

Exhibit No. ISO-22

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Gross Load and HV TRR Data

**Gross Load and HV TRR Data
For PG&E, SCE, SDG&E, and Vernon**

PG&E

Period	Gross Load (MWH)	HV TRR (Existing) (\$)	HV TRR (Existing & New) (\$)	Source
Jan-01	86,221,000	118,692,000	118,692,000	ER01-819-000 Filing (12/28/00)
Jul-01	86,687,000	152,030,000	152,030,000	ER01-2457-000 Filing (6/29/01)
2001 Average	86,454,000	135,361,000	135,361,000	
Jan-02	86,686,550	239,570,324	239,570,324	ER02-599-000 Filing (12/21/01)
Jul-02	85,707,000	191,836,100	191,836,100	ER02-2192-000 Filing (6/28/02)
Sep-02	85,707,000	191,836,100	191,836,100	ER02-2542-000 Filing (9/5/02)
2002 Average	86,196,775	215,703,212	215,703,212	
Jan-03	85,707,000	116,274,905	116,274,905	ER02-310-000 Filing (12/20/02)
2004-2015	85,707,000	154,837,354	203,733,361	Gross Load set equal to 2003. HV TRR from response to ISO-PGE-2. In years 2005-2015, PG&E share of Path 15 costs are added to the HV TRR (Existing & New).

SCE

Period	Gross Load (MWH)	HV TRR (Existing) (\$)	HV TRR (Existing & New) (\$)	Source
Jan-01	78,428,000	154,955,000	154,955,000	ER01-819-000 Filing (12/28/00)
Jul-01	78,428,000	154,955,000	154,955,000	ER01-2457-000 Filing (6/29/01)
2001 Average	78,428,000	154,955,000	154,955,000	
Jan-02	78,427,896	127,918,887	127,918,887	ER02-599-000 Filing (12/21/01)
Jul-02	78,427,896	127,918,887	127,918,887	ER02-2192-000 Filing (6/28/02)
Sep-02	84,358,000	169,691,604	176,743,677	ER02-2542-000 Filing (9/5/02)
2002 Average	79,910,422	138,362,066	140,125,085	
Jan-03	84,358,000	169,946,053	177,008,701	ER02-310-000 Filing (12/20/02)
2004-2015	84,358,000	169,946,053	177,008,701	Set equal to 2003

SDG&E

Period	Gross Load (MWH)	HV TRR (Existing) (\$)	HV TRR (Existing & New) (\$)	Source
Jan-01	17,701,000	35,675,000	35,675,000	ER01-819-000 Filing (12/28/00)
Jul-01	17,701,000	35,675,000	35,675,000	ER01-2457-000 Filing (6/29/01)
2001 Average	17,701,000	35,675,000	35,675,000	
Jan-02	17,700,683	45,328,000	45,718,815	ER02-599-000 Filing (12/21/01)
Jul-02	17,700,683	45,916,380	46,667,140	ER02-2192-000 Filing (6/28/02)
Sep-02	17,700,683	45,916,380	46,667,140	ER02-2542-000 Filing (9/5/02)
2002 Average	17,700,683	45,622,190	46,192,978	
Jan-03	17,700,683	41,321,927	42,136,977	ER02-310-000 Filing (12/20/02)
2004-2015	17,700,683	41,321,927	42,136,977	Set equal to 2003

Vernon

Period	Gross Load (MWH)	HV TRR (Existing) (\$)	HV TRR (Existing & New) (\$)	Source
Jan-01	1,211,000	9,852,000	9,852,000	ER01-819-000 Filing (12/28/00)
Jul-01	1,211,000	9,852,000	9,852,000	ER01-2457-000 Filing (6/29/01)
2001 Average	1,211,000	9,852,000	9,852,000	
Jan-02	1,211,000	9,852,000	9,852,000	ER02-599-000 Filing (12/21/01)
Jul-02	1,210,668	9,852,130	9,852,130	ER02-2192-000 Filing (6/28/02)
Sep-02	1,210,668	9,852,130	9,852,130	ER02-2542-000 Filing (9/5/02)
2002 Average	1,210,834	9,852,065	9,852,065	
Jan-03	1,210,668	10,175,975	10,175,975	ER02-310-000 Filing (12/20/02)
2004-2015	1,210,668	10,175,975	10,175,975	Set equal to 2003

