in other words, because
16 the energy is not deliverable to load. Accordingly, the
17 CAISO does not view its role before the Commission in
18 this proceeding as determining "need" or "if" a
19 transmission project associated with Otay Mesa should be
20 constructed. Instead, based on D.04-06-011, the CAISO
21 assumes a prior Commission finding of "need" for both
22 Otay Mesa and transmission, and therefore addresses
23 whether the proposed Transmission Project constitutes the
24 appropriate alternative to satisfy the stated objectives
25 of SDG&E in proposing Otay Mesa and the Commission in
approving that resource.

1 Thus, the CAISO admittedly did not do a cost-effectiveness analysis to
2 determine whether the Generation Project and Project constituted the
3 most cost-effective and viable method for SDG&E to meet the objectives
4 identified in D.04.06-011. However, the CAISO did consider SDG&E's
5 estimated costs of the various transmission alternatives in selecting a
6 preferred transmission plan. After considering numerous alternatives,
7 including their costs, the CAISO concluded that the Project was the
8 best alternative in meeting the objectives of the Commission. As was
9 noted in the CAISO testimony in this proceeding, the Project will:

- 10 1. provide for the firm transmission delivery of Otay Mesa generation to
11 the SDG&E load centers;
- 12 2. prevent Otay Mesa generation from increasing transmission congestion
13 north of Miguel;
- 14 3. reduce RMR costs by allowing displacement of a portion of the RMR
15 generation in SDG&E service area;
- 16 4. provide higher operational flexibility during scheduled outages;
- 17 5. improve system voltages; and
- 18 6. avoid the need to trip additional generation and load for the Miguel
19 corridor outage.

20 All the other alternatives studied by SDG&E and the CAISO either failed
21 to achieve the objectives listed above or had even higher cost than the
22 Project.

23 Q. Does that conclude your testimony?

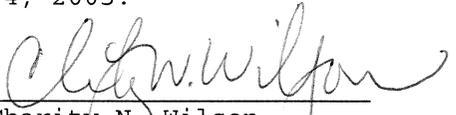
24 A. Yes.

25

PROOF OF SERVICE

I hereby certify that on March 4, 2005 I served, by electronic mail, Reply Testimony of Irina Green on behalf of the California Independent System Operator Corporation in Docket #A.04-03-008.

DATED at Folsom, California on March 4, 2005.



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

DAVID L. HUARD
MANATT, PHELPS & PHILLIPS, LLP
11355 WEST OLYMPIC BOULEVARD
LOS ANGELES, CA 90064
dhuard@manatt.com
A.04-03-008

RANDALL W. KEEN
MANATT, PHELPS & PHILLIPS, LLP
11355 WEST OLYMPICS BLVD.
LOS ANGELES, CA 90064
puc_service@manatt.com
A.04-03-008

ALEXANDRA ELIAS
CENTRE CITY DEVELOPMENT CORPORATION
225 BROADWAY, SUITE 1100
SAN DIEGO, CA 92101
elias@ccdc.com
A.04-03-008

E. GREGORY BARNES
SAN DIEGO GAS & ELECTRIC COMPANY
101 ASH STREET
SAN DIEGO, CA 92101
gbarnes@sempra.com
A.04-03-008

WILLIAM J. BRIGGS
PORT OF SAN DIEGO
3165 PACIFIC HIGHWAY
SAN DIEGO, CA 92101-1128
wbriggs@portofsandiego.org
A.04-03-008

CHRIS BING
SAN DIEGO GAS & ELECTRIC
8330 CENTURY PARK COURT, CP02-170
SAN DIEGO, CA 92123
cbing@semprautilities.com
A.04-03-008

JOHN W. LESLIE
LUCE, FORWARD, HAMILTON & SCRIPPS, LLP
11988 EL CAMINO REAL, SUITE 200
SAN DIEGO, CA 92130
jleslie@luce.com
A.04-03-008

NOEL A. OBIORA
CALIFORNIA PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102
nao@cpuc.ca.gov
A.04-03-008

BRIAN T. CRAGG
GOODIN, MACBRIDE, SQUERI, RITCHIE & DAY
505 SANSOME STREET, SUITE 900
SAN FRANCISCO, CA 94111
bcragg@gmsr.com
A.04-03-008

JEFFREY P. GRAY
DAVIS WRIGHT TREMAINE LLP
ONE EMBARCADERO CENTER, SUITE 600
SAN FRANCISCO, CA 94111
jeffgray@dwt.com
A.04-03-008