**Gross Load and HV TRR Data
For Anaheim, Azusa, Banning, Riverside**

Anaheim

Period	Gross Load (MWH)	HV TRR (Existing) (\$)	HV TRR (Existing & New) (\$)	Source
Jan-03	2,589,830	23,665,095	23,665,095	ER02-310-000 Filing (12/20/02)
2004-2015	2,589,830	23,665,095	23,665,095	Set equal to 2003

Azusa

Period	Gross Load (MWH)	HV TRR (Existing) (\$)	HV TRR (Existing & New) (\$)	Source
Jan-03	239,575	1,812,911	1,812,911	ER02-310-000 Filing (12/20/02)
2004-2015	239,575	1,812,911	1,812,911	Set equal to 2003

Banning

Period	Gross Load (MWH)	HV TRR (Existing) (\$)	HV TRR (Existing & New) (\$)	Source
Jan-03	139,457	1,262,005	1,262,005	ER02-310-000 Filing (12/20/02)
2004-2015	139,457	1,262,005	1,262,005	Set equal to 2003

Riverside

Period	Gross Load (MWH)	HV TRR (Existing) (\$)	HV TRR (Existing & New) (\$)	Source
Jan-03	1,814,019	19,481,736	19,481,736	ER02-310-000 Filing (12/20/02)
2004-2015	1,814,019	19,481,736	19,481,736	Set equal to 2003

**Gross Load and HV TRR Data
For LADWP, Colton, CDWR, WAPA, and MID**

Company	TAC Area	Period	Gross Load (GWH)	Source	HV TRR (Existing) (\$000)	HV TRR (Existing & New) (\$000)	Source
LADWP Colton	3	2003	23,493	Data provided in response to Discovery.	141,500	153,500	Data provided in response to Discovery.
	2	2003	318	2002 Gross Load of 312 GWH provided in response to ISO-COL-1 and grown at 2% to 2003.	2,552	2,552	Data provided in response to Discovery.
CDWR	1/2	2003	8,430	2002 Gross Load of 8,264 GWH provided in response to ISO-SWP-1 and grown at 2% to 2003.	28,501	28,501	2001 HV TRR provided in response to ISO-SWP-2 and assumed to be the same in 2003.
WAPA	1	2003	4,229	Response to data request ISO-WPA-1.	12,496	12,496	Calculated as HV TRR less Existing Contract Revenue (See Notes).
MID	1	2003	2,357	Response to data request ISO-MID-1 (Page 19 of "2002 Load Forecast Study").	13,136	13,136	Calculated as the sum of COT, MTS, SCE, and internal transmission costs (See Notes).

Notes:

- CDWR assumed to be 50% in TAC Area 1 and 50% in TAC Area 2.
- WAPA HV TRR of \$21,724,211 provided in response to Data Request ISO-WPA-2. Existing Contract Revenue of \$9,227,873 provided in response to Data Request ISO-WPA-3.
- MID COT TRR of \$8,196,000, MTS TRR of \$2,455,000, and SCE TRR of \$476,000 provided in response to ISO-MID-2. Internal Transmission Costs of \$2,008,540 provided in ER98-2351-000: September 11, 1998 Testimony of Paul D. Reising, Exhibit No. NCPA-17, Page 3.
- HV TRR (Existing & New) assumed to be equal to HV TRR (Existing) for CDWR, Colton, WAPA, and MID. Gross Load, HV TRR (Existing), and HV TRR (Existing & New) for years 2004 through 2015 set equal to 2003.

**Gross Load and HV TRR Data
Estimates for "Other" New PTOs in TAC Areas 2 and 3 (Pasadena, Burbank, Glendale, and MWD)**

Company	TAC Area	Period	Gross Load (GWH)	Source	HV TRR (Existing) (\$000)	HV TRR (Existing & New) (\$000)	Source
MWD	2	2003	2,190	2004 Energy Demand of 2,190 GWH provided in response to ISO-MWD-1.	3,005	3,005	See notes.
Pasadena	2	2003	1,226	2000 Gross Load of 1,155 GWH provided in Annual Report and grown at 2% to 2003.	11,848	11,848	Assumed equal to Average Cost per MWH from Anaheim, Azusa, Banning, and Riverside multiplied by Gross Load.
Burbank	3	2003	1,108	2001 Gross Load of 1,065 GWH provided in Annual Report and grown at 2% to 2003.	10,708	10,708	Same as above.
Glendale	3	2003	1,290	FY 2001 Power Generated and Purchased of 1,240 GWH provided in SCPA Annual Report. This figure assumed to be approximately equal to Gross Load and grown at 2% to 2003.	12,467	12,467	Same as above.
Other Area 2 Total		2003	3,416		14,854	14,854	
Other Area 3 Total		2003	2,398		23,174	23,174	

Notes:
MWD provided TRR data for its Parker-Gene line (30 MW capacity - \$388,800 TRR), Welton-Mohawk-Ligorta-Gene line (50 MW - \$648,000), and Etiwanda-Vincent line (24 MW - \$214,272). TRR calculated by multiplying MWD's total Gross Load by the average cost per MWH in the three lines.
The average cost per MWH in the three lines was calculated as (Total TRR) / [(Total MW capacity) * 8760 hours/year].

HV TRR (Existing & New) assumed to be equal to HV TRR (Existing).
Gross Load, HV TRR (Existing), and HV TRR (Existing & New) for years 2004 through 2015 set equal to 2003.

**Gross Load and HV TRR Data
Estimates for "Other" New PTOs in TAC Area 1 (Redding, SMUD, SVP, TID, and NCPA Members)**

Company	TAC Area	Period	Gross Load (GWH)	Source	HV TRR (Existing) (\$'000)	HV TRR (Existing & New) (\$'000)	Source
Redding	1	2003	777	Response to Data Request ISO-RED-1	5,058	5,058	See page 6
SMUD	1	2003	9,685	2001 Gross Load of 9,309 GWH provided in Annual Report and grown at 2% to 2003.	37,910	37,910	See page 6
SVP	1	2003	2,623	2001 Gross Load of 2,521 GWH provided on "Utility Information Fact Sheet" on web site and grown at 2% to 2003.	13,694	13,694	See page 6.
TID	1	2003	1,510	2001 Gross Load of 1,451 GWH provided in Annual Report and grown at 2% to 2003.	6,453	6,453	See page 6
Alameda	1	2003	419	Response to Data Request ISO-NCPA-1	1,456	1,456	See page 6
Biggs	1	2003	18	Same as above.	41	41	See page 6
Gridley	1	2003	34	Same as above.	77	77	See page 6
Healdsburg	1	2003	76	Same as above.	271	271	See page 6
Lodi	1	2003	444	Same as above.	1,722	1,722	See page 6
Lompoc	1	2003	166	Same as above.	445	445	See page 6
Palo Alto	1	2003	1,078	Same as above.	3,958	3,958	See page 6
Plumas	1	2003	196	Same as above.	503	503	See page 6
Roseville	1	2003	1,099	Same as above.	3,427	3,427	See page 6
Ukiah	1	2003	118	Same as above.	347	347	See page 6
NCPA Total		2003	3,648		12,247	12,247	
Other Area 1 Total		2003	18,243		75,362	75,362	

Notes:
HV TRR (Existing & New) assumed to be equal to HV TRR (Existing).
Gross Load, HV TRR (Existing), and HV TRR (Existing & New) for years 2004 through 2015 set equal to 2003.

Gross Load and HV TRR Data
Workpaper for Estimates of HV TRR for "Other" New PTOs in TAC Area 1

Company	Gross Load (GWH) [1]	% COT Capacity [2]	COT TRR (Filed) (\$000) [3]	COT TRR	Internal HV TRR [5]	Cost of non-COT	Cost of non-COT	Total Cost of
				(Calculated) (\$000) [4]		Transmission (\$/MWh) [6]	Transmission (\$000) [7]	Transmission (\$000) [8]
Redding	777	6.61%	3,313	---	---	2,246	1,745	5,058
SMUD	9,685	21.69%	10,266	---	---	3,465	27,644	37,910
SVP	2,623	16.11%	7,803	---	---	2,246	5,891	13,694
TID	1,510	9.87%	4,696	---	1,757	2,246	---	6,453
Alameda	419	1.07%	---	514	---	2,246	941	1,456
Biggs	18	---	---	---	---	2,246	41	41
Gridley	34	---	---	---	---	2,246	77	77
Healdsburg	76	0.21%	---	101	---	2,246	170	271
Lodi	444	1.51%	---	725	---	2,246	997	1,722
Lompoc	166	0.15%	---	72	---	2,246	373	445
Palo Alto	1,078	3.20%	---	1,537	---	2,246	2,420	3,958
Plumas	196	0.13%	---	62	---	2,246	440	503
Roseville	1,099	1.83%	---	879	2,548	2,246	---	3,427
Ukiah	118	0.17%	---	82	---	2,246	266	347