GRANT A. ROSENBLUM
CALIFORNIA ISO
151 BLUE RAVINE ROAD
FOLSOM, CA 95630
grosenblum@caiso.com
A.04-03-008

JANE A. PEARSON
DUKE ENERGY AMERICAS
5400 WESTHEIMER COURT
HOUSTON, TX 77056
japearson@duke-energy.com
A.04-03-008

NORMAN A. PEDERSEN
HANNA AND MORTON LLP
444 SOUTH FLOWER STREET, SUITE 1500
LOS ANGELES, CA 90071-2916
npedersen@hanmor.com
A.04-03-008

MKE HARRINGTON
GOODRICH ASG
850 LAGOON DRIVE
MAIL ZONE 54/A
CHULA VISTA, CA 91910
A.04-03-008

ALBERT YORK HUANG
401 MILE OF CARS WAY, SUITE 310
NATIONAL CITY, CA 91950
A.04-03-008

JOHN PORTEOUS
DUDEK & ASSOCIATES, INC.
605 THIRD STREET
SAN DIEGO, CA 92024
jporteous@dudek.com
A.04-03-008

EUCALYPTUS HILLS LANDOWNERS ASSOC.
INC.
PO BOX 803
LAKESIDE, CA 92040
EHLA@flash.net
A.04-03-008

ARLEN & ELAINE WATT
10881 OAK CREEK DRIVE
LAKESIDE, CA 92040
A.04-03-008

THEODORE E. ROBERTS
SAN DIEGO GAS & ELECTRIC COMPANY
101 ASH STREET, HQ 13D
SAN DIEGO, CA 92101-3017
troberts@sempra.com
A.04-03-008

FRED SAINZ
SAN DIEGO CONVENTION CENTER
CORPORATION
111 W. HARBOR DRIVE
SAN DIEGO, CA 92101-7899
A.04-03-008

CENTRAL FILES
SAN DIEGO GAS & ELECTRIC
8330 CENTURY PARK COURT
CP31-E
SAN DIEGO, CA 92123-1530
centralfiles@semprautilities.com
A.04-03-008

BRUCE FOSTER
SOUTHERN CALIFORNIA EDISON COMPANY
601 VAN NESS AVENUE, STE. 2040
SAN FRANCISCO, CA 94102
fosterbc@sce.com
A.04-03-008

JACK P. MCGOWAN
GRUENEICH RESOURCE ADVOCATES
582 MARKET STREET, SUITE 1020
SAN FRANCISCO, CA 94104
docket-control@gralegal.com
A.04-03-008

JODY LONDON
GRUENEICH RESOURCE ADVOCATES
582 MARKET STREET, SUITE 1020
SAN FRANCISCO, CA 94104
jlondon@gralegal.com
A.04-03-008

CALIFORNIA ENERGY MARKETS
517-B POTRERO AVE.
SAN FRANCISCO, CA 94110
cem@newsdata.com
A.04-03-008

MITCH WEINBERG
CALPINE CORPORATION
4160 DUBLIN BLVD.
DUBLIN, CA 94568
mitchw@calpine.com
A.04-03-008

RICHARD L. THOMAS
CALPINE CORPORATION
4160 DUBLIN BLVD.
DUBLIN, CA 94568
rickt@calpine.com
A.04-03-008

STEVEN S. SCHLEIMER
CALPINE CORPORATION
4160 DUBLIN BLVD.
DUBLIN, CA 94568
sschleimer@calpine.com
A.04-03-008

ANDREW TRUMP
DUKE ENERGY
PO BOX 11140
OAKLAND, CA 94611
altrump@duke-energy.com
A.04-03-008

MRW & ASSOCIATES, INC.
1999 HARRISON STREET, SUITE 1440
OAKLAND, CA 94612
mrw@mrwassoc.com
A.04-03-008

CALIFORNIA ISO
150 BLUE RAVINE ROAD
FOLSOM, CA 95630
e-recipient@caiso.com
A.04-03-008

MELANIE GILLETTE
DUKE ENERGY NORTH AMERICA
980 NINTH STREET, SUITE 1420
SACRAMENTO, CA 95814
mgillette@duke-energy.com
A.04-03-008

CHRISTINE KELLER
VIEWPOINT WEST
23475 GOVERNMENT SPRINGS ROAD
MONTROSE, CO 81401
vpwest@montrose.net
A.04-03-008