Notes & Sources

- [1] All See Page 5.
- [2] All ER98-2351-000: September 11, 1998 Testimony of Paul D. Reising, Exhibit No. NCPA-9, Page 2.
- [3] All Available ER98-2351-000: September 11, 1998 Testimony of Paul D. Reising, Exhibit No. NCPA-34.
- [4] All Calculated as [2] * (Sum of [3] for Redding, SMUD, SVP, and TID) / (Sum of [2] for Redding, SMUD, SVP, and TID).
- [5] TID & Roseville ER98-2351-000: September 11, 1998 Testimony of Paul D. Reising, Exhibit No. NCPA-34.
- [6] SMUD SMUD contract rate for hourly delivery between Rancho Seco or Lake Substation and Hurley or Elverta Substation
All Others SMUD's PG&E contract rate for hourly delivery between Midway Substation and Rancho Seco or Lake Substation
- [7] SMUD Estimated as (SMUD Load Not Served by COT) * [6]. (See Below)
TID Assumes Non-COT transmission costs already reflected in [5]
Roseville Assumes Non-COT transmission costs already reflected in [5]
All Others Estimated as [1] * [6].
- [8] All Calculated as the sum of COT transmission costs ([3] or [4]) and non-COT transmission costs ([5] or [7])

Detailed Calculation of SMUD TRR

Total Capacity of COT	1600 MW	ER98-2351-000: (9/11/98) Reising Testimony, Exhibit No. NCPA-9, Page 2.
SMUD Capacity on COT	347 MW	Calculated as 1600MW * (SMUD % COT Capacity).
NCPA Gross Load	3,648 GWH	Response to Data Request ISO-NCPA-1
NCPA Peak Load	741.7 MW	Response to Data Request ISO-NCPA-5, "2002 Preliminary Planning Forecast"
NCPA Load Factor	0.56	Calculated as (NCPA Gross Load) / (NCPA Peak Load) * (1000 / 8760)
SMUD Gross Load	9,685 GWH	See above table.
SMUD Peak Load	1,969 MW	Calculated as (SMUD Gross Load) / (NCPA Load Factor) * (1000 / 8760)
Percentage of SMUD Peak Load Not Available on COT	82.4%	Calculated as 1 - [(SMUD Capacity on COT) / (SMUD Peak Load)]
SMUD Load Not Served by COT	7,978 GWH	Calculated as 82.4% * (SMUD Gross Load).

Path 15 TRR Data

Year	Path 15 TRR (\$Millions) [1]	TransElect Share of Path 15 [2]	PG&E Share of Path 15 [3]	TransElect Share of Costs (\$Millions) [4]	PG&E Share of Costs (\$Millions) [5]
2005	64.12	72%	28%	46.17	17.95
2006	63.20	72%	28%	45.50	17.70
2007	62.36	72%	28%	44.90	17.46
2008	56.07	72%	28%	40.37	15.70
2009	53.67	72%	28%	38.64	15.03
2010	51.35	72%	28%	36.97	14.38
2011	49.09	72%	28%	35.34	13.75
2012	46.89	72%	28%	33.76	13.13
2013	44.75	72%	28%	32.22	12.53
2014	42.61	72%	28%	30.68	11.93
2015	34.10	72%	28%	24.55	9.55

Sources:

- [1] Opening Testimony of PG&E in CPUC Investigation No. 00-11-001, Exhibit A, Table B.
- [2] TransElect NTD Path 15 Application For Participating Transmission Owner Status.
- [3] Calculated as 1 - [2].
- [4] Calculated as [1] * [2].
- [5] Calculated as [1] * [3].

Notes:

- [5] PG&E's Share of Path 15 Costs are added to the PG&E HV TRR of Existing & New Facilities in 2005 through 2015.